

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

In the Matter of	)	
	)	
Structure and Practices of the Video Relay Service Program	)	CG Docket No. 10-51
	)	
NOTICE OF INQUIRY	)	FCC 10-111
	)	
To: Commission	)	

**COMMENTS OF CONVO COMMUNICATIONS, LLC**

Convo Communications, LLC (Convo) hereby submits its comments to the Notice of Inquiry released by the Federal Communications Commission (“FCC” or “Commission”) on June 28, 2010 regarding Video Relay Service (VRS). The Commission wants to take a “fresh look” at the regulations regarding VRS and seeks comments regarding a broad array of issues from the affected public - especially from VRS providers, deaf/hard-of-hearing relay users and influential disability policy developers speaking for broad consumer constituencies.

Convo is a non-certified video relay service (VRS) provider. On September 18, 2009, Convo was registered as an Interexchange Carrier (IXC) within the State of Texas. On October 30, 2009, Convo submitted an application to the FCC to be certified as a VRS provider, which is pending before the Commission.

The underlying mission of Convo Communications, which is wholly owned and managed by deaf and hard of hearing persons, is to provide functionally equivalent telephone relay interpreting services between persons with hearing loss who sign and hearing persons who use voice communications. Since its inception, Convo has ethically provided video relay services and has submitted requests for compensation minutes in full compliance with federal regulations.

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## I. CONVO STATEMENT

When the Texas Public Utility Commission approved the user trials for Video Relay Service in the early 1990's, a seminal moment occurred in which organized *human society (acting through that government agency)* permitted deaf and hard-of-hearing persons to participate in the telecommunication world in a way that achieved true functional equivalence, closely akin to what hearing persons enjoyed in their telecommunications experience. Of all the mind-boggling advances in the tele-communications industry, Video Relay Service has since then proven to be nothing short of liberating for hundreds of thousands of deaf and hard-of-hearing persons. VRS opened up an uncountable number of opportunities that otherwise would not be accessible. The Commission, in its enlightened foresight, lent the necessary support to make VRS economically feasible and in doing so, enabled VRS to "change the world".

It is now with somber realization that the Notice of Inquiry (NOI) as released by the Commission has the potential be as pivotal as the Texas VRS user trials were. The questions posed in the NOI challenges the current operating paradigm for VRS users and industry participants. Feedback is being sought from telecommunications providers, organizations/associations of/for the deaf/hard-of-hearing, and many individuals with a genuine interest in seeing VRS redefined into an ideal model. This effort will foist on the shoulders of the FCC the hopes and dreams of an untold number of people who expect it to craft rules and regulations that will stand the test of time.

The corporate philosophy of Convo, in this nascent VRS business, is to operate with the primary focus of providing the most functionally equivalent, consumer-driven tele-communications service available anywhere, anytime. That philosophy is wholly consistent with the overarching principle of the Americans with Disabilities Act to fully integrate people with disabilities into the fabric of humanity in a way that preserves personal choice and personal independence, and is in harmony with the associated statutory mandate placed on the Commission to regulate Title IV telecommunications services to ensure functional equivalence in a context containing long-standing public regulatory policy principles.

Having stated this, Convo comes forward before the Commission with this preliminary caveat: while the regulations for the VRS Industry need to be well balanced and consider the

needs of all involved parties, the underlying, obvious focus of results from this NOI and ensuing FCC decisions must abide by those “functionally equivalent” principles that affect and necessarily must impact VRS users. Likewise, the Commission must also consider ancillary issues important to users that in the past have been only lightly touched on or left unaddressed. Several examples of these ancillary issues important to VRS users are related to point to point calls; to the separation of equipment and services; to the need for a single video codec standard while forbidding proprietary video codec or in the alternative, to allow providers to employ a proprietary video picture codec with a video device interoperability standard for VRS; whether to allow hearing persons video telephone numbers; and other related issues for which the FCC has ancillary jurisdiction.

With careful analysis, the Commission can provide an ideal model of VRS for full access into the world of exciting and vibrant telecommunications services for deaf and hard-of-hearing persons. Results of the Notice of Inquiry can and should extract the best of the very best suggestions and solutions, which then can be compiled into guidelines that offer VRS providers necessary incentives to continue their involvement in this service-intensive and vital business and which further enables the freedom to communicate that is the birthright of every person.

That said, the present VRS system is not broken. There is currently lively competition benefitting customers and new products and services are continually being offered. VRS users are having a field day choosing the best product or service, given the shortage of options available to them less than five years ago. The Commission should be commended for taking steps that did not let self-serving, nefarious providers steer the VRS industry focus away from working towards fair and competitive services grounded in providing excellent customer experiences. On the other hand, any regulatory paradigm will not prevent the intrusion of unscrupulous businesses that have no regard for rules of fair play or long-term customer loyalty, so Convo appreciates the proactive actions that the Commission has undertaken through its recent actions and the questions posed in the NOI to provide the necessary operational structure for VRS that will allow it to achieve its true promise.

In its previous FCC comment filings, Convo has suggested a process to reduce the risk of fraudulent provider activity through the implementation of a Provisional Certification program

that can also provide fair opportunities for newly competitive entrants into the VRS provider market. Convo has long felt that there is a need to reformulate certain aspects of the VRS regulations to take VRS through a timely, necessary structural and operational metamorphosis that will sustain its vitality. Evidenced by its release of this Notice of Inquiry, the Commission seeks a similar degree of change for the better.

Although Convo is a young company, it does have a unique combination of regulatory expertise, a clear feel for the customer's experience with various VRS features and products over the past 20 years, which is further backed by the involvement of technical specialists who have experience in the development of robust and reliable call platforms. So Convo is eagerly and fully committed towards contribute to the redesign of a regulatory model that VRS users, the VRS industry, and the Commission would all come to recognize as resulting in a better "formula" for everyone involved.

## **II. INTRODUCTION**

The Commission presents the NOI in two parts. The first part focuses on compensation issues under the current rules using the existing ratemaking structure, with the second part focusing on possible changes in the fundamental methodology for the delivery of functionally equivalent services and the best market structure for VRS. Convo will identify FCC subject matter and comment queries with their corresponding "NOI #xx" to make it clearer which sections of the NOI Convo's comments are in reference to, in the order they are presented in the NOI.

Preliminarily, Convo notes that the consumer-recommended model TRS regulations, originally developed by the FCC to regulate TTY relay services, was based on analog circuit-switched hardware, copper wire land-lines, and generally available telephone devices and largely interoperable features. The compensation structure was based on rate of return and price cap compensation schemes that were modeled on the American railroad and later, interstate and

multi-carrier telephone rate regulation and tariffing schemes<sup>1</sup>. Also, the original TRS regulations developed in the early 1990's specified that TRS had to be offered by existing telephone companies, which were largely FCC-licensed common carriers capable of providing the technical infrastructure needed to provide TRS.

The meteoric rise of the Internet within a few years of the new millennium made those rules largely obsolete when applied to VRS. VRS is an industry where every company is new and capable of accessing the technical capabilities of the Web at scalable levels and forms definitely more varied and adaptive. Indeed, VRS operates much like a web-based, VoIP-like service provider, and whose sole purpose is to provide digitized video relay service using mostly software-driven proprietary devices. Given this insight, it seems sensible to reconsider the historical basis for treating VRS akin to traditional TRS. Convo requests that the FCC be diligent in its review of the salient differences between the two infrastructures in its regulatory reconstruction of VRS policy and functional performance.

**A. PART 1 - Adjustment and Modifications to Improve the Current VRS Compensation Methodology**

**1. Accounting issues**

**a) NOI #11: Same types of compensable costs for all VRS providers?**

Convo comments that it is certainly true that all VRS providers, despite differences in size, incur the approximate same kinds of compensable costs. However, non-certified providers like Convo also incur costs to consolidate their billing data with that of a certified provider. These billing costs vary from 7 to 13% of the NECA reimbursement rate. The non-certified providers are required to collect and submit the data including all call detail records, so they achieve little or no offsetting savings in the underlying costs to collect, maintain, verify and submit the data. Some providers also use a technical platform (ACD/communication) supplied by others at a contracted cost between 10 to 15% of the NECA reimbursement rate. There are

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<sup>1</sup> See Andrew M. Odlyzko, Pricing and Architecture of the Internet: Historical Perspectives from Telecommunications and Transportation, Presented at 2004 Telecommunications Policy Research Conference (available at <http://www.dtc.umn.edu/~odlyzko/doc/pricing.architecture.pdf>).

some offsetting savings the provider realizes in reduced spending on equipment, technical costs and staffing but it has not proven out that these savings offset the contracted cost.

One possible approach to equalize this is to establish higher reimbursement rates for non-certified providers. But we do not recommend that approach. We would prefer to see a provisional certification process adopted which would allow direct submission of minutes by provisionally certified providers. This is more fully described in our NPRM submission dated May 27, 2010 and in this comment Section 7 NOI #24 - 26. If a new policy and procedure for Provisional Certification is adopted, then over a relatively short time these extra costs for non-certified providers would be transitory and of less import. This would serve as a market entry incentive and spur viable competition and innovation

**b) On Part 32 Accounting**

Convo believes there are significant financial accounting differences for the VRS industry as compared to companies that are subject to the Commission's Part 32 Uniform System of Accounts. CFR Part 32 accounts are designed to be used by public and private network operators licensed by the FCC whose biggest costs to provide service are equipment and communication facilities. In contrast, VRS service is a labor intensive service requiring CAVI participation in each call. The chart of accounts for a VRS service provider would ideally be different than the complex Part 32 account structure. But, the big advantage of Part 32 is that it is well documented and widely used. Convo suggests that the FCC continue the use of Part 32 as a standard and further refine its relevancy to VRS by developing a special supplement to allow the major cost elements of the VRS service to be collected in a uniform way by providers.

