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ACCESS TO GLOBAL TELECOMMUNICATIONS

**ACCESS TO GLOBAL TELECOMMUNICATIONS:
A COMPARATIVE DISCUSSION OF THE EXTRATERRITORIAL
LEGAL ISSUES CONFRONTING THE TELECOMMUNICATIONS
RELAY SERVICE**

by
Joshua Pila*

INTRODUCTION

A. Adapting Traditional Disability Accommodations Regulations to a New Global Telecommunications Environment.

Without accommodations such as the Telecommunications Relay Service (TRS), an individual with a hearing and/or speech impairment would not be able to call a friend, order a pizza, or join a conference call.¹ While many able-bodied people take those simple actions for granted,² the ability of hearing impaired and/or speech-impaired individuals to use the telecommunications infrastructure is facilitated by a complex system of legal, regulatory, political, and technological factors that converge to form TRS. TRS is not a singular technology or equipment type, but rather a set of technologies that depends on a mix of the factors presented above.

As our society becomes more global, the implications of government programs like TRS that once had only domestic reach must be analyzed under an transnational framework due to the vital importance of global

* Joshua Pila is a third year law student at Georgetown University Law Center. The author would like to thank Professors Paul Margie and James Assey for all of their help. In addition, many thanks go to Brenda Battat, Thomas Chandler, and Maripat Brennan for their preliminary aid. Professors Naomi Mezey, Jennifer Manner and Julie Cohen also provided much helpful advice. This article was runner-up in the Third Interdisciplinary Access to Knowledge (A2K) Writing Competition at Yale University. See <http://islandia.law.yale.edu/isp/a2kwriting.html> (last visited Oct. 28, 2006). This article also won Third Place in the Telecommunications Policy Research Conference student paper awards contest. For more information on TPRC awards see <http://www.tprc.org/TPRC06/studentpap06.htm> (last visited Oct. 28, 2006).

¹ FCC, Consumer Guide to Telecommunications Relay Services, <http://www.fcc.gov/cgb/consumerfacts/trs.html> (last visited Oct. 28, 2006).

² Congratulatory letter from Kevin J. Martin, Chairman, FCC, on the ADA Anniversary, <http://www.fcc.gov/cgb/dro/martinadaletter.html> (last visited Oct. 28, 2006).

communications³ and the needs of hearing-impaired individuals to receive accommodations for their cross-border activities. An analysis of the interaction between two leading national TRS disability accommodations regimes and the global telecommunications infrastructure makes clear that traditional telecommunications accommodations regimes (specifically TRS regimes) must adapt to a new global marketplace brought about by technological development. This paper highlights the extraterritorial legal issues for these traditionally domestic regimes and recommends policy steps to ensure that individuals with disabilities are continued beneficiaries of the tremendous technological growth in the global telecommunications system.

These policy recommendations will concentrate on the marketplace differences of the U.S. free market highly regulated model and the U.K. former government monopoly model as representative examples of the situation of many national telecommunications industries. Within these systems, this paper makes recommendations regarding Internet Protocol (IP) Relay, TRS funding, reimbursement from TRS funding mechanisms, regulatory requirements for TRS capabilities, standardization, and foreign language capabilities. Most of these transnational issues are directly related to international calling and possible extraterritorial and/or conflicts of law concerns, although other isolated transnational legal issues are selectively enumerated. If not properly addressed, these areas of transnational legal and regulatory concern for TRS could hinder the availability and innovation of telecommunications disability accommodations in countries with pre-existing TRS regimes as well as countries contemplating TRS implementation.

B. TRS Allows Individuals with Hearing and/or Speech Impairments to Communicate with Hearing Society

In order to understand the legal and comparative discussions, the reader must understand the tangible form of TRS as a text-based or sign language system that allows individuals with hearing and/or speech impairments to communicate with hearing society via a communications assistant (CA). TRS is not a single technology or equipment type, but rather is a system that can be provided via landline telephone lines and (with specialized equipment or software), over the Internet (IP Relay), and/or in video format.

³ Edward R. Leahy & Michael O'Brien, *Telecommunications Law and Technology in the Developing World*, 22 B.C. Int'l & Comp. L. Rev. 1 (1999).

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Thanks largely to the Americans with Disabilities Act (ADA),⁴ current types of TRS in the United States include: Text-to-Voice TRS (Traditional TTY-TTS), Voice Carry Over (VCO), Hearing Carry Over (HCO), IP Relay, Speech-to-Speech Relay, Video Relay Services (VRS), Spanish Relay Service, One-Line Captioned Telephones and Two-Line Captioned Telephones.

Using any of the systems, a hearing impaired and/or speech-impaired user (User A) with a special telephone or computer software adds the nationwide TRS prefix, 711,⁵ and can connect to a relay center, where a CA connects the user to a hearing person. The hearing person (User B) does not need any equipment other than a standard telephone.⁶ The CA translates the conversation from the format of User A to spoken words for User B, and translates the spoken words of User B into coherent communication for User A. Using 711, a hearing person can reverse the process to reach a relay center in order to call a TRS user. The differences come from varied inputs from User A and outputs from the CA to User A. These inputs/outputs include a voice with captioned response, typed text, American Sign Language (ASL) on video or Spanish language. Several of these services are now available on mobile devices.⁷ There is an effort underway to remove the CA from the equation by replacing the human interaction with voice recognition software and hardware in order to lower costs, increase system availability to users, and decrease delay.⁸

I

TRS HISTORY AND CURRENT TRENDS

TRS is a hot topic for both domestic and international law due to a policy environment that thrusts disability accommodations and communications in general to a highlighted position in the public debate, forcing traditional domestic systems to rethink their interaction with the global

⁴ TRS was created by Title IV of the ADA. *See* 47 U.S.C. § 225(a)(3) (defining TRS); 47 C.F.R. § 64.601(14).

⁵ Speech-To-Speech relay, which does not require special equipment, and VRS with proxy IP address databases instead of phone numbers are the exception to this rule.

⁶ *See* FCC Consumer Guide to TRS, *supra* note 1.

⁷ Suzanne Robitaille, *New Telecom Connections for the Deaf*, BUSINESS WEEK ONLINE, Oct. 9, 2002, http://www.businessweek.com/technology/content/oct2002/tc2002109_4505.htm.

⁸ Press Release, Sprint, Sprint and Ultratec Announce Technology Trial (July 16, 1999), *available at* http://www3.sprint.com/PR/CDA/PR_CDA_Press_Releases_Detail_PF/0,3680,962,00.html.

system. This section specifically includes the U.S. Supreme Court's decision regarding the extraterritorial applicability of the ADA in *Spector v. Norwegian Cruise Line*,⁹ the U.S. FCC and the U.K. OfCom¹⁰ regulatory actions, and preliminary attention to telecommunications disability accommodations in the world forum of the International Telecommunications Union (ITU)¹¹ as part of "Access to Knowledge" (A2K) initiatives.¹²

Several high profile cases regarding the ADA have reached the U.S. Supreme Court and have sparked interest in the extraterritorial applicability of America's premier disability accommodations laws.¹³ As background, government officials, citizen activists, and persons with disabilities celebrated the 15th anniversary of the ADA in 2005. This statute is often described as one of the most significant civil rights laws ever passed,¹⁴ because of its comprehensive anti-discrimination regime based on the concepts of "reasonable accommodation" and "functional equivalence" that provides for facility access and protections from various forms of government and private discrimination.¹⁵

During the ADA's 15th anniversary year, a case came before the U.S. Supreme Court that questioned a direct intersection between international law and the ADA. This case bore directly on the applicability of a government-

⁹ *Spector v. Norwegian Cruise Line, Ltd.*, 545 U.S. 119 (2005).

¹⁰ Ofcom is the independent regulator and competition authority for the UK communications industries, with responsibilities across television, radio, telecommunications, and wireless communications services, <http://www.ofcom.org.uk>.

¹¹ The ITU is an intergovernmental organization within the United Nations system that sets standards and regulations for radio and telecommunications by forming consensus between government and private sector. For more information see <http://www.itu.int/home/index.html>.

