

ANDREW O. ISAR



Via Electronic Comment Filing System and Overnight Delivery

March 1, 2019

Ms. Marlene H. Dortch,
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

ATTN: Chief, Consumer and Governmental Affairs Bureau

RE: nWise AB, Petition for Waiver, Structure and Practices of the Video Relay Service Program, CG Docket No. 10-51; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, CG Docket No. 03-123

Dear Secretary Dortch:

nWise AB ("nWise") hereby submits a *Petition for Waiver of Sections 64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c) of the Commission's Rules and Request for Declaratory Ruling Authorizing Access to the TS Numbering Directory for the Provision of Direct Video Services and Other Point-to-Point Communication Solutions for the Deaf Community* in the above referenced matter.

Thank you for your attention to this matter. Questions may be directed to me.

Sincerely,

MILLER ISAR, INC.

/s/ Andrew O. Isar

Andrew O. Isar

Consultants to
nWise AB

Attachment

**Before the
Federal Communications Commission
Washington, DC 20554**

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

**PETITION FOR WAIVER OF SECTIONS 64.613(a)(1), 64.613(a)(2), 64.613(a)(4),
64.613(b)(2) AND 64.623(c) OF THE COMMISSION'S REGULATIONS
AND REQUEST FOR DECLARATORY RULING
AUTHORIZING ACCESS TO THE TRS NUMBERING DIRECTORY FOR THE
PROVISION OF DIRECT VIDEO SERVICES AND OTHER POINT-TO-POINT
COMMUNICATIONS SOLUTIONS FOR THE DEAF COMMUNITY**

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March 1, 2019

SUMMARY

nWise AB (“nWise”), an advanced technology company specializing in the development of communications application solutions for the Deaf and Hard-of-Hearing, DeafBlind, and individuals with speech impairment in Europe, Asia, and the U.S., respectfully requests waiver of Sections 64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c) of the Commission’s rules.¹ nWise requests waiver of these rules so that it may access the Telecommunications Relay Service (“TRS”) Numbering Directory as a non-Internet-based Telecommunications Relay Service provider to add numbers specifically for direct video calling (“DVC”) and other direct communications application subscribers it seeks to serve in the U.S. Further, nWise requests that the Commission’s related interoperability Declaratory Ruling that video relay service (“VRS”) providers “route and connect all direct voice, video, and text calls between telephone numbers listed in the TRS Numbering Directory” apply to nWise upon a grant of the requested rule waivers and nWise’s direct access to the TRS Numbering Directory.²

In January 2017, the Commission granted a petition for waiver of Sections 64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c) of the Commission’s rules to VTCSecure, LLC (“VTCSecure”),³ a U.S. company specializing in the development of “next generation” platform-based communications application solutions. VTCSecure petitioned the Commission for waiver of these rules to gain access to the TRS Numbering Directory as a non-Internet-based Telecommunications Relay Service provider, so it could add ten-digit telephone numbers assigned to its DVC service subscribers in the Directory. In granting VTCSecure’s petition, the Commission agreed with VTCSecure regarding the significant benefits associated with enabling direct access to the TRS Numbering Directory by qualified non-Internet-based Telecommunications Relay Service Providers. The Commission concluded that such

¹ 47 C.F.R. §§ 64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c).

² *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 03-123 and 10-51, *Order and Declaratory Ruling*, DA 17-86 (January 18, 2017) [2017 VTC Order and Declaratory Ruling] at para. 1.

³ *Id.*

access would promote functional equivalency and a reduction in TRS costs borne by the TRS Fund, among other factors, constituting a “good cause” basis for granting VTCSecure’s rule waiver request and interoperability Declaratory Ruling.⁴ The waiver request received the support of Consumer Groups representing the Deaf Community and Gallaudet University.

nWise is an advanced platform-based communications application solutions provider with a long standing proven ability to meet the complex technical requirements for the provision of DVC, real time text, and other direct communications applications in Europe and Asia, and now in the U.S. nWise has designed and provides a suite of communications applications that enhance communications capabilities for the Deaf, Hard-of-Hearing, DeafBlind, and individuals with speech impairment, and the governmental institutions and commercial enterprises that serve them in Europe and Asia. nWise seeks to provide these advanced communications solutions in U.S. In order to make these services available to the public, nWise seeks access to the TRS Numbering Directory as a qualified non-Internet-based Telecommunications Relay Service provider to incorporate new numbers assigned to DVC service subscribers.

nWise already has direct TRS Numbering Directory access in the U.S., albeit as a contracted automatic call distribution platform provider for a TRS Fund-eligible VRS provider, and has already developed technical interfaces, accordingly. A waiver of the requested rules and expressed applicability of the Commission’s Declaratory Ruling to nWise will enable nWise to introduce its own innovative DVC, RTT, and other direct communications solutions to the Deaf, DeafBlind, and speech impaired Communities and to government institutions and commercial enterprises who seek to better serve them. A grant of nWise’s request is in furtherance of the Americans with Disabilities Act goals, the Commission’s stated functional equivalency and TRS Fund cost reduction public policy objectives, and is entirely consistent with the Commission’s “good cause” basis grant in the *2017 VTC Order and Declaratory Ruling* the Commission’s DVC policy.