The supplement should detail costs by department and cost element in a manner consistent with general accounting practices by US businesses. This approach would limit the administrative burden of the provider as they would allow the FCC cost reporting to flow directly from the provider's internal accounting system. It would also facilitate the audit of the reported cost data as it would need to be maintained in a consistent manner across all providers.

c) **NOI #12: Cap or Set Reasonableness Limits for Cost Compensation.**

Convo supports the overall concept of reasonableness limits (or caps) on reimbursable provider costs based on certain cost categories comparably incurred by companies of similar revenue size. Convo submits this also should be the framework for determining caps on executive compensation. It will be important to include the cost of both cash and equity compensation and other compensation benefits in these measures as is required by US GAAP.

Convo submits there should be limitations on outreach expenses and that they should not be permitted to include the provision and maintenance of equipment at a customer's site unless it can be demonstrated that this equipment is provider neutral and that it is cost effective when compared to other alternatives. Further comments related to outreach are made pursuant to NOI subsections 17 thru 19 herein.

Convo submits that there should be limitations on reimbursement of interest expense and debt repayment. If the proceeds of the underlying debt were used to purchase equipment or facilities or supply working capital *reasonably necessary to provide the VRS service*, they should be allowed. If the proceeds are used for other purposes, they should be disallowed. For clarification, debt instruments obtained to finance the purchase of a VRS company are capital transactions and not related to the direct provision of VRS service. Interest on such debt should not be reimbursable.

Convo submits further that the cost of investor returns or dividends should not be an element in the subsequent calculation of any tiered reimbursement rate. Any compensation to investors for their investment is not an actual cost of providing a VRS service and should be properly categorized as the result of executive management decisions.

Convo believes these caps or allowable ranges based on companies of comparable revenue are necessary controls to prevent abuse of the reimbursement system. On the other hand, it is very important that the reimbursement rate contain sufficient allowance for profit to ensure that new market entrants are able to attract investors and as those entrants mature, the profit allowance ensures they can rely on it for longer-term financial stability. More to the point, the current profit allowance based on return on fixed assets is not appropriate for a labor

intensive service like VRS. The profit allowance needs to be in proportion to the reasonable, allowable costs, including variable labor costs, incurred by a provider.

## **2. Company-Specific Compensation**

### **a) NOI #13: Company-specific compensation for each provider?**

Convo believes the current tiered, industry wide reimbursement system is superior to a company-specific compensation system. The tiering recognizes the fixed and variable nature of costs and its application to all providers creates a reward system which promotes cost efficiency. Providers are encouraged to provide a higher quality of service to capture increased volume (based upon customer choice) but also can be required to achieve cost efficiencies.

Convo believes a company specific compensation system would wrongfully reward any company-specific inefficient processes and promote their continuation. Such a system would not only promote inefficiency across the board; it would also be administratively burdensome for the Commission.

### **b) NOI #14: Company-specific approach**

Convo does not believe the company-specific approach is advisable for the aforementioned reasons. If reimbursement is to be dependent upon projected minutes of use, Convo recommends that the Commission calculate this use-level projection based on the industry-wide historical rate of VRS minutes of use growth. The use of company-specific projections of growth is not appropriate and will encourage companies to adjust their projections to maximize their reimbursement. This is not advisable.

### **c) NOI #15: Proper use of historical cost information**

Convo believes historical costs, *adjusted for inflation*, should be used in setting rates. The major difference between historical costs and projected costs is that historical costs include only allowable reimbursable costs. The projected costs include many other items various providers incur or plan to incur which they assert should be reimbursable. Overall growth in demand should be projected on an industry-wide basis and should continue to be used as a factor

in determining reimbursement rates because it assists providers in being able to recover costs associated with responding to increased demand. It also seems appropriate to review historical data to identify and build in a cost-efficiency projection for anticipated cost efficiencies driven by projected call volume growth.

This compensation scheme rewards providers who provide high quality VRS services, evidenced somewhat by their resulting increases in call volume, and who drive operational cost efficiencies better than a similarly-sized provider.

**d) NOI #16: Further comments**

The variations in historical costs (by provider and on a per minute basis) are attributable to 4 major factors. Those major categories are: overhead expenses, service response times, occupancy levels, and the cost of labor.

Overhead expenses include administration, accounting, IT, legal, executive compensation and other costs and are a significant portion of the cost of implementing and managing any business. They are not so purely related to the operational and service costs associated with the provision of VRS. As in all “for profit” businesses, VRS providers are motivated to minimize these overhead expenses. Overhead expense amounts in most of those categories become relatively fixed after a certain point. Although the total amount of overhead increases with the size of the business, the marginal cost of overhead will definitely decline on a per minute basis as the number of minutes processed increase for a provider.

Service level costs will vary between providers according to the standard of service a provider seeks to achieve. NECA has established acceptable VRS call response times and levels<sup>2</sup>, but all providers seek to operate well-within them for good reason. This is achieved by increasing VRSCA staffing. This increase impacts provider costs in total and on a per minute basis and the impact will be different by provider depending upon the standard of service targeted by that provider. Of course, users would prefer no delay and providers have to balance this desire for quality service with the need to be cost efficient. In the competitive environment, VRS providers strive to answer as soon as possible - typically between 30 and 45 seconds on

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<sup>2</sup> 64 CFR §604(b)(2)(iii)

average. This would be a competitive advantage since users want minimal delay but it will also increase provider cost.

The costs will also vary depending on the occupancy percentage achieved. For purposes of clarity, occupancy percentage is calculated by dividing the number of billable minutes processed by a VRSCA by the number of minutes they work. A standard management practice of all VRS providers is to schedule VRSCA staff in proportion to the anticipated call volume. The better a provider is at predicting call volume, the higher occupancy they will achieve.

Occupancy percentages can vary from 0% (e.g. overnights with no calls) to 80% (high volumes, long calls). Occupancy is naturally higher in shifts with higher call volumes. Convo has noted that occupancy percentages per VRSCA above 65% puts undue physical demands on VRSCAs, to the point of causing work-related injuries and associated industrial insurance cost increases for a provider. However, on the average it seems that occupancy percentages near to 45% is the most physically comfortable zone for VRSCAs at which they can provide reasonably high quality relay performance. Call volume and scheduling accuracy in response thereto are the key variable factors in controlling occupancy rates, with the length of calls serving as a complicating factor. The time involved in call set up and termination is not counted in the minutes processed so unusually short or long calls can have a big impact on occupancy.

Another major variable is the pay rates of VRSCAs. This varies widely based on the geographic cost of living, quality of interpreting skills, and typical supply and demand factors. Providers operating call centers in higher cost areas are at a disadvantage compared to those providers in lower cost areas. Metropolitan areas tend to have higher costs than rural areas and the higher quality VRSCA labor pool is more concentrated in metropolitan areas. High quality interpreters are able to command higher salaries. Users prefer high quality interpreters, so this is another optimal-point balancing act challenging each provider.

In the competitive VRS environment, each provider is required to make “balancing decisions” regarding service levels, call center locations, VRSCA work conditions, and the availability and quality of the local pool of interpreters. They also are driven to schedule VRSCA staff accurately and to minimize overhead expense. They seek to offer the best service to users and to do so within the reimbursement framework established by NECA.

These behaviors are healthy and encouraged by the current tiered, industry wide rate setting. That is why Convo thinks they should continue.

### **3. Outreach and Marketing costs**

#### **a) NOI #17 - #19: Outreach and marketing definition and compensation**

Convo comments by addressing the meaning of and interrelationship between “outreach” and “marketing”, then next addresses compensation matters and concludes with a proposed solution.

To ensure that the Commission and the VRS industry are on the same page, one starting point is to understand how “business outreach” contains “educational outreach”. In the VRS industry, providers must endeavor to find new customers while servicing current customers. Seeking new customers is a continuous function all VRS providers must perform if they hope to succeed. Business outreach actions (i.e., “marketing”) are designed to procure new customers and in doing so, providers often must educate them about VRS (i.e., do “outreach”) first. Currently employed methods of business outreach consist of booths at various community and national events, technician presentations as part of a user’s device installation, and through informational “e-blasts”. Convo believes that outreach is a very critical aspect of any VRS provider’s marketing program. The challenges to educate users are as big as the challenge of marketing to them. There are still many deaf people who have asked following questions:

- How do we get Internet service? What are the required Internet performance features?
- How do we connect to VRS? What about Point to Point connectivity?
- How do we use this device or software application?

By itself, marketing is used to raise brand awareness and collect leads for the outreach representatives to follow up on. The activities of a provider doing marketing may include offering prize drawings (with intention of collecting leads), along with event sponsorships to conduct further advertising activities that raise brand awareness. So, to differentiate from outreach, marketing should be defined as those actions by a business that promotes purchasing and using a provider’s products or services. Marketing costs also include the cost of market research and advertising activities.