¹² Access to Knowledge is a movement concerned with ensuring fair access to telecommunications services for all persons. For general information on the ITU initiatives see Report by Hiroshi Kawamura, Representative for WSIS of the DAISY Consortium of Global Forum on Disability in the Information Society (Nov. 18, 2005), *available at* <http://www.itu.int/wsis/tunis/statements/docs/pe-forum-disability/1.pdf>.

¹³ See *Bragdon v. Abbott*, 524 U.S. 624 (1998); *PGA Tour, Inc. v. Martin*, 532 U.S. 661 (2001); *Tenn. v. Lane*, 541 U.S. 509 (2004).

¹⁴ Jamie C. Ruff, *Making Campuses Accessible is Goal Colleges Seek to Meet the Needs of Students Who Use Wheelchairs*, RICHMOND TIMES-DISPATCH, Aug. 8, 2005, at B1.

¹⁵ 42 U.S.C. § 12101 (2000).

sponsored disability accommodation regime, which could implicate U.S. TRS because of its international calling capabilities. In *Spector v. Norwegian Cruise Line*, several plaintiffs who use wheelchairs sued the cruise ship company for failing to provide reasonable accommodations for their cruise trip out of Galveston, Texas.¹⁶ The question reviewed by the Court was “[w]hether and to what extent Title III of the Americans with Disabilities Act applies to companies that operate foreign-flag cruise ships in United States waters?”¹⁷ The cruise ships included in the allegations followed industry practice and flew under “flags of convenience,” and therefore under traditional maritime law they would not be subject to U.S. law when in international waters.¹⁸

In a fractured set of opinions, the Supreme Court provided the plaintiffs with a small win, finding that the ADA applied to foreign-flagged ships in U.S. waters as long as the accommodations did not directly affect the internal affairs of the ship.¹⁹ This holding was heavily influenced by the particular facts of a cruise ship in a maritime situation.²⁰ While entire notes could be written on *Spector*, the differences in opinions and the application of traditional international maritime law is beyond the scope of this paper. What matters is that the Court recognized the intersection of the ADA with international law and provided for some (albeit maybe not much) extraterritorial applicability of the statute.

Within the environment described above, the FCC diligently strengthened its rules on disability accommodations and OfCom completed reviews of the British TRS system. Under Title IV of the ADA, the FCC was charged with implementing the TRS regime, and in July 2005 the FCC approved four rulings in one day regarding TRS.²¹ Commissioner statements

¹⁶ *Norwegian Cruise Line*, 545 U.S. 119.

¹⁷ U.S. Supreme Court, <http://www.supremecourtus.gov/qp/03-01388qp.pdf> (last visited Oct. 28, 2006).

¹⁸ See BARRY E. CARTER, INTERNATIONAL LAW 840 (4th ed. 2003).

¹⁹ *Norwegian Cruise Line*, 545 U.S. at 128.

²⁰ The intricacies of international maritime law are beyond the scope of this paper.

²¹ Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Order, 20 F.C.C.R.13195 (2005); Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Report and Order, 20 F.C.C.R. 13165 (2005); Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Order on Reconsideration, 20 F.C.C.R. 13140 (2005). The FCC has continued to pay attention to the issue in a series of NPRMs and Rulings on TRS

in these orders have specifically included references to the anniversary of the ADA and the importance of TRS to the modern telecommunications world.²²

In the United Kingdom, OfCom did not go as far as the FCC, but did complete an important study of Universal Service Obligations (USO Review).²³ In this review, OfCom recommended a study on the feasibility of bringing IP Relay and the Video Relay Service to the British TRS system, but noted that it might be hampered by a lack of statutory authority.²⁴ Issues of statutory authority aside, OfCom's proposed study of VRS and IP Relay will certainly require the researchers to analyze extraterritorial effects of their decisions because of the emerging integration of Europe and the technological issues discussed below.

In the global arena, there has been a preliminary effort to bring attention to disability affairs in the general sense as well as within the telecommunications industry with few concrete results as a baseline for the analysis of international implications of TRS. Generally, the World Bank held two International Disability Conferences,²⁵ and the UN High Commissioner on Human Rights recognized "a dramatic shift in perspective has been taking place over the past two decades, and persons with disabilities are increasingly viewed as holders of rights."²⁶ In the telecommunications industry specifically, several foundation-level actions occurred within the ITU, a United Nations organization devoted to fostering an environment where "governments and the private sector could work together to coordinate the operation of telecommunication networks and services and advance the development of communications technology."²⁷

(especially VRS) in May 2006, many of which are cited in this note.

²² See *supra* note 21.

²³ Ofcom, Ofcom Review of Universal Service Requirements, http://www.ofcom.org.uk/media/news/2005/01/nr_20050110#content (last visited Oct. 28, 2006).

²⁴ Ofcom, Universal Service Requirements FAQ, <http://www.ofcom.org.uk/media/mofaq/telecoms/usofaq/> (last visited Oct. 28, 2006).

²⁵ 2004 World Bank International Disability Conference, <http://web.worldbank.org/> (Search for "2004 World Bank International Disability Conference") (last visited Oct. 28, 2006).

²⁶ OHCHR, Disability, <http://www.ohchr.org/english/issues/disability/> (last visited Oct. 28, 2006).

²⁷ International Telecommunication Union, Purposes, <http://www.itu.int/aboutitu/overview/purposes.html> (last visited Oct. 28, 2006).

The original TRS has some standardization, but none of the other types of TRS have ITU standards.²⁸ The ITU is currently discussing “the Total Conversation concept for conversation in Real-time Text, Video and Voice as an accessible superset of video telephony, text telephony and voice telephony.”²⁹ Beyond the highly technical 2000 standardization report, the ITU recently saw the promulgation of general policy statements in relation to its World Summit on the Information Society (WSIS).³⁰ Both the 2003 Geneva WSIS and 2005 Tunisia WSIS included forums that focused on disability accessibility.³¹ The “Tunis Declaration on Information Society for Persons with Disabilities, November 18, 2005” requested generally that governments and private sector actors consider individuals with disabilities in their technological and regulatory undertakings.³²

These actions are beginning steps in an international telecommunications legal environment that is currently devoid of much substantive law or policy, yet these actions evidence a growing body of political, diplomatic, and legal actions that national TRS systems must accommodate and ideally will shape.

A. Transnational Challenges of Extraterritoriality Requirements, Cross-Border Funding Mechanisms, and IP Protocol Concerns in U.S. and U.K. TRS Systems.

The United States and United Kingdom are starting points in the road to defining and resolving the extraterritorial issues of TRS, because they host the two most successful TRS regimes and their overall telecommunications industry structures are representative of other nations. The United States provides more accommodations for individuals with disabilities than any other country in the world. Indeed, former President George H. W. Bush commented: “The passage of the ADA, the world's first declaration of equality for people with disabilities, made this country the international leader

²⁸ ITU, Operational and Interworking Requirements for DCEs Operating in the Text Telephoning Mode, <http://www.itu.int/rec/T-REC-V.18/en> (last visited Oct. 28, 2006).

²⁹ ITU, SG 16 Work on Accessibility, <http://www.itu.int/ITU-/studygroups/com16/accessibility/achievements.html> (last visited Oct. 28, 2006).

³⁰ Report by Hiroshi Kawamura, Representative for WSIS of the DAISY Consortium of Global Forum on Disability in the Information Society (Nov. 18, 2005), *available at* <http://www.itu.int/wsisis/tunis/statements/docs/pe-forum-disability/1.pdf>.

³¹ *Id.*

³² *Id.*

on this human rights issue.”³³ The relatively early passage of the ADA and its subsequent timely implementation by the FCC has made the U.S. TRS system the world’s leading regime. The U.K. TRS system is also one of the world’s strongest, as British Telecommunications (BT) created a system-wide regime that reaches many customers.