⁴ *Id.* at paras. 8 to 10.

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**PETITION FOR WAIVER OF SECTIONS 64.613(a)(1), 64.613(a)(2), 64.613(a)(4),
64.613(b)(2) AND 64.623(c) OF THE COMMISSION’S REGULATIONS
AND REQUEST FOR DECLARATORY RULING
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COMMUNICATIONS SOLUTIONS FOR THE DEAF COMMUNITY**

nWise AB (“nWise”) respectfully requests waiver of Sections 64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c) of the Commission’s rules.⁵ By its request, nWise seeks to gain direct access to the Telecommunications Relay Service (“TRS”) Numbering Directory as a “non-Internet-based TRS provider” so that it may add telephone numbers assigned to the subscribers it seeks to serve in the U.S. nWise further requests that upon a grant of its requested waiver, the related video relay service (“VRS”) provider interoperability Declaratory Ruling issued in the *2017 VTC Order and Declaratory Ruling* apply equally for nWise.

nWise’s request is predicated on its desire to provide technologically advanced direct video calling (“DVC”), real time text (“RTT”),⁶ and other point-to-point communications solutions for

⁵ 47 C.F.R. §§64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c).

⁶ See, *Transition from TTY to Real-Time Text Technology; Petition for Rulemaking to Update the Commission’s Rules for Access to Support the Transition from TTY to Real-Time Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 13568 (2016) (*RTT Report and Order*).

Deaf, Hard- of-Hearing, and DeafBlind individuals (collectively, the “Deaf Community”), to individuals with speech impairments, and those commercial and governmental entities that seek to enhance access and services to the Deaf Community and those with speech impairments in the U.S.

I. INTRODUCTION

nWise is an established⁷ advanced technology solutions leader in the development and implementation of DVC, RTT and other point-to-point communications solutions for the Deaf Community and speech impaired in Europe and Asia. nWise’s mission is to enable everyone, regardless of physical capabilities or challenges, to access important public services, including emergency and healthcare services, businesses, and friends and family, easily and effectively.

The Company provides its communications technology for 14 government-run relay service programs in Europe and Asia. In Europe, nWise provides DVC, RTT and other communications solutions to emergency and healthcare services and commercial enterprises in Sweden, the Netherlands and the United Kingdom including, including the National Health Service (England, Scotland and Wales) and the National Administration of Special Education (Sweden), and private enterprises in Germany, including insurance companies and employment agencies. In the Netherlands, nWise serves schools for the Deaf Community and emergency service providers. In Asia, nWise also serves schools for the Deaf Community and emergency service providers in Thailand and is the primary technology provider to the Thai Telecom Relay Service. And, in conjunction with PolarPrint in Sweden (<http://www.polarprint.se>) and Access256 Productions,

⁷ The MMX® technology nWise has designed and incorporated into its applications had been available via Ericsson to telecom operators in Europe including Deutsche Telecom (Germany), Telia (Sweden), Telenor (Norway), and TDC (Denmark) since the early 2000s. nWise was founded in 2008 after a management buyout from Ericsson and has since owned and pursued further development of its MMX® technology. Several former Ericsson employees that had been working with relay services became nWise employees. Their expertise guaranteed that the technical capability and long-term experience in the field were secure.

LLC (<https://access256.com/>) in the United States, nWise has designed and implemented unique communications solutions specifically for the DeafBlind currently in use in Europe and Asia.

In the U.S., nWise has served as a technology partner with ASL Services Holdings, LLC dba GlobalVRS (“Global”), a TRS Fund-eligible VRS provider since 2011, by developing and supporting Global’s automatic call distribution platform for the Deaf Community and specialized applications to facilitate the provision of service to DeafBlind individuals. In this capacity, nWise has worked with Internet-based VRS providers on interoperability, technology, and compliance matters. And as a Global technology provider, nWise already has direct access to the TRS Numbering Directory and established technical interfaces with the TRS Numbering Directory, albeit exclusively on Global’s behalf.

VTC Secure, LLC (“VTCSecure”) has made a compelling case for granting the requested rule waivers to gain direct access to the TRS Numbering Directory for qualified entities including, closer approximation of functional equivalency associated with DVC,⁸ a reduction in TRS Fund costs, and additional employment opportunities, among others.⁹ The Consumer Groups¹⁰ and Gallaudet University supported VTCSecure’s access to the TRS Numbering Directory to promote DVC in expanding functional equivalency for the Deaf Community. And the Commission agreed in concluding that a “good cause” waiver of these rules consistent with the clear benefits of DVC

⁸ VTCSecure adopts the undefined term “direct SL customer support service provider” as descriptive of the DVC services it provides and nWise now seeks to provide subject to a grant of the requested rule waivers.