Even with the more obvious differences between the two terms, outreach and marketing overlap each other in inseparable ways. Convo believes the Commission is seeking to confine provider costs surrounding provider outreach to those actions that educate the people about VRS and do not contain any undue emphasis regarding a specific VRS company's products or services. It is actually unrealistic to expect that VRS providers will endeavor to do purely outreach activities within that definition, since it is contrary to the very nature of a business whose primary survival instinct consists of actions that promote their products or services.

Under current Commission rules, traditional TTY providers are required to conduct TRS outreach, which they do mainly by containing TRS information in (or with) telephone billing statements or in local area telephone books. To apply that to the VRS industry is not easy. There is nothing VRS providers can do to add VRS information in local telephone books, nor do they even furnish invoices to users. VRS industry providers do not provide sufficient generic VRS information their websites, which are purely designed to promote their products or services.

Now Convo comes to address the compensation portion and offers a solution formula. Generally, VRS providers set aside a percentage of their total revenue to do outreach and marketing activities. Convo suggests that the FCC allow cost of outreach and marketing to be part of the cost analysis in estimating the VRS compensation rates. However, to make it fair for VRS providers and for efficient management of the Interstate TRS Fund, Convo suggests that the percentage be allocated according to tiered rates; for example: a certain percentage for the lowest tiered rate, then a lesser percentage for the next tiered rate level and so on. There should be a cut-off point (i.e., no compensation towards provider outreach and marketing costs) for those companies with over 1 million minutes of use per month. At such high call volumes, user knowledge of VRS in relation to that provider is at some high saturation point such that the return on investment per customer for outreach costs is one of decreasing returns and can amount to a subsidization of that provider's outreach by the Fund. These capped percentages will then be used to calculate the compensable costs.

Convo suggests starting with a compensable level of 10% of the total marketing and outreach expense for the lowest tiered rate, with zero percentage at the highest tiered rate. If this is adopted, VRS providers would eventually align Outreach and Marketing costs with their call

volume growth or be compelled to carry the full cost. This would serve as a disincentive to over-market through the offering of free devices to users and to conduct minute pumping exercises. It will also result in a more fair competition between providers that will be based more on VRSCA performance quality.

Regarding the kind of “generic” outreach that does not promote or advertise a particular VRS provider, Convo suggests that common carriers should be assessed a contribution factor for this kind of consumer awareness activity. This is deeply rooted in the philosophy behind many ADA provisions. In particular, Congress provisioned TRS to correct for the historical exclusion of the deaf and hard of hearing from access to mainstream telecommunications services by serving as a “bridge” for common carriers to that customer base. VRS provides such a “bridge”, so it makes no sense to obligate VRS providers to pay for the past failures of common carriers to include people with hearing loss. The justifying argument for making common carriers the source of generic outreach funding is because many hearing people already have been “educated” by those carriers using comparable outreach/marketing efforts. Just as employers are required to post job notices that their employment practices are free of discrimination and job applicants can request reasonable accommodations at no charge, so should common carriers be required to absorb the cost of educating persons with hearing loss about the availability of VRS and TRS, being that they serve as a form of accommodation to access common carrier services.

Subsequently, the FCC can issue a Request for Proposals to award a contract to conduct national outreach for VRS. This would allow for impartial educational VRS outreach by independent contractor(s) and allow VRS providers do whatever they want in their outreach and marketing activities without worrying what is permissible and what is not.

#### **4. Research and Development Costs**

##### **a) NOI #20 - Research and development costs be calculated into compensable rates?**

It is important to note that Research and Development (“R&D) processes play a very important role in creating new products and services in this fast paced VRS business, which is a role the Commission should incentivize through the compensation mechanism. The traditional TRS regulation regime operates on the view that any relay service call type should be based on practices and protocols that are relatively static, since the traditional voice telephone network

was designed to operate in a systemic dial and call fashion over a relatively reliable backbone. Such a regulatory framework does not work so well for Internet-based relay services, especially for VRS. The general premise (aka Moore's Law) is that new and better products or services cycle into upgraded versions approximately every 18 months. For VRS providers to constantly upgrade and offer better products and services, R&D is vitally needed. The concern, however, is that VRS providers could submit for compensation their R&D amount, and without proper controls, it could be an over-expenditure and unnecessarily increase the Fund payments. Convo suggests there should be a fixed percentage recovery allowance for R&D by VRS providers and it should be based on a nationally averaged R&D expense associated with similarly-sized companies whose business relies heavily on continuous technology developments to make their services and products competitive. The Commission can determine a fixed R&D allowance pursuant to its own research and consultation efforts. Convo will use as an example a sample report provided by **Business Insider**. Exhibit A represents **Business Insider** report<sup>3</sup> showing the R&D costs and their associated percentages for several major technology companies. The Commission can surely find a comparable industry and appropriate cost model in determining the allowance. VRS providers would need to omit R&D costs from their submitted cost estimates or expenditure data and the Commission would add its percentage allowance for R&D cost reimbursement.

By adopting this procedure of fixed percentage based on the national average of similarly situated and sized companies, Commission would not have to worry about how VRS providers do their R&D as it becomes a fixed reimbursement level applicable to all providers.

## **5. Videophone Equipment**

- a) **NOI #21, question item A: Interoperability of videophones and their associated costs and, if any, whether they should they be compensable? If so, how so?**

The VRS industry is capable of offering unique and novel opportunities for deaf and hard-of-hearing persons to access telecommunications service features through video

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<sup>3</sup> See Exhibit A.

conferencing equipment. With this in mind, Convo comments on the features and use of video conferencing equipment and addresses associated cost issues.

For purposes of this discussion, we shall refer to two categories of video communications devices: “relatively static devices” (hereinafter called “static devices”) and “dynamic devices”. Static devices are those kinds of devices that have limited uses and work within closed user-provider loops. Videophone models issued by companies like D-Link, Sorenson, SnapVRS, Purple, and ZVRS 150/350 are examples of such devices whereby users have limited configuration capabilities and rely on firmware downloads made available exclusively for those devices and none other. Dynamic devices consist of open, multi-function devices that do far more than act as videophones. This covers personal computers, mobile netbooks/laptops, and the new breed of smart phones. A key functional difference between most of those static devices and those dynamic devices is the ability of the former to be assigned 10-digit numbers and to enable communications with E-911 services.

In terms of interoperability, there should be a different set of rules applied to such static devices, as opposed to dynamic devices. Static devices should have stricter rules of interoperability, simply because dynamic devices, such as a video-enabled personal computer, can download more than one software option to enable their device to communicate with a similar end point device setting (i.e., iChat, Skype, H323-based software, SIP-based software and open source options all can be on a dynamic device). Static devices have more limited capabilities. The stricter rules should establish functionally equivalent communication interfaces between static devices due to this limited user-adaptive range, whether or not such devices have inherent technical limitations by nature or by design.

Convo believes interoperability standards, to the extent that they bear costs, should be incentivized across all video-capable dynamic device manufacturers, rather than forced via regulation. There are currently available transcoding solutions that enable the interoperability of two dynamic endpoints. For instance, there is an interoperability solution for Flash-based video conferencing in the works that would enable communication between Flash and SIP or H.323 endpoints in real time. While there are possible transmission latency issues between various transcoding solutions, the need to force such standards between static device providers is greater

because it has enabled them to create closed loops that have resulted in artificial barriers to entry, to competition and have created limited consumer options. One example is the persistent use of H.323 video codec standards by one VRS provider in the face of competitor adoption of a SIP-based transmission protocol and video codec that run over it. VRS providers are required to ensure user interoperability and to the extent they are to do so, they must be allowed to recover costs associated with enabling that interoperability. Convo, since it does not offer its own device to its users, must incur costs to enable its communications platform to interact with other proprietary products. While Convo has posited a reasonableness limit for R&D cost compensation, it does not advocate extending such a cap for interoperability costs, including associated R&D expenses. If such a cap on costs to ensure interoperability were to be imposed by the FCC, it would be counterproductive to the agency's twin goals of achieving functional equivalence and encouraging innovation in a manner that benefits all users. Convo believes the FCC has the requisite auditing authority to demand proof that R&D costs to achieve interoperability are in fact such costs. Furthermore, the FCC has issued a ruling that makes VRS provider executive management, under penalty of perjury, fully responsible for verifying the truth and veracity of such cost claims<sup>4</sup>

**b) NOI #21, question item B: How should the Commission ensure that affordable video equipment is available to VRS users?**

Convo, in retrospectively looking at the historical growth of VRS, considers the distribution of a “free video phone” a key factor of the successful growth. However, Convo believes the “equipment distribution system” as it is practiced now is at a point where it is no longer an efficient mechanism in helping people get what they need. Due to the proliferation of provider-issued static devices, many deaf and hard-of-hearing persons have several video phones, each associated with an unique 10-digit number and are all simultaneously E-911 capable. VRS users with multiple devices tend to use one or two reliable products and their other video phones are “parked”, gathering dust. Since a few of them are available only for purchase,

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<sup>4</sup> In the Matter of Structure and Practices of the Video Relay Service Program, CG Docket No. 10-51, FCC-10-88, Declaratory Ruling, Order and Notice of Proposed Rulemaking, released May 27, 2010.

this becomes an unnecessary user cost burden. If this were a similar occurrence in the mobile cellphone market, surely there would be a very loud objection. In any case, what are the alternatives?

State equipment distribution programs (“EDP”) offer a possible solution, having had an appreciable degree of success. However, Convo believes that state practices of providing equipment at no cost, compared to requiring some level of user contribution, is not an effective option, for several reasons.