Regarding general telecommunications regulation, the U.S. free market model without a government-ownership legacy and including universal service obligations (such as TRS), is widely imitated. In contrast, the U.K. system presents the state of many current national telecommunications markets as they attempt to transition from a government-owned monopoly carrier to a free-market approach. A comparison of U.S. and U.K. regimes is useful in fashioning resolutions to the current transnational legal concerns for both of these nations as well as many other nations attempting to implement a TRS regime because the comparative histories provide a launching point for solutions.

B. The U.S. TRS Model Fails to Consider Trans-National Concerns because of Extraterritorial Jurisdiction Assertions and Cross-Border Funding Mechanisms, Compounded with IP Technology Advances.

The U.S. TRS model provided a wealth of innovation in the TRS field because of a legal requirement on common carriers and a shared funding mechanism, yet these two items are also points of legal concern regarding extraterritoriality as international calling becomes more prevalent in our globalized society. This section will discuss first the background of these two issues, while the extraterritorial legal concerns are discussed later in this paper.

There are both statutory and regulatory requirements for common carriers to provide TRS in the United States, and an understanding of these requirements is integral for comprehension of the advanced legal arguments promulgated later. The ADA defines TRS as allowing individuals with disabilities to “engage in communications by wire or radio with a hearing individual in a manner that is functionally equivalent” to an individual without an impairment.³⁴ Title IV of the ADA requires each common carrier to provide TRS, and subsequent FCC regulations require TRS be available 24 hours a day, seven days a week, with no higher charges and no refusal of calls

³³ George H. W. Bush, Remarks Commemorating the First Anniversary of the Signing of the Americans with Disabilities Act of 1990 (July 26, 1991), *available at* <http://bushlibrary.tamu.edu/research/papers/1991/91072603.html>.

³⁴ 47 U.S.C. § 225 (2006).

or time limitations.³⁵ As mentioned above, the FCC recognizes a variety of different types of TRS as meeting that standard, and has required carriers to provide several forms of TRS while designating others as optional.³⁶

The role of Congress and the FCC in requiring TRS should not be understated. Due to the fragmented nature of the U.S. telecommunications system in the 1990s (when the ADA passed), it was difficult for a small group of individuals with disabilities to leverage nearly non-existent market power for nationwide TRS. Some states had TRS via government bodies or public-private partnerships,³⁷ but the creation of a nationwide network required national law. After the breakup of AT&T,³⁸ the FCC set national rules on interconnection, services provided, and other items.³⁹ State public service commissions still had an effect after the Telecommunications Act,⁴⁰ yet national telecommunications issues were solved at the federal level.

Because of the instant market created by the requirement, entrepreneurs were able to develop new types of TRS to satisfy demand. Particularly relevant to the inquiry of this note, federal enforcement created a central regulatory power at the nation-state level in order to address extraterritorial issues. There is no singular and binding international regulator for conflicts of national laws, although the ITU and the WTO may have jurisdiction concerning some aspects of a TRS regime.⁴¹

³⁵ *Id.* The FCC regulations on TRS can be found in 47 C.F.R. § 64.601. The current FCC docket for TRS-related issues is CG Docket 03-123.

³⁶ *See supra* note 4 for more information on the different types of TRS recognized by the FCC.

³⁷ In the Matter of the Use of N11 Codes and Other Abbreviated Dialing Arrangements, Second Report and Order, 15 F.C.C.R. 15188, 15190 n.4 (2000); Intrastate calls are still funded by states, not through the Interstate TRS fund.

³⁸ The American telecommunications landscape was forever altered with the breakup of “Ma Bell.” *See* ROBERT W. CRANDALL, *AFTER THE BREAKUP: THE U.S. TELECOMMUNICATIONS INDUSTRY IN A MORE COMPETITIVE ERA* (The Brookings Institution, 1991); *see also* *United States v. AT&T (Modification of Final Judgment)*, 552 F.Supp. 131 (D.C. Cir. 1982) *aff’d sub nom.* *Maryland v. United States*, 460 U.S. 1001 (1983).

³⁹ For interconnection regulations before the *Modification of Final Judgment*, *see* *Microwave Commc’ns Inc.*, 18 F.C.C.2d 953 (1969); *MCI Telecomms. Corp.*, 60 F.C.C.2d 25 (1976).

⁴⁰ Pub. L. No. 104-104, 110 Stat. 56 (1996).

⁴¹ For example, the ITU may have some jurisdiction in standardization issues and the WTO may have jurisdiction in regard to intellectual property

In addition to requiring common carriers to provide TRS, the FCC also established a shared funding mechanism to compensate TRS providers for the TRS portion (not the underlying phone call cost) of a TRS call, which led to questions about payments for international calling and the use of non-domestic revenues in the contribution formula. Modeled after the Universal Service Fund (USF), the Interstate TRS Fund was established in 1993 and is administered by the National Exchange Carrier Association (NECA), a nonprofit organization that also administers the USF.⁴² Based on a "TRS Fund Worksheet" all common carriers must file NECA uses revenues from interstate, international, and intrastate communications services to decide the required contribution.⁴³ While the contribution comes from the common carriers, it is inevitably passed on to consumers. Cellular, paging, mobile radio, operator services, PCS, access, packet-switched, 800, 900, private line, telegraph, video, satellite, international, intraLATA, and resale services must contribute to the fund, even though some of these services arguably have nothing to do with TRS and have extraterritorial reach and/or revenues.⁴⁴

concerns. Neither, however, has direct control over conflicts of law in regard to disability issues.

⁴² See *In the Matter of Telecommunications Services for Individuals with Hearing and Speech Disabilities and Americans with Disabilities Act of 1990, Order on Reconsideration*, 8 F.C.C.R. 1802 (1993) (Interstate TRS Fund Order). NECA also administers the Universal Service Fund, see <http://www.neca.org>. Because the FCC approves all rates and worksheets, NECA can be viewed as an extension of the FCC, not an abdication of authority. The Fund has risen from \$70 million to over \$440 million, a growth attributed to the addition of new TRS services like IP Relay and VRS. See National Exchange Carrier Association, http://www.neca.org/images/-RELAYRATESHISTORY_revised_08_21_06.pdf (last visited Oct. 28, 2006) for a chart of the fund size history.

⁴³ FCC, Telecommunications Reporting Worksheet Form 499-a (March 2006), <http://www.fcc.gov/Forms/Form499-A/499a-2006.pdf>.

⁴⁴ *Id.* In fact, in regard to the Telco Group petition discussed *infra* note 86, the Consumer and Government Affairs Bureau chief noted "the obligation to pay into the Fund . . . is not tied to particular benefits contributors may receive from the fund. Under the rules, a broad range of interstate telecommunications carriers are required to pay into the fund, regardless of whether they also provide relay services paid for by the Fund or otherwise 'benefit' directly." In the *Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Declaratory Ruling on Reconsideration*, 21 F.C.C.R. 5962, 5966 n.28 (2006).

This cost sharing ensures that TRS is not exclusively funded by TRS users and distributes them among the telecommunications market. The FCC approved the shared funding mechanism because it was worried about carriers providing only minimal TRS,⁴⁵ finding the shared funding mechanism provides “strong incentives for TRS providers to offer high quality, innovative services at reasonable cost.”⁴⁶ By spreading the costs, the FCC created a market for innovation and quality service with a guaranteed revenue stream.⁴⁷ The FCC barred TRS providers from advertising discounts to obtain more TRS users and/or more compensable TRS minutes.⁴⁸ All subscribers are paying a portion of the TRS cost, and the FCC determined it is unfair to charge them more.

In effect, the FCC foreclosed price competition, meaning competition must be had on quality and availability. By doing so, the FCC pushed for even more innovation and better quality service, because those items differentiate TRS providers.

C. The U.K. TRS System Fails to Adequately Face the Global Telecommunications, Technological and Commercial Environment.

Unlike the U.S. statutory and regulatory regime, Britain’s TypeTalk TRS system began as a voluntary venture by a government-owned monopoly, which provides basic service to hearing and speech impaired British citizens,

⁴⁵ *Interstate TRS Fund Order*, 8 F.C.C.R. at 1805, paras. 19-27.