⁹ Governmental and commercial entities also gain additional capabilities for outreach to, and access by, the Deaf Community. Deaf and DeafBlind agencies, such as NORCAL in California and Helen Keller National Center in New York have shown a great interest in using direct phone numbers to better serve the Deaf Community. These agencies would like to set up their telephone services and helpline so that individuals from the community can contact them directly, without revealing Deaf employee assigned VRS numbers.

¹⁰ Telecommunications for the Deaf and Hard of Hearing, Inc., National Association of the Deaf, Deaf and Hard of Hearing Consumer Advocacy Network, Association of Late Deafened Adults, Inc., Cerebral Palsy and Deaf Organization, Deaf Seniors of America, National Association of State Agencies of the Deaf and Hard of Hearing, and California Coalition of Agencies Serving the Deaf and Hard of Hearing (collectively the “Consumer Groups”).

addressed by VTCSecure, the Consumer Groups, Gallaudet University and the Commission itself.

nWise is eminently qualified and experienced to provide advanced DVC and point-to-point communications solutions in the U.S. Its requested waiver of Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613(b)(2), and 64.623(c) of the Commission’s rules is entirely consistent with VTCSecure’s request, is in furtherance of the Americans With Disabilities Act and Commission functional equivalency and TRS Fund cost reduction public policy objectives, among others, and warrants the same “good cause” basis grant established under the *2017 VTC Order and Declaratory Ruling*.

II. VTCSECURE HAS MADE A COMPELLING CASE FOR WAIVER OF THOSE RULES THAT EFFECTIVELY PRECLUDE QUALIFIED, NON-INTERNET-BASED TRS PROVIDERS FROM ACCESSING THE TRS NUMBERING DIRECTORY AND PROVIDING DVC.

- A. Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613(b)(2), and 64.623(c) of the Commission’s rules Preclude Qualified Non-Internet-Based TRS Providers from Providing DVC and Other Advanced Communications Services for the Deaf Community and the Speech Impaired Unless Waived.

VTCSecure has demonstrated how Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613(b)(2), and 64.623(c) of the Commission’s rules preclude non-Internet-based TRS providers such as nWise from gaining access to the TRS Numbering Directory,¹¹ a necessary prerequisite for providing DVC:

64.613 (a)(1) – “effectively prohibit[s] the inclusion of [North American Numbering Plan] telephone numbers for direct SL [Sign Language] customer support services in the TRS Numbering Directory because the direct SL customer support may or may not be ‘an individual’

¹¹ *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program*, CG Docket Nos. 03-123, 10-51, *Petition for Waiver of Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613 (b)(2), and 64.623(c) of the Commission’s Regulations and Request for Declaratory Ruling to Permit Providers of Direct Sign Language Customer Support Service to Access the TRS Numbering Directory*, VTCSecure, LLC (July 6, 2016) [VTCSecure Petition] pp. 7 to 12.

[undefined] and may or may not meet the registration requirements of Section 64.611 of the Commission’s regulations.”¹²

64.613 (a)(2) – “the language in that section directs the format for the records in the TRS Numbering Directory... Because direct SL customer support does not meet the definition of VRS [video relay services], the absence of instructions for the format for the URI needed to properly resolve the IP address if any direct SL customer support service leaves open the possibility for disputes among VRS and direct SL customer support service providers ...” over proper communications routing.¹³

64.613 (a)(4) – This section establishes that “[o]nly the TRS Numbering Administrator and Internet-based TRS providers may access the TRS Numbering Directory.’ It would appear that a direct SL customer support service provider does not meet the definition of an ‘Internet-based TRS provider...’¹⁴ VTCSecure goes on to reflect on the impact of the SIP [session initiation protocol] Interoperability Profile¹⁵ noting that “if the source IP address of the SL customer service number is not associated with one of the ‘peer providers’ ... another VRS provider – then the VRS provider is directed not to complete the call to its VRS end user.”¹⁶

64.613 (b)(2) and 64.623(c) – These sections “may prevent the TRS Numbering Administrator... from allowing anyone other than a VRS provider to access the TRS Numbering Directory...”

¹² *Id.* pp 7, 8 VTCSecure continues, “Even assuming *arguendo* that a [sign language] customer support number could be found to be ‘an individual’ that ... meets the requirements of Section 64.611, the regulations clearly require that the user be ‘registered with’ a VRS provider.” [footnotes in original omitted].

¹³ *Id.* at 9, [footnotes in original omitted].

¹⁴ *Id.* at 10 [footnotes in original omitted].

¹⁵ Since adopted by reference in 47 C.F.R. §64.621(c).