First of all, free equipment has been shown to be very likely to become “parked”. When there is a lack of satisfaction with the “free” equipment, customers are not likely to contact customer service to complain about the device or service in order to fix it. They tend to behave differently when they have some payment contribution. Secondly, state programs usually have limiting conditions, such as keeping the equipment in state or limiting user selection to single vendors that carry only a few products. Thirdly, to set up among all state TRS programs a uniform program of access to videophone equipment would mean getting resellers such as (Apple, Best Buy, etc.) to agree to carry as inventory VRS-compatible equipment for deaf and HOH. It would be a challenge to get 50 states to agree how to compensate those resellers for carrying that level of inventory just for a consumer base of VRS users. Fourthly, many states have legislated procedures for the purchase of and distribution of TRS-based consumer premises equipment (and which largely do not allow the purchase of video conferencing equipment for TRS) and this would require multiple state actions to implement such a nation-wide level of uniformity among all state programs. Finally, not all states have equipment distribution programs. Given the feasibility challenges, state equipment distribution programs are clearly not an ideal solution.

A national EDP should be considered. A national program could consist of a voucher system not unlike what the state of Texas EDP now uses. Texas uses a system where a deaf or hard-of-hearing person applies for a voucher, shows proof of his/her deafness and has a phone number and demonstrates state residency. Thereupon, the person is assigned a voucher. Video manufacturers would need to apply to the national EDP to be approved as a distributor, seller, or reseller. Participating video manufacturers or distributors would need to show proof that their

products are compatible with VRS. Deaf or hard-of-hearing persons would become the sole owners of issued devices and thus any problems they experience with specific products will have to be dealt directly pursuant to warranty protections offered by distributors or manufacturers.

Convo suggests that vouchers be issued to qualified applicants on payment of a nominal fee, sufficient to cover inventory maintenance and administrative processing costs. Also, by having applicants pay fee, they will feel more ownership and responsibility to the product they will receive. Eligible national program applicants can re-apply for vouchers every so often and can be limited to one voucher per person or to one in-state address. A National EDP could limit this to either static or dynamic devices. VRS providers who distribute video phones should be allowed to utilize the national EDP route. Convo believes the Commission should determine whether a terminable service contract without penalty should be required, as long as this preserves consumer freedom of choice for both device and provider. Deaf or hard-of-hearing persons who wish to purchase additional devices can do so at full retail or wholesale prices from the end dealer. Convo does not support the provision of videophones free of charge or at heavily discounted rates, but is cognizant of the challenges of enforcing this kind of condition in a free market.

At the same time, Convo notes that video connectivity, which is rapidly becoming a standard feature of dynamic devices, has become a focus of major Internet-based companies' R&D efforts because of the wide-spread consumer desire for feature interoperability on such devices. For instance, Apple has indicated its desire to collaborate in the open sourcing of its FaceTime application code to any company wishing to incorporate its video standards. Convo believes that Apple's (or any large scale dynamic device manufacturer) desire to take a leading position could establish a video standard for many devices. In other words, anyone would be able to connect other devices employing Apple's FaceTime video standard. If and when this does occur, consumer purchases from VRS providers would go down dramatically because the public will then choose to purchase equipment "off-the-shelf" because a uniform video standard would exist on many dynamic devices.

Enabling VRS users to purchase off-the-shelf equipment from industry stalwarts rather than from VRS providers would protect their ability to choose from a wide variety of

products. This alone is sufficient justification for implementing a centralized, national voucher system.

## **6. Protection of Providers from Under-Compensation and Avoidance of Over-compensation**

### **a) NOI #22: Reasonableness of Costs.**

Convo does not support the true up process. It seems unnecessarily complex and administratively burdensome. Convo believes reimbursement rates should be established based upon historical costs adjusted for anticipated inflation and anticipated cost efficiencies to be achieved. This is basically the current system. Over and under compensation will be adjusted on a periodic basis as new rates are set. Providers who achieve greater than average efficiencies are rewarded with the current system.

### **b) NOI #23: Rate of return.**

The current rate of return methodology is badly flawed for VRS services. The methodology is based on a capital intensive business model where returns are allowable based on provider capital investments. But, VRS is a far more labor intensive business model. We believe the rate of return should be based on a cost plus profit allowance model.

## **7. Certification**

### **c) NOI #24 - #26: Appropriate certification procedure?**

The current routes to directly receive Fund compensation have served a preliminary purpose well by virtue of the Commission's certification application rules. However, there is a perception of fear that those rules have lead to the state of affairs besetting the VRS industry and have placed cumbersome oversight burdens on the Commission. This has, unintentionally, operated to restrict certification applications from companies like Convo from moving forward.

Convo strongly believes the easiest solution to address pending applications before the Commission is to add and implement a Provisional Certification procedure. The Commission

should set up a procedure for Provisional Certification (PC) for currently non-certified VRS providers or for any company wishing to provide VRS services. The length of time a company would hold this provisional status can be for up to 5 years, over which time the FCC can monitor and closely scrutinize the performance and billing activities of such companies. If this certification procedure were added, VRS providers eligible to submit reimbursement claims to the Fund Administrator would fall under one of two categories: they are either a Certified Provider or are a Provisionally Certified Provider.

Under either of these two certifications, any domain name that enables online access to a VRS call platform must be owned and managed by the certified entity. This would prevent ‘white-label’ call centers from submitting billable minutes pursuant to a separate contract with an existing VRS provider. As for multiple-domain names associated with a Certified VRS entity, the Commission should allow billing claim submittals associated with those multiple-domain names as long as they are fully operated and fully-owned by the Certified entity. In essence, new market entrants who wish to become a certified VRS provider must be required to first secure Provisional Certification and will have a direct reporting relationship with the FCC and Fund Administrator.

A suggested set of criteria to become a “Provisional” VRS provider may be as follows:

- Senior staff must be familiar with TRS regulations
- Provisional applicants must demonstrate their ability to meet 47 C.F.R § 64.604 mandatory minimum standards for VRS
- CEO or Senior administrator must certify that the demand data and relay calls are developed and handled within FCC VRS accounting rules
- Must own, operate, and manage a Call Center 24/7 and that their Call Center(s) must be rule compliant on the first day of being provisionally certified
- Applicant provider(s) report directly to the FCC on a more frequent or detailed basis
  - Provider must report periodically as to their R&D, marketing/outreach, and customer service activities to demonstrate the commitment of the provider
  - Also the Provider must send in relevant and pertinent financial information on a monthly basis as may be deemed necessary, using an FCC-directed reporting format.

- Must own or lease a fully operational Automatic Call Distribution technical platform prior to assuming online services

If the Provisional Applicant fails to meet any of mandatory operational criteria, the FCC can suspend or deny formal certification and withhold further payments. The FCC can terminate the provisional privileges any time if the FCC finds evidence of non-compliant conduct by the Provisionally Certified provider. Applicant providers have up to 5 years to demonstrate consistent compliance with all TRS regulations and must have provided 50,000 minutes of service a month for a specific period (to be determined by the FCC) by end of their 5th provisional year as a final step towards becoming fully Certified VRS providers.

If the Commission, upon review and under certain circumstances, determines that Provisionally Certified Provider fully conforms to the established criteria, it can formally certify such providers before the 5 year term is over.

Provisional Certification application criteria and procedures will eliminate most, if not all, “fly-by-night” operators as well as those who have no intention of becoming certified VRS providers. The burden of meeting regulations will fall onto those providers and reduce the need for FCC policing of fully certified VRS providers on foundational issues. Reporting directly to the FCC will force applicants for Provisional VRS Certification to assess their intentions and decide if they want to become certified VRS providers or not. The procedure also will enhance the capabilities of those companies that fully intend to become certified VRS providers.

The added benefit of Provisional Certification is that the start-up providers would not have to pay additional processing or service fees to a Certified VRS provider acting as a billing partner. Additionally, those Provisionally Certified providers would be compensated at the NECA rates based on their actual call volume instead of being reimbursed at the lowest compensation rate, as certified VRS providers normally compensate themselves at the higher compensation rates first. A few VRS providers add a further condition to the billing partnership arrangement by requiring the non-certified provider to use their call platform. This platform and billing tying arrangement, previously addressed herein, adds further cost obligations to the Fund because under the current cost submission scheme, certified providers imbed those arrangements within their cost and demand data submittals to the Fund Administrator. This becomes an

artificial cost as it adds a “service charge” to the cost of providing relay services unrelated to true operational expenses, and is harmful to competition. The Provisional Certification procedure would enable providers to have extra funding as stated above and be in a better situation to survive the meager profit opportunities available for such a start-up VRS business, enabling them to better serve customers.

A Provisional Certification procedure is a “win-win” solution for all except those who intend to make a fast buck and leave. The procedure will maximize the effectiveness of the FCC in identifying issues that may be problematic for start-up providers and enhance the ability to regulate towards a competitive and product-innovative service delivery scheme. By having the Commission deal directly with Provisional Certification providers, scrutiny is much easier and effective. Also, by dealing with the FCC more closely and directly, it would discourage would-be nefarious providers who only want to ramp up minutes and make a quick profit without regard to sustainable service to customers. It also would serve as an incentive to potential VRS market entry as they would be able to maximize their profit and re-route revenue to further refine essential tasks to help those companies strengthen their positions in the highly competitive world of VRS.