⁴⁶ *Id.* at 1806, para. 24.

⁴⁷ The shared funding mechanism for TRS also bears a strong relationship to the goals and reasoning underlying Universal Service policies to bring access to underserved individuals as a matter of public policy. The market creation theory rather than the moral public policy theory is discussed here, but there is a strong argument for the expression of ADA “functional equivalence” as a public policy moral judgment. For more information on Universal Service, see NTIA, *The New Universal Service: A User’s Guide*, <http://www.ntia.doc.gov/opadhome/uniserve/univweb.htm> (last visited Oct. 28, 2006) (summarizing the FCC’s approach to Universal Service to bring benefits of competition to all users); see also, ROBERT W. CRANDALL & LEONARD WAVERMAN, *WHO PAYS FOR UNIVERSAL SERVICE?: WHEN TELEPHONE SUBSIDIES BECOME TRANSPARENT* (Brookings Institution Press 2000).

⁴⁸ Federal Communications Commission Clarifies That Certain Telecommunications Relay Services (TRS) Marketing And Call Handling Practices Are Improper And Reminds That Video Relay Service (VRS) May Not Be Used As A Video Remote Interpreting Service, Public Notice, 20 F.C.C.R. 1471 (2005).

but fails to keep pace with the rapidly changing global telecommunication market. The U.K. model has much more limited requirements than the U.S. model, but the requirements still may have extraterritorial legal ambiguity and concern. The United Kingdom does not, however, have any shared funding mechanisms, which limits questions about taxpayer funds being utilized for extraterritorial purpose. However, as a telecommunications provider with a large amount of market share due to its past government-owned monopoly status, the requirement on BT to both provide and fund the TypeTalk system could be viewed as an effective tax that subsidizes global activities in a international TRS calling situation.

While OfCom now requires TypeTalk as part of BT's license,⁴⁹ it is statutorily limited in its ability to require additional forms of TRS beyond the most basic system and therefore is unable to foster innovation, which may lead to international standardization concerns. TypeTalk started as a voluntary and charitable venture between BT and the Royal National Institute for Deaf People (RNID) in 1989,⁵⁰ much like in the United States where several local TRS systems started via charitable or public partnerships, often with volunteers.⁵¹ In 1994, then-regulator Office of Telecommunications (OFTEL) required BT to provide TRS as part of their "license,"⁵² but that was not the original impetus.⁵³ Indeed, TypeTalk is described by RNID as a "direct result of lobbying...."⁵⁴ While lobbying a company still qualifies as lobbying, it does appear there was some element of governmental influence. Like 711, 18001 and 18002 TypeTalk prefixes exist and BT guarantees a 60 percent rebate when they are used (but not for international calls).⁵⁵

The funding for TypeTalk is provided solely by BT, and since it is required to provide the service, BT and its consumers are effectively being taxed in order to provide TRS to the British public, which could include international calling service. As in the United States, the user does not bear TRS costs, and further gets a rebate on the cost of the underlying call. Thus,

⁴⁹ TypeTalk, A Brief History of TypeTalk, <http://www.typetalk.org/downloads/HistoryofTypetalkleaflet.pdf> (last visited Oct. 28, 2006).

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ The British version of the ADA, (the Disability Discrimination Act) refers to communications in Section 19, but does not appear to be the basis of TypeTalk. The Disability Rights Commission, <http://www.drc-gb.org/thelaw/index.asp> (last visited Oct. 28, 2006).

⁵⁴ *Id.*

⁵⁵ *Id.*

BT competes for TRS users as subscriber by means of automatic processing and ease of use. Today, there are other U.K. telecommunications providers, but BT still provides only the basic TRS system with RNID. Consumers of other carriers still have access to TypeTalk, but do not get the same automatic rebates as BT TRS customers.⁵⁶ BT provides TRS service for international calls, but does not apply the 60 percent rebate to those calls.⁵⁷

OfCom has entered into a consent decree requiring BT to undertake many structural competition reforms.⁵⁸ One potential outcome of these competition reforms could be to allow competition in TypeTalk, which is currently exclusive to BT. Because the competitive reform process is relatively new and OfCom has not specifically mentioned TypeTalk in this context, one can only note there has been a trend towards more strict regulation that may have a future impact on TypeTalk.⁵⁹

II EXTRATERRITORIAL LEGAL CONCERNS

Several possible adaptations are available to each country (or other countries with a similar current or contemplated overall telecommunications industry structure) for a strong, innovative, and fair TRS system in the current and future global telecommunications marketplace in various areas of extraterritorial legal concern.

With the backgrounds of current leading TRS models previously discussed, this section specifically highlights deficiencies and possible adaptations to ensure a strong, innovative and globally sensitive TRS system. This section focuses on:

- A) IP Relay,
- B) shared funding mechanisms and reimbursement from those mechanisms,

⁵⁶ RNID TypeTalk, Billing and Rebate, http://www.typtalk.org/-html/ourservices/comdifficulties/commdiff_billing.asp (last visited Oct. 28, 2006).

⁵⁷ *Id.*

⁵⁸ OfCom, Implementation of BT's Undertakings, <http://www.ofcom.org.uk/-telecoms/btundertakings> (last visited Oct. 28, 2006).

⁵⁹ See, Press Release, Olswang: Lawyers to Technology, Media, Telecommunications, and Property Sectors, *Preliminary finding from Ofcom that BT has abused its dominant position* (Oct. 11, 2004), available at <http://www.olswang.com/news.asp?page=newssing&sid=123&aid=715> (suggesting that OfCom may be a stricter regulator in the area than predecessor OfTel).

- C) legal requirements for TRS provision, and
 - D) standardization and highlight the current and proposed interactions between domestic TRS systems and the transnational legal, regulatory, and technological order.
- A. Registration Requirements, Technological Adaptations, or Special Fees May Limit the Significant Challenge that Borderless IP Relay Poses to a (potential) Global TRS Regime.

IP Relay already has proven to be a sore point of contention for extraterritoriality of funding mechanisms in the United States,⁶⁰ and surely would continue to cause legal concerns if potential solutions like registration requirements, technological adaptations, or special fees (or a combination of these activities) are not utilized. While the innovative U.S. TRS system has IP Relay capabilities, British users have not been given the same technologically advanced opportunities, although, OfCom is studying the issue.⁶¹

As background, IP Relay works in the same manner as other TRS systems, where a CA serves as a translator between a hearing and/or speech impaired individual and a mainstream individual. The key difference between IP Relay and other forms of TRS is that the underlying call is made over Internet Protocol packet technology that is relayed from server to server across the Internet, often using a mere Internet applet that can be accessed by any Internet browser (i.e. Internet Explorer or Netscape Navigator),⁶² rather than point to point over the traditional telecommunications infrastructure lines.⁶³ Similar to modern Voice Over IP (VOIP) systems, IP relay costs much

⁶⁰ In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 19 F.C.C.R. 12475, 12525 n.368 (2004).

⁶¹ Ofcom, Ofcom Review of Universal Service Requirements, http://www.ofcom.org.uk/media/news/2005/01/nr_20050110#content (last visited Oct. 28, 2006).

⁶² For more information on IP Relay *see* FCC Consumer Facts, IP Relay Services, <http://www.fcc.gov/cgb/consumerfacts/iprelay.html> (last visited Oct. 28, 2006). For an example of a working IP Relay applet, *see* www.ip-relay.com (last visited Oct. 28, 2006).

⁶³ The Video Relay Service (VRS) may also be subject to some of the concerns listed in this subsection because it often uses Internet Protocol to transmit the video discussion. However, it should be noted that the anonymity of IP Relay is missing with VRS because of the image of the caller and the ease for the CA to determine the caller does not use sign language. There are

less than traditional TRS.⁶⁴ IP Relay has no additional costs to the user, unlike traditional TRS long-distance fees for the underlying call. It is also becoming more preferred by the technology-savvy user base, and in fact, after January 2003, more IP Relay minutes were recorded in the United States than traditional TRS minutes.⁶⁵

Neither the FCC nor OfCom requires the provision of IP Relay, and therefore the system does not raise transnational legal issues in that regard. Rather, the inherent nature of the service raises transnational legal concerns. The anonymity and global scope of the Internet provides a unique legal and policy problem – fraud. Because there is no special equipment required (only a browser and Internet connection), anyone in the world can use IP Relay.