¹⁶ *VTCSecure Petition* at 11.

Taken individually and collectively, these rules, unless waived, effectively preclude non-Internet-based TRS providers from gaining access to the TRS Numbering Directory and from providing DVC, as has been established.

B. The Deaf Community and Public Benefit from the Entry of New DVC Providers.

VTCSecure concludes its Petition by highlighting clear benefits to the Deaf Community and ratepayers resulting from a waiver of those rules that otherwise preclude non-Internet-based TRS providers from gaining direct access to the TRS Numbering Directory. Those benefits include enhancing more accurate communications with hearing customer service representatives, providing TRS “in the most efficient manner,” and reducing costs to the TRS Fund through the provision of DVC,¹⁷ among others.

Commission acknowledgement of these considerations for waiving the requested rules and interoperability Declaratory Ruling is established in the Commission’s “good cause” grant of VTCSecure’s request, and is consistent with the Commission’s established policy of promoting DVC.

III. THE COMMISSION HAS GENERALLY ESTABLISHED THE “GOOD CAUSE” BASIS FOR WAIVER OF THE REQUESTED RULES AND INTEROPERABILITY DECLARATORY RULING FOR QUALIFIED NON-INTERNET-BASED TRS PROVIDERS.

The Commission clearly articulated the “good cause” basis¹⁸ for granting VTCSecure’s request to waive sections 64.613(a)(1), (2), (4), 64.613(b)(2), and 64.623(c) of the Commission’s rules, finding that,

Allowing VTCSecure access to the TRS Numbering Directory will enable individuals who are deaf, hard of hearing, deaf-blind or have a speech disability to

¹⁷ *Id.* at 15 to 17.

¹⁸ 47 C.F.R. § 1.3. *See also* *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990); *Nat’l Ass’n of Broad. v. FCC*, 569 F.3d 416, 426 (D.C. Cir. 2009).

move closer to obtaining the functional equivalency Congress envisioned in enacting Title IV of the ADA. As the Commission has repeatedly recognized, compared to traditional TRS, “point-to-point services even more directly support the [purposes of section 225]” because they “increase the utility of the Nation’s telephone system” for persons with hearing and speech disabilities by “provid[ing] direct communication – including all visual cues that are so important to persons with hearing and speech disabilities.”¹⁹

The Commission concluded that,

Granting VTCSecure access to the TRS Numbering Directory will likely reduce the TRS costs that would otherwise be borne by the TRS Fund by enabling customer support services to be used in lieu of VRS. As the Commission has recognized, direct video communication for consumers using DVC is more efficient than traditional TRS because it is “more rapid in that [it] involve[s] direct, rather than interpreted, communication” and “does not trigger the costs involved with interpretation or unnecessary routing....” In addition to increasing functional equivalency and reducing costs of the TRS program, we also agree with VTCSecure that granting this petition will increase employment opportunities for deaf persons at businesses and agencies that use DVC customer support.²⁰

Regarding the grant of VTCSecure’s request for declaratory ruling that VRS providers “not refuse to recognize and route direct voice, video, or text calls originating from or directed to the domain and IP address of an NANP telephone number included in the TRS Numbering Directory,”²¹ the Commission also explicitly found that

We agree that without this requirement, VRS users may be unable to reach DVC customer support service numbers, and vice versa, due to the risk that calls “to a domain name not on the VRS providers’ white list” may not be completed. The Commission has a longstanding policy regarding interoperability and has previously stated that “all default providers must support the ability of VRS users to make point-to-point calls without the intervention of an interpreter.” This requirement applies with respect to DVC customer service calls, which as noted above, are a subset of point-to-point calls.²²

¹⁹ 2017 VTC Order and Declaratory Ruling at 9 citing to *Telecommunications Relay Services and Speech-to-Speech Service for Individuals with Hearing and Speech Disabilities*; *E911 Requirements for IP-Enabled Service Providers*, Second Report and Order and Order on Reconsideration, 24 FCC Rcd 791, 821, para. 67 (2008) (*Second TRS Numbering Order*); see also *Structure and Practices of the Video Relay Service*; *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Further Notice of Proposed Rulemaking, 30 FCC Rcd 12973, 12995-6, para. 61 (2015) (*VRS 2015 FNPRM*).

²⁰ *Id.* at 10, footnotes in original omitted.

²¹ *Id.* at 19.

²² *Id.*, footnotes in original omitted.

Although these findings are specific to VTCSecure, the “good cause” basis for granting waiver of sections 64.613(a)(1), (2), (4), 64.613(b)(2), and 64.623(c) of the Commission’s rules – promotion of direct “point-to-point communications options for the Deaf Community, greater efficiency in communications over traditional TRS, reduced interpretation and routing costs, increased functional equivalency (and alternatives) in communications for the Deaf Community, a reduction in costs to the TRS Fund, and increased employment opportunities for the Deaf and ‘businesses and agencies that use DVC customer support,’” among others - are universal benefits associated with the provision of DVC as the Commission has generally expressed²³ – and point-to-point communications generally - and are not confined to a single technology provider. Indeed, these significant public interest considerations apply equally to qualified entities that can demonstrate their technical and operational capability to provide and expand the use of DVC customer assistance and – and point-to-point communications.