**B. Part II - Broader and Economic Issues Concerning Video Relay Service**

**a) NOI #27 thru #31: FCC concerns**

Convo reiterates its earlier comment(s) that the system is not so “broken” that it requires a whole cloth remake. The system works, but there are aspects that would benefit from Commission refinement and closer involvement. Convo believes that is the purpose of this Notice of Inquiry. As in past comments, Convo recommends that the Commission fully utilize its enforcement in a more responsive manner upon noting possible impropriety and that it should further respond to VRS participants’ petitions for clarification promptly so that anomalies are addressed and resolved before they later are deemed impermissible, much to the dismay of industry participants. Convo reiterates that the proposed Provisional Certification procedure and stronger Commission enforcement activities will be effective in addressing its concerns.

## 1. The Components of Video Relay Service

### a) NOI #34-36: Video equipment functionalities and other related issues

Convo's earlier comments to *NOI #21, question item A*, addresses some of the issues raised in these NOI sections. In addition thereto, Convo believes the basic functionalities VRS users require of static or dynamic devices and associated call platform features emanating from the provider side consist of the following desirables:

- Address book
- Call History
- Answering machine retrieval
- Ability to save textual aspects of VRS calls
- Video mail

Convo believes the video connectivity standard should be SIP-based as a majority of VRS providers utilize that standard. If the majority of providers are using a more prevalent standard, it should be the required standard. Instead of following the video standard of the single largest VRS provider, the standard should be based on prevailing internet architecture configurations. Convo accords little credence to any VRS provider arguments that preserve an outdated protocol on the grounds that their historical investment in it has not exacted the desired rate of return on investment beforehand. Industries are replete with the frequent adoption and abandonment of standards and this is the expected nature of competition in a digital environment. To insist otherwise demonstrates naiveté or be in denial of one's poor business judgement.

While the vast majority of users currently are locked into a limited selection of VRS equipment, primarily because of the equipment's anti-competitive tying arrangement with the provider's call platform, the Commission should examine ways to provide disincentives to this practice. Such bundling arrangements are ultimately unfriendly to consumers and for persons with limited access to the mainstream aspects of society due to the presence of a disability, and such unconscionable arrangements violate fundamental notions of fairness.

The FCC asked for comments to the following question: *In the context of our existing rules, should videophone equipment supplied by VRS providers, and the networks on which they*

*operate, also be standardized so that they retain a mandatory minimum set of functionalities regardless of the provider selected by the VRS user?*

Convo takes the position that videophones and VRS networks should be standardized in the same spirit that exists over VoIP networks, wireless cell phones, and circuit-switched protocols. For instance, the audio and text channels of mobile handsets operate under a device and network standardization that enables Blackberry devices to communicate with iPhone devices.

In response to the FCC question seeking comment on *whether it is feasible for the Commission to adopt technical standards that would ensure the continuation of videophone equipment functionality after a consumer switches default providers*, Convo asserts that every video phone unit should be at least be able to place emergency calls even when the device is not associated with the providers user database at the time. Furthermore, such devices should adhere to technical standards much like cell phone devices do so that any videophone user is able to make any type of video call to any other videophone devices without restriction or a loss of picture or audio quality.

Likewise, to the extent that user features are housed in the provider's network (rather than the videophone equipment itself), a standardized protocol within the network must exist so that switching providers will not eliminate the existing functionalities of the user's equipment. Convo asserts that it is technically feasible to use such a standardized protocol across provider networks so that switching providers will not eliminate functionalities of the user's equipment. One such standardized protocol previously mentioned is the Session-Initiated Protocol standard, which enables devices and platforms to seamlessly interface without loss of functionality or degradation of quality.

**b) NOI #37: Video communication service**

Convo believes that VRS provider platforms should be allowed to feature voice to text capabilities when VRS users access their answering service. For example, a when a hearing person leaves a voice message, the deaf customer should be able to choose the output nature of the message, which could be either video or text. This is a novel step because it integrates two modalities and in a way, becomes multi-functional from one access point. There are reliable

voice to text applications available. Moreover, it will enable VRS providers to act as TRS providers in the sense they would be rendering voice to text at a much lower cost to the Fund than they would otherwise, as it would not be the case if users were limited to receiving voice messages in sign language. This option would also enable providers to achieve efficiencies in occupancy rates as VRS users move towards voice to text options, thereby freeing up VRSCAs to handle actual conversation calls.

**c) NOI #38: Relay interpreter service**

FCC has frequently cited its view that a VRSCA connection is conceptually and procedurally treated as if the connection is equivalent to a hearing person receiving a “dial tone”. Convo acknowledges that VRSCAs should be available 24 hours and 7 days a week, and in general be a “transparent conduit”. However, Convo wishes to remind the Commission that a VRSCA nevertheless is a person and there will be instances where a “dial tone” stance may be problematic. Convo recognizes that there is a unique communication role-based relationship between a deaf or hard-of-hearing person and VRSCAs, which is unique and simply cannot be ignored.

One instance of a problematic situation is where a VRSCA actually sees physical abuse on their monitor, perhaps of a father hitting a little boy and causing a nose bleed. Many state laws do not exempt even lawyers, doctors, or priests from being mandatory child abuse reporters. Convo is of the strong opinion that this obligation should apply to VRSCAs as well, despite previous Commission rulings to the contrary. VRS has introduced a visual connection that cannot be easily explained away. VRS calls where there are no visual displays of abuse, but contain comments that could be interpreted by a reasonable person to result in physical harm to a child or an elder (perhaps as a form of punishment or control) should not be reported simply because the parties may be joking. The act of actually witnessing physical abuse is not the same as hearing about it through a “conversation”.

Convo suggests that the FCC revisits this issue and release a Notice of Rulemaking on the role of VRSCAs in situations involving witnessing physical abuse. It would further acknowledge that VRSCAs are persons who cannot simply shut out traumatic working experiences and it would remove the artifice of treating VRSCAs as “dial tone” equivalents.

**d) Quality of VRSCA**

To ensure that its VRS callers experience high quality interpreting services, Convo has adopted an in-house evaluation of the signing skills of potential Convo interpreters prior to authorizing them to work as a Convo VRSCA. Convo has discovered that not all certified interpreters are qualified and notes that there were more than a few instances where some non-certified interpreters were far better than many certified interpreters. Convo suggests that until a VRSCA certification procedure is mandated, Convo prefers to do its own evaluation of its interpreters. To address the concern of unqualified, underperforming VRSCAs, VRS users are becoming more aware of their power to choose other VRS providers in the event they consistently get low quality interpreters from their default provider.

**e) ASA Requirements**

As for handling wait times affecting its speed of answer measures, Convo has developed a tracking protocol, using its staff experience from previous VRS and TRS industry assignments, which enables Convo to monitor and manage its adherence to FCC speed of answer requirements.

**f) NOI #39 - What components of VRS attract VRS users?**

Convo notes those items that appeal to VRS users are as follows:

- Qualified Interpreters
  - professional attire
  - background color and adequate lighting
- Contain frequently usable features
  - address book
  - auto answering service access
  - reliable VCO-VRS sessions
- Simple and dependable devices or software
- VRS customer support service readily available

- Very good video picture quality
- Quick VRSCA response (minimal waiting time)

Convo has also noted that some non-service related considerations are important and appeal to deaf and hard-of-hearing consumers

- Providers supporting and contributing to worthy causes
- High number of deaf and hard-of-hearing employed by the provider
  - Appropriately proportionate number of deaf and hard-of-hearing persons are employed in high-level or influential management positions

**g) NOI #40: Broadband Issues**

Convo has noted that if VRS users use less than adequate broadband speeds, the user's VRS access experience is compromised as video quality is degraded. Those who use wireless Internet providers typically have barely adequate download speeds and insufficient upload speeds, despite provider promises/pronouncements of high bit rates.

Convo understands this is a national problem that the Commission now is addressing through other proceedings. The Commission must continue to address this if VRS is to ever reach its true functional equivalency potential under the Commission's Universal Service principles.

**2. The Demand for Video Relay Service**

**a) NOI #42: Number of VRS users**

Convo believes information associated with the Video Relay Service, while largely available to NECA and FCC by providers, should be more transparent to the public and that includes aggregate provider disclosure of the number of VRS users and their associated Internet Protocol addresses or 10-digit numbers. The information contained in the iTRS database, which includes all registered 10-digit phone numbers and associated Internet Protocol addresses is at this time the best resource for a reliable count of VRS users.

Convo counts Convo VRS users using registered 10-digit phone numbers assigned by Convo. Convo also processes calls by non-Convo registrants which Convo counts as well in

order to manage call volume. In arriving at an aggregate count, instances of double counting must be avoided. Providers should not report registrants already registered with other VRS providers as this would only duplicate reporting of registrants. If the FCC were to implement a reporting mechanism that required providers to include IP addresses not associated with a 10-digit number and appropriately filtered to reduce instances of double counting, it is possible to get closer to the actual number of VRS users.

The Commission asks what kind of additional information should be collected by the VRS providers or the Commission? Convo posits that existing telephone regulations surrounding Customer Proprietary Network Information (CPNI) should be adapted for the VRS industry for possible use as a data reporting tool. This would produce useful information regarding user behavior, such as the number of intrastate VRS calls, areas of the country where call activity is disproportionate to the number of registered users, the average length of calls by day/hour/month in specific geographic zones, all of which can be associated with non-call data to optimize the access to and deployment of needed provider and network resources.