There are two distinct problems that could overlap: 1) persons from outside the United States using a U.S.-funded system and 2) persons without disabilities using IP Relay. In a glaring example, based on a spike in extraterritorial IP Relay and anecdotal/statistical evidence that a large number of those calls were not being made by persons with disabilities, the FCC staff (and later the full Commission) refused to fund international calling via IP relay.⁶⁶ Particularly disturbing was that hearing-impaired TRS users were denied CA response, because a non-impaired user was monopolizing the CA. In addition, the sheer volume of extraterritorial minutes threatened to push the Fund into the red. The decision was not made on extraterritoriality concerns, but rather on practical funding concerns.

Without reimbursement, IP Relay providers no longer allow users to make non-domestic calls, cutting off use for individuals with disabilities.⁶⁷ Because TypeTalk does not yet have IP Relay capabilities, no such example is

some concerns for VRS regarding the minimum required standards and the lack of CA ability to terminate an illegitimate call that will be discussed later in this section in relation to IP Relay. However, for purposes of clarity and because of its more anonymous nature, only IP Relay is discussed here.

⁶⁴ In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Order, 20 F.C.C.R. 12237 (2005).

⁶⁵ TRS Fund Administration, NARSA Meeting (2005), <http://neca.org/-media/090805NASRAPRESENTATION.pdf>.

⁶⁶ In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 19 F.C.C.R. 12475, 12525 n.368 (2004).

⁶⁷ See AT&T Relay, <http://www.consumer.att.com/relay/internet> (last visited Oct. 28, 2006).

available in the U.K. system, but regulators will only take heed of the U.S. experience with extraterritoriality concerns as they study the feasibility of IP Relay.

More recently, the FCC recognized the concerns of IP Relay fraud regarding use of IP Relay for fraudulent credit card purchases (often from abroad) and the fraudulent use of VRS as a remote interpreting service.⁶⁸ While not addressing fraudulent international calling and/or basic fraudulent use of IP Relay, the FCC's underlying reasoning in the NRPM stretches broader than the narrow topics discussed. The FCC noted the CA presently receives no identifying information (unlike caller ID on a PTSN phone call), and noted that besides the harm to merchants by use of fraudulent credit cards, telecommunications carriers "should not be paying more because of the misuse of funded services."⁶⁹ The FCC requested comments on whether it should lower the minimum standards that currently prohibit CAs from refusing calls, intentionally altering a relayed conversation, or disclosing or keeping records of calls.⁷⁰ The FCC conceded that by lowering these standards for IP-based communications, there could be a denial of functional equivalence and requested comments on how to address that tension.

In contemplating a lowering of these standards, the FCC requested comment on whether a CA should be given discretion to determine a call is not legitimate on a case-by-case basis and whether the FCC should adopt rules to guide that discretion.⁷¹ However, it does not seem to be a positive solution to deter innovation and efficiency by making IP Relay more burdensome for both the providers (who will have to monitor discretion) and IP Relay users (who run the risk of being described as "illegitimate") as opposed to older technologies by lowering minimum standards. Other options discussed herein would seem to avoid functional equivalence tensions and allow for the continued efficient use of TRS.

Given the transnational fraud and funding concerns, there are several possible actions for regulators and/or the market, including registration,

⁶⁸ Indeed, the FCC has recognized a subset of this fraud from anecdotal evidence. See In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Misuse of Internet Protocol (IP) Relay Service and Video Relay Service, Further Notice of Proposed Rulemaking, 21 F.C.C.R. 5478 (2006). (hereinafter *Misuse NPRM*).

⁶⁹ *Id.* at 5480, paras. 6-7.

⁷⁰ *Id.* at 5482, paras. 9, 11.

⁷¹ *Id.* at 5483, para. 12.

special-use technology, or special fees.⁷² Some mix of the three might actually provide the best solution. While there is some uneasiness in the United States about requiring sensitive medical information in order to utilize government services,⁷³ transit agencies use it as a means to screen applicants for their ADA-compliant paratransit services.⁷⁴

If a registration mechanism is chosen, a small fee might help alleviate concerns of fraudulent registrations, but could be a violation of functional equivalence by imposing an additional fee and because it would make IP Relay more expensive. Because there is competition between TRS providers,⁷⁵ one provider is not able to implement a registration system alone, as consumers would quickly switch to another provider. Therefore, in order to solve the system-wide global legal/regulatory issue, the FCC and other national regulatory authorities would have to be the organization(s) imposing this remedy if chosen.

A detriment to a registration system is a privacy concern with the ensuing data, and the FCC has implied there could be wrongful use of this registration information and that adequate procedural safeguards would be required.⁷⁶ However, this concern could be alleviated by appropriate safeguards like assignment of unique identifiers, record-keeping and destruction requirements, and other methods and in the cost-benefit analysis, the registration system would solve the anonymity concern discussed in the NPRM.⁷⁷

There is a question as to whether registration and the use of assigned unique identifiers⁷⁸ to utilize the service should be required for all TRS

⁷² Indeed, the FCC requested comments on how registration could be implemented and what information should be required from a user if it was to require registration for IP Relay. *Misuse NPRM*, 21 F.C.C.R. at 5483, para. 14.

⁷³ See *Watson v. City of Miami Beach*, 177 F.3d 932 (11th Cir. 1999).

⁷⁴ See e.g., Washington Metropolitan Area Transit Authority, Metroaccess Paratransit Information and Application Forms, <http://wmata.com/-metroaccess/eligibility.cfm> (last visited Oct. 28, 2006) (discussing the need for healthcare professional verification forms).

⁷⁵ See FCC Consumer Facts, *supra* note 62.

⁷⁶ *Misuse NPRM*, 21 F.C.C.R. at 5484, para.15.

⁷⁷ The FCC also questions whether collecting information would be in violation of 47 U.S.C. § 605, which regulates information collected about calling. These concerns could likely be remedied via appropriate safeguards as well.

⁷⁸ Such as a username and password, which could be assigned randomly.

services, or just IP Relay. Because other services (with the exception of VRS over IP Relay) require specialized equipment that an ordinary consumer would not purchase, the equipment itself serves as a barrier to entry for fraudulent users.

Perhaps IP Relay could be the only registration-based system, so that individuals who do not wish to provide medical information still would have access to the other methods of TRS while ordinary able-bodied consumers would not be able to exploit the ease of use of IP Relay for fraudulent purposes without spending additional money on specialized equipment. Yet, such a distinction might lead to claims the FCC is no longer observing “functional equivalence” aims, as VoIP becomes the predominant means of communication for the hearing community. At the same time, technology itself might make a registration system unnecessary.

If IP Relay services can be incorporated in specialized mobile devices at modest cost⁷⁹ or are somehow linked to other adaptive technology (such as hearing aids), IP Relay would be like other TRS services where the purchase of specialized equipment serves as a low, but effective barrier to fraud. Making current TTY/TTS or other specialized equipment work on IP formats would provide the same benefit and arguably is closer to functional equivalence as the hearing world moves to VoIP.

Perhaps a single VRS provider could be designated for IP Relay international calls to better screen calls (because the CA will quickly notice when neither side speaks ASL). However, because sign languages differ between countries and there is a high expense for the broadband connection for VRS, that model would not work. Another technological option would be to block IP addresses of individuals or areas of the world, but because of the ease of masking IP addresses, it would likely not be successful and does not address the problem of domestic fraud.