The provision of DVC has already proven its worth in expanding functionally equivalent direct communications for the Deaf Community, as the Commission itself has recognized. According to the Commission’s *Direct Video Calling Primer*, the “number of calls from ASL-fluent callers” to the Commission’s ASL Consumer Support Line has increased three-fold since the Commission’s Disability Rights Office implemented the Consumer Support Line in June 2014; Incoming relay calls to the FCC’s toll-free number have nearly been eliminated, and calls are being handled and resolved faster.”²⁴ In Sweden, the National Administration for Special Education (“Administration”), an nWise client, has had incorporated DVC and text services for adult Deaf

²³ See e.g. *The Essentials in Adopting Direct Videoconferencing Telecommunications*, Federal Communications Commission, <https://www.fcc.gov/file/13007/download> , [*Direct Video Calling Primer*], Slides 6 and 7.

²⁴ *Id.* slide 5. See also, the Commission’s DVC web site, <https://www.fcc.gov/dvc>.

individuals who are not sign language proficient, since 2005. The number of DVC and text calls has been consistently stable at 500-600 a month from zero, when the Administration first initiated use of these services. The National 112 Alert System in the Netherlands,²⁵ an nWise client, experienced a growth from one to two calls a month in 2014 to more than 40 calls per month by 2017, reflecting the desirability of direct access.

In recognizing the significant benefits of DVC, the Commission has expressed its desire to expand DVC availability, noting that, “The Commission *encourages entities in the private and public sectors* to adopt measures so that callers can avail themselves of DVC for business and personal calls.”²⁶ The Commission’s intent to encourage the proliferation of DVC is clearly evident and should extend to enabling qualified entities, such as nWise, to make DVC platform solutions available to entities seeking to offer DVC to the public.

IV. CONSUMER GROUPS AND GALLAUDET UNIVERSITY HAVE EXPRESSED THEIR SUPPORT FOR GRANTING ACCESS TO THE TRS NUMBERING DIRECTORY.

The Consumer Groups, in their *Comments* regarding the VTCSecure Petition, expressed support the Company’s access to the TRS Numbering Directory. The Consumer Groups’ support was based on the conclusion that granting access to the TRS Numbering Directory by a non-Internet-based TRS provider would promote functional equivalency as required under the ADA,²⁷

²⁵ The equivalent of the U.S. E911 system. nWise has developed specialized 112 Alert System accessibility for the Deaf, hard-of-hearing and DeafBlind.

²⁶ *Direct Video Calling Primer* slide 2.

²⁷ *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program, Petition for Waiver of Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613 (b)(2), and 64.623(c) of the Commission’s Regulations and Request for Declaratory Ruling to Permit Providers of Direct Sign Language Customer Support Service to Access the TRS Numbering Directory*, CG Docket Nos. 03-123, 10-51, WT Docket No. 10-191, *Comments of Consumer Groups* (August 17, 2016) [*Consumer Group Comments*] at 4. “Among the core functional equivalency principals cited include advancing the objective of (a) providing a call experience for individuals who are deaf, hard of hearing deaf-blind or speech disabled equivalent to that of a call between two hearing persons; (b) providing the full benefit of TRS

and would “significantly improve the privacy and security of sensitivity communications between parties.”²⁸ The Commission agreed finding that “as Consumer Groups argue, granting DVC customer support services access to the TRS Numbering Directory will enhance the functional equivalence of the TRS program by granting VRS users more direct, visual, reciprocal communication.”²⁹

Gallaudet University also supported VTCSecure’s petition, agreeing with the Company that “direct sign language calling should be enabled and facilitated,” and would greatly reduce the risk for “costly and frustrating misunderstandings” between ASL and English translations.³⁰

The factors contributing to the Consumer Groups and Gallaudet University’s support of granting VTCSecure’s waiver request and access to the TRS Numbering Directory - and indeed the underlying basis for the Commission’s granting necessary waivers to enable qualified non-Internet-based TRS providers to access the TRS Numbering Directory, as noted - are not confined to VTCSecure.

to all parties on a call; and (c) motivating vendors to continually improve the calling experience.” Citing to the Consumer Groups; TRS Policy Statement.

²⁸ *Id.* The Consumer Groups also urged that certain protections be considered to protect VRS user security, reliability, and privacy as acknowledged by the Commission, and addressed *infra*.

²⁹ 2017 VTC Order and Declaratory Ruling at 5.