**b) NOI #43 and #44: Population of deaf and hard-of-hearing persons and associated issues**

At this time, there is no credible census of total deaf and hard-of-hearing persons in the United States. The last time deaf and hard-of-hearing people were identified through a US Census count was 1930. The last survey count by the National Association of the Deaf was privately conducted in 1971. The Gallaudet Research Institute, using Centers for Disease Control incidence rates associated with hearing loss and other demographic surveys, estimates is that hearing loss affects 8.6% of the total USA population. However, any effort to identify aspects of the universe of ASL users is fraught with peril and would ultimately be unreliable. Any demographically-based determination of ASL fluency among deaf and hard of hearing persons is very difficult and would likely result in unreliable data. Convo does not have the necessary resources to arrive at its own accurate count of deaf and hard-of-hearing people that could benefit from the provision of VRS. Nor can Convo associate the absence of broadband availability in some areas of the country to a measure of potential VRS users.

**c) NOI #45: Trends in VRS minutes of use**

Impacts in the video communications environment that affect trends in VRS minutes of use are related to the following factors: improvements in video picture quality due to better video codec and reliable, robust broadband transmission speeds; broadband penetration into rural markets; cheaper video-enabled equipment and lower access charges; and lastly, a wider dispersion of knowledge amongst ASL-fluent users how to operate video communications equipment and to access VRS service. Other than those identified trend agents, Convo does not have any information on how to compare those trends with functionally equivalent voice communication service trends.

**d) NOI #46: Other trend measures**

Convo believes a gradually increasing percentage of native ASL signers are relying on VRS as their primary means of communicating with hearing parties due to reduction in barriers to accessing broadband offerings and greater availability of video-enabled equipment. However, the largest non-VRS user base consists of late-deafened adults, mainly because they receive very little support for or have any desire to become fluent in ASL. Convo believes this group consists of approximately 36 million late deafened adults in the country. Also, the majority of late deafened adults continue to rely on speech and any residual hearing they have available to conduct telephone calls as their primary means of communication. They instead gravitate to CapTel devices or text telephone relay devices to meet their telecommunication needs.

As dynamic devices and broadband costs have become more affordable, more deaf people are making an investment in portable video equipment and computers that enables them to make the switch from TTY relay services to VRS. The trend is very slow partially because of the disproportionate impact the economic downturn has had on the deaf community of late.

Convo believes the shift towards dynamic devices signals there is a robust trend leading VRS into an age where static provider issued videophones will become obsolete. Video communications have enabled an increasing interaction between deaf persons across the country who previously were separated by distance and saddled with relatively expensive

telecommunications means. As ASL dependent individuals increasingly strive to reconnect with other deaf persons and their own hearing family members who sign, the numbers of point-to-point calls have exceeded the number of VRS calls.

While Convo does not have any information on the number of deaf or hard of hearing people using mobile phones to text with other people, Convo believes it is now one of the primary means of communication between deaf and hearing people. The growth in wireless text communications is somewhat limited by the fact that text is good for shorter conversations, so such growth should not imply that dynamic handheld devices will replace VRS as a method to carry on longer conversations.

Convo supports assigning 10 digit numbers to hearing people but the costs of that effort should be borne by the hearing party, not the providers or the Fund. Convo believes compensable minutes should only be allowed for bona-fide communications relay activities between deaf or hard of hearing persons and their voice callers. Convo does not have any information of the potential impact on VRS providers if 10-digit numbers were assigned to hearing callers but believes this will reduce costs to the Fund.

**e) NOI #47: Factors contributing to the low adoption of VRS?**

Convo submits that the lack of an accurate population count of deaf and hard-of-hearing people in the USA makes it difficult to assess whether the VRS industry has reached a saturation point. Is the VRS industry now at the point where VRS providers are left to compete among themselves over a discrete, finite pool of VRS users and have less opportunity or need to secure new customers who never have used VRS? Convo argues that this is likely not the case because if one does an analysis of NECA's reports with disallowed minutes removed, it would show that the number of VRS minutes continues to increase, indicating the possible influx of new customers, many of whom are likely deaf or hard of hearing persons with ASL fluency.

Another possible reason for the seemingly low adoption rate is that the country has been undergoing an economic crisis for the past few years. The deaf and hard-of-hearing population has been hit hard and on top of the historical high unemployment percentage of this population, it could explain the low adoption rate. Also, while broadband speeds have increased, monthly

rates in many locations are still expensive so unemployed people may not be able to afford high speed broadband. Convo has pointed out herein there are many rural locations that offer less than ideal broadband speeds and many areas still have no Internet service available.

Fears of and lack of experience with newer technologies have discouraged quite a few people from trying VRS. Convo has found this to be more problematic than one realizes. Many deaf persons have minimal language skills and as a result tend to be late adopters of newer technologies. Also, elderly deaf and hard-of-hearing people that can sign often are set in their ways and are uncomfortable with digital technologies. However, in the last 5 years, Convo has noted that this is now slowly changing as the access to and use of video phones and dynamic devices have grown more and become easier to use. Also, more VRS companies have employed their own installers to help users learn to use and configure their new product or service.

Many ASL users also have a distrust of third-parties that participate in the call, such as the VRSCA and bear concerns about call confidentiality issues and identity theft. Also there are widespread concerns regarding how much information VRS providers gather about VRS users on their calling habits.

VRS branded as being used by the “Deaf” may have influenced many hard-of-hearing persons who can sign not to use VRS as they do not want to be branded as “Deaf” nor do they fully identify with the Deaf community.

### **3. The Supply of Video Relay Service**

#### **a) NOI #49: Relay interpreter service.**

The biggest variable costs for providing VRS service are staffing and operating call centers to answer VRS calls. The peak hour volumes are the cost driver for the number of stations required. In non-peak times, most of the stations are idle and unstaffed. From purely a cost point of view, the best way to serve this need would be to establish 8-10 large call centers in various places outside of metropolitan areas. The cost of living/VRSCA pay rates would be moderated and the supply of VRSCA's would be optimized. This could be shared between VRS providers but this would equalize the quality of service among providers. Currently, we consider this quality a major differentiator. Convo believes the centralized approach would lead to a

lower quality of service than having many smaller, inter-networked call centers controlled by individual VRS providers who depend upon customer satisfaction to survive and grow. But, from purely a cost perspective, it would be a cheaper approach, but not recommended.

In this centralized approach, the number of interpreters needed at peak time would not be reduced too significantly (because of the minimal time delay) but the number of interpreters needed in off peak hours would be able to be reduced fairly significantly. In fact, during the lowest traffic times (overnights), several VRS providers already share call centers at a significant savings to individual provider operations.

Convo does not favor this centralized approach because Convo believes it will lead to a degradation of service quality and a reduced amount of innovation. VRS providers utilize their unique video equipment for their VRSCAs that would not be possible in a centralized approach. It will lead to the end of the competitive model for these services. Convo markets its services based on a better customer experience and feels that quality assurance must be closely monitored. The VRSCA is the central part of the VRS experience of excellence.

**b) NOI #50: Video communication service**

Hearing persons primarily use video communications over software-enabled video devices imbedded within off-the-shelf dynamic devices widely available to the public, such as iChat offered by Apple/AIM, as well as OOVOO, Skype, and other downloadable video conference software programs. In contrast to these alternatives and what is the unique part of VRS, is that it is a labor intensive service. There is a human interaction required on each VRS call, without exception. This is not true of the other mass market video-capable services.

The reality surrounding video conference products and software is that a universal video standard has yet to be established. Convo hesitates to recommend a permanent video standard or a model to emulate as it seems technology companies are just now discovering the potential market for video conference products and services. They are taking proactive, innovative measures to serve that market. A case in point is the FaceTime feature of the Apple iPhone4 which has led to corporate decisions by Apple to allow FaceTime to become an open source standard; the idea is to let other mobile device manufacturers incorporate into their products as to

make it interoperable with different branding. This could very well show a potential shift in the video standards to where certain video codec will be the standard.

Consequently, Convo suggests that the Commission take restrained measures to reconfigure VRS pursuant to this NOI in order to study the movement amongst technology companies as they make their foray over the landscape of video communications. Convo strongly believes that existing major industry participants will pave the way towards a well-integrated and standardized video conference experience, which could ultimately inure to the benefit of the deaf and hard-of-hearing VRS user, and that the VRS industry will be able to move away from proprietary static devices and be able to use other readily available dynamic video conference products or services to provide their own “brand” of VRS.

**c) NOI #52: Single entity vs multiple vendors**

Convo believes the current system as is not broken and is actually designed to promote effectiveness, efficiency and sustainability for the next several years. In the past few years, providers such as Sorenson, Purple, ZVRS, and SnapVRS have introduced products into the market place. Convo will soon be the next provider to introduce a very radical product to the marketplace. The current system actually encourages start up companies or existing companies whose corporate mission is to become a Tier 2 or Tier 3 provider to reinvest the profit they earn into R&D. Given the low profit margins available to most existing VRS providers, this is risky and the Commission should be mindful of adding more risk before those companies have a chance to become financially solid.

The Commission sought comment as to whether its practice of allowing the integration of proprietary video devices with provider platforms have been harmful to the progress of VRS for users and industry participants. In a nutshell, Convo feels that to a limited extent, mainly due to the actions of the largest VRS provider, harm has been done to the VRS industry and its users. However, due to Commission efforts to reduce this exposure to restraints on competition and user access to VRS features, the industry has found daylight and will certainly rise to the occasion on a more positive and promising note.