⁷⁹ IP Relay can now be used on popular consumer handsets such as the RIM Blackberry and PalmOne Treo. *See*, Robitaille, *supra* note 7. While great for relay users, this availability does not help distinguish between fraudulent and non-fraudulent use without access to consumer use records, which is currently a controversial topic in Congress and the FCC. *See*, *Hearing on Phone Records For Sale: Why Aren't Phone Records Safe From Pretexting? Before the H. Comm. On Energy and Commerce*, 109th Cong. (2006) (statement of Kevin J. Martin, Chairman, FCC), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-263577A1.pdf.

Limiting international calls to non-IP formats (as the FCC has done) is an effective temporary stopgap because of the necessity of special equipment for other forms of TRS. But as the entire phone system moves toward IP, it would likely be a violation of “functional equivalence” to hold back TRS. It can be argued that just because the FCC stopped reimbursing the international calling minutes, that does not necessarily mean an intrepid competitor would not provide non-domestic access, but the most popular IP Relay services have responded by limiting calls to 10 digit numbers or outright banning international calling.⁸⁰

Recommendation: The FCC, OfCom, or any other National Regulatory Authority (NRA) implementing a TRS system should develop a registration system to provide international calling over IP Relay for qualified users, leaving other TRS methods free from registration requirements, while at the same time encouraging technology-specific solutions.

B. Funding

A funding mechanism is required for a strong, innovative TRS system, but the source of the funding and contribution calculations are national questions with moral and global implications regarding fairness.

For the best TRS system possible, an obligation to spread the costs among all common carriers and all subscribers would be preferred because it allows for a pool of money as an incentive for technological innovation and quality service. Yet, that sharing mechanism could end up requiring domestic users to fund foreign programs and vice versa. The shared funding mechanism could draw its revenue from common carriers (via charitable or required payments) or from subscribers, but either way there is a concern about domestic funds used for international calling. Charitable provision of TRS should be dismissed out of hand, because fewer risks will be taken with charitable money to provide innovative service, because of a desire to avoid embarrassment to the donor by failure and a lack of for-profit incentive, preferring the status quo.

⁸⁰ For examples of the lack of international calling capability over IP Relay see Hamilton Relay, <http://www.hiprelay.com/> (last visited Oct. 28, 2006); IP-Relay.com, <http://www.ip-relay.com/> (last visited Oct. 28, 2006); Sprint, <https://www.sprintip.com> (last visited Oct. 28, 2006).

Given the proliferation of deserving telecommunications charities,⁸¹ the chances of finding another large donor like BT are small to none. Requiring common carriers to foot the TRS bill by an effective tax may seem like a good solution, but in the end, the costs are merely passed on to consumers. For all subscribers to pay for the special needs of a few may seem unfair, but in the end the shared pool creates an incentive for innovation and customer recruitment and retention, therefore creating positive network effects.⁸²

An alternative is that the shared funds be provided from the public treasury, but it would still mean that all subscribers are funding the needs of a few. However, it may be preferable to have the users also contributing to the fund (assuming they pay taxes and are not exempt) as to level the playing field.

Social welfare programs aimed at discrete populations often prove to be unpopular and inefficient in America, but in a socialist or communitarian government, they could provide many of the same benefits as a TRS fund (like guaranteed funding as an incentive and a lack of burden on individual users). The other problem with a public treasury funding mechanism is that the TRS system would then be subjected to the annual vulgarities of the budget process and would always be in limbo. The United States uses this shared funding mechanism at the subscriber level, and OfCom has hinted at funding mechanism alternatives.⁸³ Perhaps a middle ground would be to base fund contributions on subscriber use of the system via regulatory rulemaking.

The statutory authorization seems to be already available in the United States for the FCC to change the TRS model,⁸⁴ but in the United Kingdom, OfCom likely would need a new statutory authorization or a reinterpretation of the U.K. Disability Discrimination Act.⁸⁵ There could be a minimum pay-

⁸¹ Both the UN Foundation (www.unfoundation.org) and the Federal Communications Bar Association Foundation (www.fcba.org/foundation) provide charitable outlets with a communications worldview.

⁸² See Dennis L. Weisman, *Assessing Market Power: The Trade-off Between Market Concentration and Multi-Market Participation*, 1 J. COMPETITION L. & ECON. 339, 341 n.5 (2005).

⁸³ See OfCom, Universal Service Obligation Review, <http://www.ofcom.org.uk/consult/condocs/uso/main/> at 1.12 (last visited Oct. 28, 2006).

⁸⁴ See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996); See also 47 U.S.C. § 225 (1996).

⁸⁵ For more information see Department for Work and Pensions, http://www.dwp.gov.uk/aboutus/dda_2005.asp (last visited Oct. 28, 2006).

in, but above a certain level, the fund contribution would be tied to the amount of TRS subscribers or minutes. Such a funding mechanism would ensure that those companies with the most TRS subscribers as customers pay in the most. It would also be an incentive to keep TRS services in-house and retain customers with internal cost cutting and innovation, because they could potentially receive more reimbursement than the payments could. Alternatively, it could be an incentive to get more TRS users, so that reimbursement overcomes the pay-in rate.

This scenario requires reimbursement levels to be set at a point where with good management and economies of scale, common carriers would be entirely able to recoup (and perhaps even profit) on their TRS offerings. However, there may be the side effect that companies would be unwilling to play the game and would try to dissuade TRS users from becoming subscribers, so a requirement that all common carriers provide TRS would be instrumental in stopping bad faith actions. In any event, some shared funding mechanism based off subscribers' contribution metric would be preferable.

Recommendation: National Regulatory Authorities implementing TRS systems should establish (or maintain) a shared funding mechanism tied to TRS usage or other competitive metric in order to provide market demand for innovation, but the shared funding scheme must be accompanied by a requirement on all common carriers (not a single designated carrier) for TRS provision so free-riding is avoided. The way TRS providers make money in the competitive environment is to lower their costs but provide high-quality services to the consumer with a choice.

Once a shared funding mechanism is chosen, the two key extraterritorial concerns revolve around 1) extraterritorial funds in the contribution requirements and 2) domestic funds being used to reimburse non-domestic calls. Each is discussed in turn, but the emphasis is on the FCC because OfCom has not yet specifically addressed the issues.

The FCC responded to a 2004 petition from Telco Group⁸⁶ to exclude transnational revenues from the Fund contribution calculation via a May 2006 declaratory ruling (and a slightly later Declaratory Ruling on Reconsideration) by the Chief of the Consumer and Governmental Affairs Bureau (not the full

⁸⁶ Telco Group, Inc. Files Petition for Declaratory Ruling or Waiver to Exclude International Revenues from the Revenue Base Used to Calculate Payment to the Interstate TRS Fund, Public Notice, 19 F.C.C.R. 20965 (2004).

Commission).⁸⁷ OfCom has not yet faced the issue, because it does not have a shared funding mechanism, but because BT's customer base is no longer domestic-only,⁸⁸ requiring TRS provision is effectively taxing foreign non-users. The Telco Group petition was mostly self-interested and not directed (or at least construed to be directed) at the extraterritorial application of the fund contribution formula to interstate revenues, but instead arguing for waiver for those carriers whose non-domestic revenues comprise a significant proportion of total interstate and international revenues. In particular, Telco Group analogized to the 5th Circuit decision in *Texas Office of the Public Utility Counsel v. FCC*,⁸⁹ where the Court of Appeals required "the Commission to revisit the USF assessment on international services revenue of a provider of primarily international services and de minimis interstate services."⁹⁰

The declaratory ruling found that Section 254 (Universal Service) was different than Section 225 (TRS) because "unlike USF assessments, contributions to the Interstate TRS Fund are used, in part, to reimburse international relay calls."⁹¹ Therefore, the declaratory ruling denied the petition without questioning the underlying extraterritorial problems of international calling on TRS, but instead citing earlier TRS orders.⁹² In

⁸⁷ In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Declaratory Ruling, 21 F.C.C.R. 5247 (2006) (hereinafter *Declaratory Ruling*). See also, In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Declaratory Ruling on Reconsideration, 21 F.C.C.R. 5962 (2006) (hereinafter *Reconsideration*) (affirming the declaratory ruling in reasoning and result but incorporating the reply of Telco Group, Inc.). As of May 2006, it is unknown whether the full FCC will take up the issues raised in the declaratory ruling (*Editor's Note*).