³⁰ *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Structure and Practices of the Video Relay Service Program, Petition for Waiver of Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613 (b)(2), and 64.623(c) of the Commission’s Regulations and Request for Declaratory Ruling to Permit Providers of Direct Sign Language Customer Support Service to Access the TRS Numbering Directory*, CG Docket Nos. 03-123, 10-51, WT Docket No. 10-191, *Comments of Gallaudet University on the Petition for Waiver of Sections 64.613 (a)(1), 64.613 (a)(2), 64.613 (a)(4), 64.613 (b)(2), and 64.623(c) of the Commission’s Regulations and Request for Declaratory Ruling to Permit Providers of Direct Sign Language Customer Support Service to Access the TRS Numbering Directory* (August 18, 2016) at 2. Gallaudet University also raised concerns over the need for strict consumer protections and privacy and limiting access to the TRS Numbering Directory exclusively for call routing purposes. Their concerns are also addressed *infra*.

V. nWISE IS TECNICALLY AND OPERATIONALLY QUALIFIED TO PROVIDE DVC AND OTHER ADVANCED POINT-TO-POINT APPLICATIONS FOR THE DEAF COMMUNITY.

The *2017 VTC Order and Declaratory Ruling* addressed key considerations underlying the grant of VTCSecure's waiver request and access to the TRS Numbering Directory. Although the Commission did not specifically address technical considerations,³¹ the underlying complex technical requirements necessary to access the TRS Numbering Directory suggest that a non-Internet-based Telecommunications Relay Service provider seeking access must possess the technical capabilities, skills, and experience needed to meet the Administrator's interface requirements, applicable regulatory requirements, and ultimately to provide secure and reliable DVC and other advanced point-to-point communication applications.

nWise has extensive technical and operational capabilities and experience in providing DVC, and other advanced point-to-point communication applications for the Deaf Community, underserved DeafBlind and speech impaired individuals, in Europe, Asia, and in the U.S. As a communications platform technology developer and provider for 14 government-run relay service programs in Europe and Asia, educational institutions, and commercial enterprises, including several Deaf and/or Interpreter-owned companies³² for more than ten years, nWise has gained significant insight into the Deaf Community's need for clear and effective communications. The Company's experience with the Deaf Community results from its direct work with clients, as well as its broader relationship and support of organizations representing the Deaf, such as the Deaf Women's Association in Sri Lanka, DeafKidz³³ in the United Kingdom, including a pilot program in South

³¹ And presumably VTCSecure's technical bona fides were already well established with the Commission.

³² nWise has been recently engaged by Sourdline (www.sourdline.com), a French deaf-owned agency (50% owned by a deaf individual, 50% by an interpreter) to provide technical enhancements to the Company's DVC, VRS and video relay interpreting services.

³³ A global child protection advocacy group.

Africa setting up a helpline in sign language for Deaf children in rural areas of KwaZuluNatal Province, implementation of telephone kiosks at the Deaf Association headquarters in Stockholm, support for the Swedish Deaf Soccer Team, and yearly seminars for relay services in Europe promoted by nWise.

nWise's experience has resulted in the development and implementation of an advanced communications platform, relay services, and DVC and other point-to-point applications designed to meet the communications needs of their users, while promoting more effective communications and job opportunities for the Deaf. In order to guarantee employment opportunities and knowledge-sharing, nWise has since its inception been a technology partner with Deaf-owned enterprises and organizations in Europe to enable these entities to provide relay services and DVC. In the United States, nWise serves as a technology partner with a DeafBlind-owned company to market applications used to serve the DeafBlind. nWise has designed its technology to be effectively and easily deployed using cloud-based applications that are connected to existing interconnected voice over Internet protocol ("VoIP") service providers, ensuring access to the Public Switched Telephone Network using existing telephone number plans, globally.

nWise's government, education, and commercial clients have retained and recommended nWise based on the Company's innovative and reliable technology and results for their own clients. nWise client relationships are particularly important in developing regions such as Brazil and Thailand. In Thailand, nWise partners with the National Electronics and Computer Technology Center ("NECTEC") and the Thai Telecom Relay Services ("TTRS"), with the support of Thai Princess Maha Chakri Sirindhorn. NECTEC and TTRS are active in promoting Telecom Relay Services, including standard technology that uses SIP and RTT (US/European standards), in international conferences regularly hosted by the International Telecom Union

ASEAN chapter, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and several other regional conferences. Their promotion has contributed to expanded communications capabilities for the Deaf in Asia and Europe.

nWise owns and develops its technology. nWise's cloud-based MMX® platform has been used since 2002 by relay services in Europe. The Company has been an early adopter and designer of RTT technology since 2005. And nWise has already developed and implemented DVC services for governmental agencies and commercial enterprise clients that serve the Deaf Community in Europe and Asia, that it seeks to now provide in the U.S.