Additionally, the Commission sought comment regarding its practice of not compensating providers for their cost of producing proprietary video devices. Convo feels that provider expenses to create new devices should be compensated from the Fund to a limited extent and has made previous comments in this regard herein. In particular, see Convo comments regarding caps on compensation for R&D. Reasonableness limits on R&D expenses reimbursable from the Fund should be maintained to reduce provider incentives to over-invest in features that serve as a restraint on customer access and use of VRS.

#### **4. The Regulation of Video Relay Service**

##### **a) NOI #59 - TRS reimbursement structure and its associated issues?**

The explosive growth was fueled by several major influences:

1) FCC rules did not anticipate the quick impact the free provision of videophone devices would have on the Fund (which were tied to a VRSCA call platform that only worked with that specific provider's device; had that not been the case, the growth of the Fund would have been much larger much sooner), plus the low cost availability of provider supplied videophones (\$99 VPAD);

2) The use of projected cost and demand estimates to establish the fund reimbursement amount, which were later determined to have result in significant overcompensation for several providers;

3) Additionally, there was the inability to demand a quick and cooperative review of provider reimbursement submittals to detect fraud as the FCC needed to get "inside" the provider's call detail records to identify patterns that would reveal possibly fraudulent activity. The FCC had audit authority that was first used only after the FCC had received whistleblower affidavits which led to the probable cause warrants that quickly resulted in the filing of criminal charges against certain certified and non-certified VRS entities.

The question regarding the contribution the compensation scheme structure has on the Fund essentially has two aspects: whether the flat rate is efficient in covering both variable and fixed costs and by doing so, it whether a flat rate creates conditions for fraud and Fund abuse.

Convo is of the opinion that the use of a flat, tiered per minute rate is the most administratively efficient means of compensating providers.

However, the proper calculation of the rate in the context of both fixed and variable costs must consider the fact that certain fixed rate cost categories do not experience positive economies of scale in labor intensive contexts. For example, equipment overhead and maintenance marginal costs (and thus total marginal costs) decline when the provider benefits from economies of scale and this is true in the traditional switched-circuit world. Those fixed costs will eventually have an increasingly negative benefit in labor intensive business settings. When a provider grows larger, additional stations and VRSCAs will require additional capital outlays after a certain growth level is achieved, creating a flatter marginal cost curve. As the incremental marginal cost of each new VRSCA cuts into marginal revenue, the only way a provider can increase profits is to get new customers, essentially from a relatively fixed pool of sign language users with hearing loss who rely on VRS more often than other forms of telecommunications. As this pool is intractably linked to the availability of videophones and broadband access, further volume and profit growth, when at capacity due to market user penetration and saturation, have to come from more revenue generating activities. This is where the incentive for fraud and Fund abuse comes about: from a “limited” source of customers, one must create artificial forms of growth through minute pumping, staff conference calls using VRSCAs when all the call participants are ASL users , etc., or risk further cost cutting measures that will detract from VRSCA service quality, increase connectivity times, and decrease VRSCA availability that harms its customer base, all just to keep a remuneratively profitable difference between the marginal cost and marginal revenue contributed by each new VRSCA.

As a solution to this cost/growth dilemma, Convo suggests the Commission consider a reimbursement calculation approach that properly formulates the relationship between provider size and compensation from NECA for fixed and variable costs so as not to cause unintended provider disincentives to comply with Fund rules.

**b) NOI #60: Principle of Cost-Causation.**

Current VRS reimbursement is based on a “per minute” compensation. Costs are more directly incurred based on a “per-VRSCA” basis. If compensation was changed to be per VRSCA hour for example, the compensation would be more directly linked to the cost. It would, however, remove the motivation of providers to optimize staff levels with anticipated call levels. We believe this kind of change would lead to greater inefficiency.

**c) NOI #61: Economic distortions.**

With the current variable structure, Convo thinks the tiering of compensation rates should consist of five tiered rates. Convo believes that having five tiered rates at incremental levels shown in the table below would smooth out the impacts of startup costs on new entrants and that the higher tiers should be more significantly reduced to reflect the increasingly gainful effects economies of scale have on variable and fixed costs as call volumes grow.

Tired Rate I	Tired Rate II	Tired Rate III	Tired Rate IV	Tired Rate V
50K	100K	250K	500K	1M

**d) NOI #62: Additional information**

Convo does not believe the VRS compensation structure is responsible for the many of problems the VRS industry has encountered. Convo thinks the VRS offering has been very successful in meeting the needs of the deaf community and the enormous legitimate growth of the traffic in this program is evidence of that success.

There have been some abuses and Convo applaud the Commission’s aggressive prosecutorial conduct to severely punish offenders and set an example for everyone else. This is exactly what a world-class, leading regulatory agency like the FCC should do.

Convo is also aware that some investors and business operators have become unduly and unconscionably enriched due to the relatively flat tiering structure in the current tier compensation system. However, the recent rate setting adjustment for the 2010-2011 Fund year will augur in ongoing refinements to the compensation structure to reduce excessively

disproportionate profits for the largest provider and it will also lead to healthier financial prospects for the smaller providers.

## **5. The Incentives of Providers**

### **a) NOI #63: How should incentives be regulated?**

**(Questions from the FCC are broken into 5 parts):**

#### **(1) How can we encourage competition that would reduce the costs of VRS?**

There may not be any need for a short term solution because there is a great demand for Video Relay Service. Everywhere you go in the deaf community, there is awareness of VRS and appreciation for the service as well. Convo believes all VRS providers should be encouraged to be innovative and to continue to develop features and processes that transfer control of the call more to the user and reduce the responsibility of VRSCAs to handle some call processes. Such steps would help to reduce the cost of VRS

On the other hand, Convo believes the leading provider currently serving 83% of the traffic has chosen not to funnel its proportionate degree of its profits back into the improving its service features. This has certainly stunted the growth of VRS. Yet, the Commission should wield an invisible hand in this matter as VRS users are entirely capable of shifting their allegiance to increasingly more progressive designs and features offered by other leading providers.

Convo believes there are other leading providers that have invested greater effort into being innovative with their products and services by hiring the best interpreters to attract customers away from other competitors and then putting more of their profit into R&D. Convo believes that by continuing to carefully monitor incentives for and to continue to guard against restraints to innovation, the FCC would see cost savings emerge from a more competitive, level playing field.

To accomplish a level playing field and to achieve Fund cost efficiencies, Convo encourages the Commission to recognize and adhere to the following principle positions:

- Insist on and enforce financial transparency principles so that providers' financial reports can be more readily audited and to enforce penalties for any resistance to auditing activities by the Fund Administrator, such as withholding compensation from providers or instituting decertification proceedings

The above step will lead to the identification of the appropriate number of tiers and corresponding tiered rates. This will ensure a more consistent rate of return across providers, regardless of their size ranges and at levels more acceptable to public policy makers

- Institute a provisional certification program to enforce VRS rule compliance and to reduce fraud and abuse against the Fund

**(2) How can we channel the efforts of VRS providers to foster innovation and improve services for VRS users?**

Convo believes that the Commission must address appropriate compensation and certification practices in order to foster innovation and improve services.

One further step the Commission should take is to not allow states to assume the provision of intrastate VRS. By way of example, winners of state TRS contracts for the past ten years have not introduced major innovations for circuit switched services to the TRS experience. As a result of the blind adherence by states to landline TRS services, that kind of technology is rapidly becoming obsolete as users have moved towards more dynamical systems.

By comparison during the same period (2000-2010), the following products were introduced to the market:

Feature rich videophones (VP 100/200, Dlink, Ojo, Z340, Z150, MVP, VPAD)

Software based products (Z4, Viable Vision, P3, Convo Anywhere, HOVRSIM, ConvoIM)

Mobile services (Z)

The explosion of product innovation will not stop there and no doubt, this will continue as the providers compete for customers. At some point, this competition will reduce the cost inefficiencies against the Fund.

Currently, this is a bit difficult to achieve because the leading provider has chosen to dictate the nature of the VRS experience for the deaf and hard of hearing VRS user communities by not further improving or providing for its user's needs. One such example is that when its users have elected to change to another default provider while retaining the provider's device, the provider has elected to discontinue to offer that user access to the user's address book, frequently called numbers, and call history.

When the monopoly by the leading provider is controlled to keep the playing field fairly balanced, Convo believes it is very likely the VRS industry will then move forward into a phase whereby Fund costs are more predictable across all call categories and between providers.

**(3) What data or analyses are particularly important for us to understand in choosing how to restructure the VRS market to improve its efficiency and effectiveness?**

Convo believes all providers have to be transparent with their books and to allow the Commission to take a closer scrutiny of provider financial behavior, rather than simply filing out NECA issued cost and demand forms. That is not an appropriate way to determine Fund compensation rates because it could lead to continued under or over-compensate of providers.

Convo believes there are 2 ways to approach this problem:

- (i). Expand the NECA form to include very specific areas showing the companies costs for more detailed line items; or
- (ii). Providers be periodically are required to subject their books to FCC auditors.

We believe that these two suggestions will allow FCC to restructure the rates and tiers which will reduce the incidence of provider under/over compensation and will discourage fraud. Appropriate level of reimbursement rates will allow the companies to be more cost effective with the services they provide as well.