⁸⁸ "BT is a leading provider of communications solutions serving customers throughout the world." BT Group Homepage, <http://www.btplc.com> (last visited Oct. 28, 2006).

⁸⁹ 183 F.3d 393 (5th Cir. 1999).

⁹⁰ *Declaratory Ruling*, 21 F.C.C.R. at 5249, para. 5.

⁹¹ *Id.* at 5250, para. 7.

⁹² The *Declaratory Ruling* did note in n.19 that a separate petition from Globecomm Systems, Inc. regarding the inclusion of revenues from traffic that does not originate or terminate in the United States would be considered at a later date because the issue raised in that petition was whether certain calls should be categorized as international calls. *Declaratory Ruling*, 21 F.C.C.R. at 5249, para. 6 n.19. In the case of international-only calls, the

particular, the reconsideration noted the necessity of a broad revenue base in order to meet the public interest of providing international and interstate TRS.⁹³

Is it fair and/or an exercise of extraterritorial jurisdiction by the FCC or OfCom to include these revenues? On the fairness point, it could be argued that the foreign customers will never see the benefits of the contributions because TRS is limited to Americans.⁹⁴ There is even the possibility of a double-taxation if the country where the non-domestic revenues were created taxes them for the general treasury and/or universal service obligations in that country's domestic laws. Beyond the fairness point, there is also an extraterritoriality concern. The D.C. Circuit has given the FCC some leeway in extraterritorial applicability for setting settlement rates for non-domestic calling.⁹⁵ In *Cable & Wireless PLC v. FCC*, the court found because the regulated parties were actually domestic carriers forced not to pay more than a certain rate, there was no extraterritorial jurisdiction.

The criticism of the case was that domestic companies had to ask the FCC to enforce against themselves. Granted, in the case of the Fund, the common carriers had been licensed to operate in the United States and the discussion was only about foreign revenues, not entirely foreign companies. Because the FCC is only regulating domestically licensed common carriers in order to sustain U.S. business, perhaps it is not reaching past its sphere of authority. However, that case could also be read to denote a line between domestic carriers and foreign carriers that could be breached by requiring inclusion of non-domestic revenues beyond the FCC's purview.

rationale of contribution to the Interstate TRS fund (even using the *Declaratory Ruling's* logic of international reimbursements as related to international revenue contributions) is even weaker because no U.S. consumers are affected at all and the burden is borne entirely by foreign consumers.

⁹³ *Reconsideration*, 21 F.C.C.R. 5962, paras. 8, 11. The Reconsideration also found a waiver to be inappropriate because Telco Group is required to contribute the same percentage of revenues as other carriers of both interstate and international services, making the approach "equitable and non-discriminatory." *Id.* at para. 9. The Commission also characterizes the analysis as not whether "the Commission *could* apply the TOPUC principle to TRS, but whether the rule the Commission did adopt . . . is reasonable and in the public interest." *Id.* at 5966 n.27.

⁹⁴ This argument is even stronger in the case of the Globecom petition. See *Declaratory Ruling*, *supra* note 92 (noting that no Americans are involved in the formation of the revenues).

⁹⁵ See *Cable & Wireless PLC v. FCC*, 166 F.3d 1224 (D.C. Cir. 1999).

Telco's petition could go either way in subsequent litigation, but it is likely the FCC would lose because of forced repatriation of revenues without an explicit congressional extraterritorial command.⁹⁶ The FCC would be on safer shores to discontinue the inclusion of foreign revenues in the calculation by rulemaking or adjudication.⁹⁷

OfCom is a relatively new entity on the British regulatory scene, because of the combination of several agencies to create it in order to comply with the European Union Directive.⁹⁸ It is therefore unknown what sort of deference the British courts and/or political branches would provide to OfCom's presumed requirement that BT use pooled resources (which presumably includes non-domestic revenues) to fund TypeTalk.

Recommendation: The FCC (and other National Regulatory Authorities) would be on the strongest legal ground to discontinue the utilization of foreign revenues in fund contribution formulas, but as a broader matter, a fund formula based on TRS usage would alleviate these concerns.

On the second issue of reimbursement, when an American makes a call from Seattle to Vancouver, should American subscribers be funding the TRS costs? The same question could be asked as to whether British subscribers of BT should be cross subsidizing the required TRS service for a call from London to Paris, notwithstanding the lack of a discount for the underlying call price international calling.

To address this issue, it must be assumed that a form of TRS other than IP Relay is being utilized with some user cost for the underlying call.⁹⁹ With those assumptions, calling from the United States to Canada seems to fit within the ADA and FCC regulatory framework and within the language of the DDA (even though it has not been used as a basis for TypeTalk). Indeed, language that states "any type of call normally provided by the common carrier," has led the FCC to reimburse international TRS minutes, although NECA does not separate international statistics.¹⁰⁰

⁹⁶ See *Norwegian Cruise Line*, 545 U.S. 119.

⁹⁷ 5 U.S.C. § 554 (2006).

⁹⁸ See *Super-Regulator Ofcom Launches*, BBC NEWS, Dec. 29, 2003, http://news.bbc.co.uk/1/hi/entertainment/tv_and_radio/3354093.stm.

⁹⁹ As discussed above, international calling on IP Relay is no longer reimbursed by the FCC or provided by carriers.

¹⁰⁰ In the Matter of Telecommunications Services for Individuals with Hearings and Speech Disabilities and the Americans with Disabilities Act of

The FCC has not directly decided upon the legality and propriety of reimbursing for international calling, but has used language responding to comments in previous orders and other snippets to justify the practice.¹⁰¹ In the reverse situation, where the TRS Fund or BT internal processes reimburse a call from Canada to the United States (or Paris to London) there might be more apprehension on the part of the American or British consumer because it was not initiated domestically.

NECA currently funds such calls, but it is more difficult to describe a functional equivalence right to receive a call than it is to make a call, especially since an ordinary citizen most likely rarely receives few incoming international calls. A foreign government, of course, will not mind the reimbursement chance for its citizen. Since outgoing calls as a matter of fairness should be funded by the nation of initiation (much like international calling settlement negotiations), a process like the settlement negotiations described in the *Cable & Wireless* case above would be ideal.

Recommendation: Outgoing international calls should be funded by individual nations through negotiating a process similar to the current international settlement process in which the FCC seeks to lower calling rates by encouraging market-based, commercial arrangements between U.S. and foreign carriers for the exchange of traffic.¹⁰²

1990, Report and Order and Request for Comments, 6 F.C.C.R. 4657, 4660 para. 18 (1991) (hereinafter *1991 R & O*).

¹⁰¹ In the Telco Group Declaratory Ruling, the CGB references *Telecommunications Services for Individuals with Hearing and Speech Disabilities, Recommended TRS Cost Recovery Guidelines*, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 16 F.C.C.R. 22948, 22948-22950, para. 2 (2001) (explaining that *TRS III* required “that every carrier providing interstate telecommunications services contribute to the TRS Fund on the basis of . . . interstate and international revenues”).

In addition, in *Telecommunications Services, and the Americans with Disabilities Act of 1990*, Third Report and Order, 8 F.C.C.R. 5300 (1993), the FCC noted Sprint’s argument that “international services should be included because TRS providers will be compensated by the administrator for international TRS minutes of use.” The *Declaratory Ruling* also references the language in the *1991 R & O* that IP Relay is the exception to the international calling reimbursement rule. *Declaratory Ruling*, 21 F.C.C.R. at 5250, para. 8 n.20 (citing *1991 R & O*, 6 F.C.C.R. at 4660, para. 18).

¹⁰² See FCC – International Bureau, International Settlements Policy and U.S. International Accounting Rates, <http://www.fcc.gov/ib/pd/pf/account.html>.