As a technology partner with Global, nWise has developed the expertise in tailoring its technology platform to deliver reliable and fully interoperable VRS in the U.S. In serving as Global's technology partner, nWise has already integrated its platform with the TRS Numbering Directory³⁴ and met the evolving technical requirements of the VATRP, VRS Provider Interoperability Profile,³⁵ Telecommunications Relay Service – User Registration Database, and the Fund Administrator's automated reporting requirements. nWise designed and implemented a highly specialized application that enables GlobalVRS to effectively serve the DeafBlind.³⁶ Further, nWise has complied in meeting its obligations to maintain secure, private, reliable, and interoperable relay services in supporting GlobalVRS's regulatory compliance. As a technology provider for Global, nWise participates in the SIP Interoperability Forum hosted by VRS providers

³⁴ nWise has also gained experience through its access to the Sweden's numbering database.

³⁵ Per 47 C.F.R. §64.621. nWise has been an active participant in the SIP Forum and worked closely with VRS providers and others in supporting the "SIP Profile" adopted by the Commission.

³⁶ nWise also provides end-user applications for DeafBlind consumers. nWise has partnered with Access256, a DeafBlind-owned company that has initiated discussion with the Hellen Keller National Center for the DeafBlind regarding the provision of DeafBlind communications access applications. Access to the TRS Numbering Directory will also make deployment of Deafblind communications access technology possible.

semi-annually, and nWise is actively involved in discussions and tests with the Commission's designated interoperability testing entity.

nWise is uniquely well-qualified technologically and operationally, and has the demonstrated capability to access the TRS numbering directory directly as a non-Internet TRS provider.

VI. nWISE IS COMMITTED TO PROTECT THE SECURITY, RELIABILITY, AND PRIVACY OF VRS USERS AND MAINTAIN INTEROPERABILITY.

The Consumer Groups, Gallaudet University, and the VRS Providers raised the need for the Commission to impose certain requirements on VTCSecure as a prerequisite for allowing its access to the TRS Numbering Directory. Among their concerns, were the need “to protect the security of the database...” ensuring “that only entities with a legitimate need can access the database;”³⁷ “require providers of direct SL [sign language] customer support service to comply with all privacy and related consumer protection requirements applicable to VRS providers with access to the TRS Numbering Directory, including Customer Proprietary Network Information (CPNI) requirements;”³⁸ protect against “lur[ing] away a VRS provider's customers;”³⁹ and maintaining VRS Provider interoperability.”⁴⁰

The Commission acknowledged these concerns, recognizing “that the security, reliability, and the privacy of VRS users are critical to the success of the TRS program.”⁴¹ The Commission continued,

we concur with [Communications Service for the Deaf, Inc.] that “any regulation intended to perpetuate limited access to the TRS Directory under the guises of

³⁷ 2017 VTC Order and Declaratory Ruling at 14 citing to VRS Providers Comments at 4.

³⁸ *Id.* at 14 citing to Consumer Groups Comments at 7-8 and 47 CFR §§ 64.5101-64.5111.

³⁹ *Id.* at 15.

⁴⁰ *Id.* at 20 citing to Gallaudet University Comments at 3.

⁴¹ *Id.* at 16.

security and reliability ... does not serve the public interest.” By granting this request for waiver, we will maintain the level of protection TRS users expect while allowing for improved privacy options through direct video communication.⁴²

nWise supports, and already meets these security, reliability, and the VRS user privacy considerations.

nWise follows security standards and requirements defined by government agencies such as Cyber Essentials Scheme (program) in the United Kingdom ⁴³ and the Dutch Police and Dutch Telecom Agencies requirements on Cryptography⁴⁴ and WEB Applications Security ⁴⁵. nWise also follows encryption standards defined by the Internet Engineering Task Force (IETF), including, but not limited to, RFC 3711 - The Secure Real-time Transport Protocol, SRTP, RFC 4103 - Real-time Protocol Payload for Text Conversation, and RFC 4568 - Security Description for Media Streams. nWise is able to integrate its technology into mainstream call center technology such as CRM systems for customer management, and management tools for statistics and service management, thus making sure that DVC services and consumer privacy is maintained consistent with privacy protections for hearing customer-based services.

nWise has had access to the TRS Numbering Directory as Global’s automatic call distribution platform technical partner since 2011, and been bound to the Commission’s customer proprietary network information rules, 47 C.F.R. §§64.5101 to 64.5111, as an extension of Global’s compliance obligations. nWise has never compromised Global’s compliance, nor its own, under the Commission’s CPNI rules or otherwise. The Commission’s grant of the rule waivers requested herein, will not change nWise’s proven commitment and established practices

⁴² *Id.*

⁴³ Cyber Essentials is a UK government backed, industry supported program designed to help protect organizations from common online cyber threats. <https://www.cyberessentials.ncsc.gov.uk/>

⁴⁴ KSP-FA05-RLO7 (KPN), which describes the requirements for all cases of encrypted communication, signed communication, use of PKI certificates, and use of management of encryption keys.