**(4) If the Commission decides to modify either what constitutes VRS or the regulation of VRS, how should the Commission structure the transition to avoid service disruptions?**

Convo does not support a major change in the regulation of VRS, but instead believes that the Commission should be judicious by continuing to address deficiencies in the current system. The FCC should be conducting more frequent auditing and enforcement actions, including implementing the provisional certification program currently proposed by Convo. All of that does not require a service transition. However if it is required/necessary for a service transition, all providers would need to get together to work on transition issues before a solution is implemented. The Commission should be aware that transition decisions are not inexpensive to instigate for providers and it is likely that this will lead providers to spend millions of dollars, as was the case after the video standards/interoperability rulings issued a few years ago.

**(5) What institutional oversight is required at the federal and state level, and how extensive must that oversight be to combat waste, fraud, and abuse?**

Convo has made numerous comments herein to address institutional oversight measures. Convo further suggests that providers be required to provide reports on product innovation and marketing/outreach activities to FCC on a more frequent basis.

While there may be a need for additional manpower at FCC to monitor all the reports and monitor the effectiveness of new products from providers, the end result would be attractive and more preferable to the current reactive “policing” system the FCC has employed to date. Convo believes this will lead to a more collaborative effort between providers and FCC.

**b) NOI #64: Choice of VRS provider.**

The consumer-oriented market scheme currently in place is what the VRS industry now has. It is the most efficient system at present that ensures the continued maturity of VRS services through the choices customers make.

Convo is strongly of the opinion that competitive bids awarded by a federal or state entity to a few VRS providers, even if with a mega-interpreter center to control costs, would seriously destroy the ongoing move towards a healthy competitive system the VRS industry experiences through the current tiered rate structure. Centralized, one-provider schemes will be anti-consumer in nature when operated in such dynamic, technology driven areas such as the current

high-speed, application and content-dense World Wide Web, simply because new features will not be developed by winning bidders who have no further need to compete for a customer's specific needs if they were the sole VRS presence in a state

Even if passed along to the states, any competitive bidding procedure will assure monopoly-like status for the winning bidder after that bidder reaches a certain competitive price point other providers cannot match because they cannot garner the necessary economies of scale to be price competitive. Given the current cost environment in VRS today, this will result in maintaining the current status quo consisting of one or two of the relatively large providers, as most states are under statutory mandates to award bids to the lowest cost bidder. Also, at the state level, new features and products will only occur if the state requests such in its bid documents, which often do not occur after a certain functional service level is achieved. This has minimized new technology innovations in the traditional TRS world and has no place in the feature rich competitive possibilities of telecommunications over the Intranet. Simply stated, one-provider or centralized monopoly-type VRS schemes will result in a much less functionally equivalent experience for users of VRS. The free market approach, which thus far has driven the VRS industry, has been, remains and will be the most efficient system. Again Convo reiterates that current system plus provisional certification procedure and increased staff of enforcement at the FCC level will sufficiently do away with nefarious providers.

**c) NOI #65: Rate-of-return regulation**

Convo believes the existing tiered rate system should be maintained with some adjustments. Rate of return regulation may be an approach to "look back" at a year's reimbursement and expenses for each individual provider to see if the provider reaped excess returns. If the returns are deemed excessive, the Commission could demand a refund of the excess amounts. As previously noted, the calculation of a rate of return based upon equipment or building ownership is not a reasonable approach to metering returns in a labor intensive business. If the commission could define an allowable profit percent for a VRS provider, this regulatory approach may be an additional way to prevent excessive and undeserved compensation.

**d) NOI #66: Modified Price-cap regulation**

Convo believes rates should be established on an industry wide basis, not by individual provider. This approach rewards efficiency of each provider when there is a benchmark the provider must perform against. The use of price caps based on historical costs adjusted for inflation and an efficiency factor is basically the same as the rate setting method currently in use. Convo supports this approach, however it is not sure how to identify a cost-related factor for anticipated efficiencies due to Convo's relatively recent entry into the market.

Convo believes rates should continue to be awarded on a per minute basis. The idea of paying based on the number of registered users is problematic in a system of equal access to all providers. Convo has many users whose 10 digit number is assigned to another provider. In fact, Convo seeks to get users registered with other providers' services to try out Convo's services. However, Convo does not have sufficient historical information to determine whether reimbursement on a per user basis would affect the final reimbursement result. As usage varies widely by users over time, reimbursement on a per user basis would simply reward the better prognosticating provider. Thus it seems more prudent to continue the current per conversation minute basis.

**e) NOI #67: Forward-Looking cost model support**

The current system of looking at historical and projected costs of all the providers seems to give rise to a reasonable reimbursement. The tiering should be based upon a model which identifies the amount of fixed versus variable costs. This is a traditional measure of economies of scale. This model could be developed by carefully studying the financial results over time for the top providers. This analysis could also identify costs associated with the relay interpreter service versus the provision of video phone equipment. Convo is not convinced the reimbursement ought to include the cost of supplying video phone equipment to users while there are more economical commercial offerings available.

**f) NOI #68): Reverse auctions**

Convo does not support the reverse auction approach. While this approach would result in the selection of one or more low cost providers, VRS service would overall experience negative

growth in interpreter quality and product innovation. In a market where one provider already captures over 80% of the traffic, this approach would result in even further concentration, and would negatively impact competition.

**g) NOI #69: Structural Safeguards**

Convo is not convinced there needs to be full reimbursement for proprietary videophone costs. The historical practice of reimbursing providers for this expense has led to the domination of the market by a single well financed participant.

Convo sees the quality of the relay interpreter services as a brand differentiator and a key success factor in meeting the VRS expectations of users. Consequently, the Commission should avoid endorsing measures that would lead a single, centralized provider to treat interpreters as commodities so easily replaced or supported.

**h) NOI #70: Jurisdiction separations**

Convo is aware of the Commission's wish to pass the oversight of VRS on to states. In view of how successful the VRS industry has been and how competition fared very well with new products and services, it would be impossible for states to maintain the high quality experience that VRS users now enjoy. States likely will release a request for proposal (RFP) and chose the lowest bidder. The RFP procedure will eliminate all but one or two VRS providers and the quality over time will decrease because of lack of competition. Also, some states require centers to be located in their states which will make it extremely difficult to find enough qualified interpreters. This will eventually pose a danger to the goal of achieving functional equivalency

Convo strongly believes that by keeping it at the federal level, it will preserve the benefits of competition in a larger provider market. If the Commission were to use the 10-digit numbering system to identify and assess intrastate VRS call costs to individual states, while maintaining a national quality standard, it would need to devise a mechanism to collect from the states their respective share of those cost assessments.

## **6. The Incentives and Needs of VRS Users**

### **a) NOI #73: Video equipment**

Currently Convo does not believe the IP addresses associated with devices offer an accurate way to determine the person's call location in order to pass along state or local charges. This makes it very difficult to identify a truly sustainable cost reimbursement structure.

### **b) NOI #74 and #75: Individual subsidies and vouchers**

Earlier in our comments, we recommended that FCC look into a voucher system allowing VRS users to purchase equipment that are widely available from mainstream commercial channels. Convo has described this in detail with the comments to NOI # 21, question item b.

### **c) NOI #76: Consumer incentives**

Convo disagrees with any usage-based cost assessment against users for this type of service. Convo believes the IP address-caller location problem previously addressed herein would need to be 100% accurate before any user subscription service could be fairly justified.

## **7. Other Regulations Affecting VRS Communications**

### **d) NOI # 78: VRS user registration requirement**

Convo supports the existing registration system as it allows VRS users to be able to call other VRS providers. ITRS database makes it possible to verify if the telephone number has been registered or not.

### **e) NOI #79: Additional reporting**

The Commission should take steps to identify the number of users, compensable minutes of use per user and estimated cost per minute of use and other measures using provider issued raw data and by utilizing SQL (Structured Query Language) features to drill down to specific

data measures the Commission deems essential to its ability to make informed and relevant decisions within its area of oversight.

Convo believes that advance notice of product releases should be made to the FCC as this will enable the FCC to take steps to prepare for or to stabilize the VRS industry against potentially game-changing product developments. For example, dramatic growth in VRS traffic will soon be easily associated with the recent distribution of 4G enabled wireless handsets that allow for mobile users to access VRS more frequently over those devices.

**f) NOI #80 - Other Regulations.**

Again, Convo believes this system is very strong and robust and it only needs consistent ongoing enforcement actions by FCC. Convo again emphasizes that a structural solution that will resolve many problems is the creation of a provisional certification program whose features have been frequently mentioned in this NOI response by Convo

**III. CONVO ENDING STATEMENT**

Convo Communications, LLC, proudly and respectfully submits these comments prepared in a collaborative effort by individuals with varied backgrounds, and spearheaded by its uniquely qualified deaf and hard-of-hearing ownerships and management team which continuously, endeavors to offer concepts that will benefit the Commission, the VRS Industry, VRSCAs, and, especially and most importantly, deaf and hard-of-hearing persons who sign.

Respectfully Submitted,



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SIGNATURES

## Exhibit A

[http://www.businessinsider.com/chart-of-the-day-rd-for-tech-companies-2010-5?utm\\_source=Triggermail&utm\\_medium=email&utm\\_campaign=SAI\\_COTD\\_052510](http://www.businessinsider.com/chart-of-the-day-rd-for-tech-companies-2010-5?utm_source=Triggermail&utm_medium=email&utm_campaign=SAI_COTD_052510)