⁴⁵ KSP-FA05-RL11 (KPN), which defines a set of policy rules regarding the protection of (web) applications.

to maintain customer privacy and database security when providing DVC.

nWise is actively engaged in Telephone Number Proof-of-Possession (“TN-PoP”) technical standards development. TN PoP technology will ensure that telephone numbers cannot be hijacked and used for “spoofing” or to enable criminals to commit fraud, waste and abuse by purporting to be the individuals to whom ten-digit numbers have been assigned to make unlawful calls.⁴⁶

nWise will also be serving commercial subscribers, agencies and institutions that support the Deaf Community and speech impaired. nWise will not be providing service to VRS users and will not be compensated from the TRS Fund, thus like VTCSecure, lacks any incentive to “to lure away a VRS provider’s customers.”⁴⁷ And, as nWise has had an established relationship with the TRS Numbering Administrator as part of its technical support of Global’s automatic call distribution platform, its continuing relationship with the TRS Numbering Administrator will also ensure ongoing compliance with Commission regulations and other applicable requirements, subject to Commission enforcement action for violation of applicable privacy and security rules.

nWise has also worked closely with the VRS Providers and the Commission’s interoperability testing organization, MITRE, on behalf of Global to fully meet Global’s interoperability requirements. As noted, nWise currently participates with the VRS Providers in the SIP interoperability meetings on behalf of GlobalVRS and has been an actively involved with the VRS Providers regarding SIP profile implementation and more recently in TN-PoP standards

⁴⁶ At the time a ten-digit number is assigned, the provider establishes an endpoint (e.g., a SIP-PBX) with credentials in the form of a TN-PoP certificate that automatically demonstrates the assigned number’s legitimacy when a call is originated from the assigned number. This precludes use of the number by others.

⁴⁷ *Id.* citing to VTCSecure Reply Comments at 9. To be sure, nWise makes clear that its relationship with Global is strictly confined to the provision and technical support of the automatic call distribution platform Global uses, as is a matter of record with the Commission. nWise has not, nor will it, engage in any function that would enable Global to lure away other VRS provider subscribers through nWise’s direct TRS Numbering Directory or otherwise.

development. Through this ongoing work, nWise is already well versed on the technological requirements associated with ensuring full interoperability with VRS providers when initiating its own DVC. nWise believes that interoperability with relay service providers is critical. nWise will continue to ensure full interoperability with the VRS Providers, now in the provision of DVC, consistent with the condition of system interoperability with the VRS provider network imposed by the Commission on VTCSecure.⁴⁸

nWise will also expect the continued collaboration with the VRS Providers to support interoperability with their systems by applying the VTCSecure interoperability Declaratory Ruling equally to nWise.

V. CONCLUSION.

nWise respectfully requests waiver of Sections 64.613(a)(1), 64.613(a)(2), 64.613(a)(4), 64.613(b)(2) and 64.623(c) of the Commission's rules and extension of the interoperability Declaratory Ruling granted to VTCSecure. VTCSecure has made a compelling case for waiver of these rules and adoption of an interoperability declaratory ruling for qualified entities. The Commission has concurred, establishing a "good cause" basis for granting VTCSecure's petition consistent with the public interest considerations including, enabling the Deaf Community to approximate functional equivalency mandated by the ADA through direct communication, reducing TRS costs that would otherwise be borne by the TRS Fund, and promoting employment opportunities for the Deaf Community, among others.

nWise is eminently qualified to provide DVC and other advanced point-to-point communication applications in the U.S as an extension of the DVC and RTT technology it

⁴⁸ "Therefore, just as the VRS providers are required to route DVC customer service calls, we waive these rules on the condition that VTCSecure ensures the interoperability of its system with the VRS provider network." *2017 VTC Order and Declaratory Ruling* at 20.

currently provides to governmental agencies, commercial enterprises, and educational institutions in Europe and Asia, and technology it has deployed in the U.S. nWise has ample experience in working with the TRS Numbering Database administrator, the TRS Fund Administrator, and VRS Providers, and is well versed in VRS regulations through its work in the U.S. The Company's access to the TRS Numbering Directory in the provision of DVC and other advanced point-to-point communication applications will accelerate and expand availability of DVC for the Deaf community in the U.S., consistent with established Commission policy, conditions, and the security, reliability and privacy concerns expressed by the Consumer Groups, VRS Providers and others, as the Commission has acknowledged.

For the reasons set forth above, nWise respectfully requests that the Commission grant waiver of the requested rules and interoperability Declaratory Ruling, on the same basis that it has previously granted VTCSecure's request, to enable nWise to gain direct access to the TRS Numbering Directory.

Respectfully submitted this 1st day of March, 2019,

nWise AB



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