C. Standards

Problems with conflicting transnational obligations could be resolved via international negotiation on technological, legal, and regulatory standards.

Both the United States and United Kingdom regulators require TRS provision, which seems to be solely domestic in character, even if part of the product is international calling. But a combination of a lack of interoperability and that requirement could cause legal strife from extraterritorial application of laws and regulations. The lack of international standards is a mixed blessing. On one hand, it ensures that domestically funded systems are limited to the national level. On the other hand, a lack of standards slows international discourse and leads to international conflicts of law and technology. What if an individual wanted to call someone also using TRS in another country and neither could utilize the CA, because of interoperability concerns, even though the common carrier was required to provide it? Both the conflict of technologies and the conflict of laws would need to be addressed.

Even within the United States, concerns about interoperability of TRS have led to a declaratory ruling,¹⁰³ and it would not be hard to see a lack of technical standardization limiting the growth of TRS. The FCC unanimously responded to that petition with a declaratory ruling that restricting VRS use to a particular provider is “inconsistent with the functional equivalency mandate, the public interest, and the TRS regime as intended by Congress.”¹⁰⁴

The FCC specifically noted non-interoperable VRS was a burden on consumers who must maintain separate phone systems, would have to wait longer for VRS service, and would make it difficult for hearing individuals to determine which VRS provider to call in order to reach a VRS user.¹⁰⁵ In the

¹⁰³ Petition for Declaratory Ruling Filed by the California Coalition of Agencies Serving the Deaf and Hard of Hearing Concerning Video Relay Service (VRS) Interoperability, Public Notice, 70 Fed. Reg. 12884 (2005).

¹⁰⁴ In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Declaratory Ruling and Further Notice of Proposed Rulemaking, 21 F.C.C.R. 5442, 5454 para. 29 (2006) (hereinafter *VRS Declaratory Ruling and FNPRM*).

¹⁰⁵ *Id.* at 5449, paras. 17-20. The Commission also referred to emergency calling needs (which are irrelevant to international calling) and the FCC policy on open and integrated telecommunications networks, including the Internet. As a result, the FCC declared non-interoperable VRS providers

FNPRM portion of the document, the Commission requested comment on whether the FCC should adopt specific Internet protocols or standards to ensure interoperability.¹⁰⁶ There are strong arguments that requiring a single protocol can retard innovation and make upgrades more onerous, yet, it would seem the requirement of a single “interoperable protocol” in addition to any proprietary protocol would allow for both innovation and interoperability. In looking at the international realm, interoperability is even more crucial because of differences in language, engineering, and technology that are much more pronounced than within a domestic market.

As with the funding mechanism, international negotiations and/or the ITU on a single “interoperable protocol” (or translation mechanism to a single protocol) while allowing innovation in other protocols may be a solution. Yet, the ITU is a slow decision-making body and international negotiations can also be slow, expensive, and cumbersome. Because of the fast pace of telecommunications technology, international diplomatic efforts could always be playing catch-up. In that event, perhaps private industry bodies with consultation from the FCC, OfCom, the ITU and other national regulatory authorities would be the best forum to set international technical standards for interoperability.¹⁰⁷ Although the actual private industry bodies may change, the concept of a public-private partnership should be maintained.

In both the legal and technical domain, the FCC and OfCom also could create case-by-case exceptions to the requirement in the case of international calling, but unlike fostering standardization development, such a move would just eliminate the consequences of separate systems and would not support the effort required for common standards. Alternatively, if a country eschewed the

would be ineligible for Interstate TRS Fund reimbursements after a set transition period.

¹⁰⁶ The FCC had previously only issued standards for the most basic text-based TRS and allowed the market to decide on standards for other types of TRS. As it turned out, most VRS providers used the H.323 device protocol. *Id.* at 5460, paras. 51-57. To its credit, in para. 57 the FCC also states its willingness to hear proposals on ensuring interoperability by other means than mandating protocols. The FCC has not yet taken or responded to comments on the FNPRM (*Editor’s Note*).

¹⁰⁷ Indeed, the VRS FNPRM specifically addressed the question of inviting “providers, consumer groups, and other interested parties to work together to jointly propose standards to the Commission.” *VRS Declaratory Ruling and FNPRM*, 21 F.C.C.R. at 5462, para. 56. As an example, the IEEE (Institute of Electrical and Electronics Engineers, Inc.) is a non-profit organization that works with the FCC in developing international telecommunications standards. *see* <http://www.ieee.org/web/standards/home/index.html>.

free market approach with a blanket requirement and instead designated a single carrier as the TRS provider with fair and reasonable rates based on public treasury compensation, that country could provide a slow, inefficient, and costly TRS system (like state-owned telecommunications companies) as a political measure, but would not resolve any of the extraterritorial concerns. Only if regulators participate in international standardization negotiations and understand the extraterritoriality of funding questions can a truly internationally-capable TRS system emerge in a functionally equivalent way.

Additionally, as standardization grows, foreign language TRS provision will increase and will exacerbate the concerns listed above. In July 2005, the FCC agreed to reimburse for ASL to Spanish VRS.¹⁰⁸ Since some forms of VRS still are IP based, it is presumed that reimbursable international TRS calling from the United States to Spanish-speaking nations could increase greatly. While VRS does not pose much risk of fraud because a CA will quickly notice when neither side knows ASL,¹⁰⁹ attempted fraud would still deprive users of CA time. Moreover, as other TRS regimes develop and international calling as a whole increases, the reimbursement and standardization questions gain importance. At present, these recommendations are preemptive in nature.

The use of IP formats and VRS as a means to prevent fraud could eventually mean that countries could collaborate to create a supra-national TRS regime with shared capabilities in a variety of languages. The European Union could be a candidate for a forum for such a supra-national system that would remove many standardization concerns in the international calling context. If its membership of a large number of industrialized states could agree on an internal protocol, it could easily become the predominant world standard. Indeed, the European Union "eAccessibility" movement has begun discussions and policy formation on providing accessibility to global communications networks.¹¹⁰ At this point, the efforts are in the discussion stages and consist mostly of encouragements for member states and

¹⁰⁸ See *In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Order on Reconsideration, 20 F.C.C.R. 13165 (2005).

¹⁰⁹ Assuming the CA has the authority to terminate the call at that point. See *supra* note 63 (discussing the effect of mandatory minimum standards on CA discretion over fraud). Nevertheless, the embarrassment of being caught with an image identifying oneself would likely limit the fraudulent use of VRS.

¹¹⁰ European Union, eInclusion and eAccessibility, http://europa.eu.int/information_society/policy/accessibility/index_en.htm (last visited Oct. 28, 2006).

equipment makers, but as it develops, the “eAccessibility” initiative could help provide for an international scheme.

European Union Directives would not be the most appropriate manner to institute a European-wide TRS system, because slight differences in national legislation and regulation could doom a single TRS market. The use of European Union regulations, which are directly binding, could provide a strong European TRS system. However, the European Union’s foray into telecommunications has been relatively recent with a focus on competition policy,¹¹¹ and given the deference traditionally afforded to National Regulatory Authorities to determine universal service obligations from ambiguous directive language it is doubtful the European Union would force a TRS system upon its members from scratch.¹¹²

The ITU has also begun discussions on “the Total Conversation concept for conversation in Real-time Text, Video and Voice as an accessible superset of video telephony, text telephony and voice telephony.”¹¹³ The ITU would be aided in this endeavor by the system recommendation immediately below.

Recommendation: National Regulatory Authorities should encourage and work with national diplomatic corps to speed the formulation of TRS technical standards as a baseline, while allowing additional protocols to be used on top of the single “interoperable protocol” in an international forum (preferably a private industry group related to the ITU and NRAs).

¹¹¹ See Council Directive 2002/2/EC of March 7, 2002, On a Common Regulatory Framework for Electronic Communications Networks and Services, 2002 O.J. (L 108) 33.

¹¹² See FCC OFFICE OF PLANS AND POLICY, OPP No. 36, , THE POTENTIAL RELEVANCE TO THE UNITED STATES OF THE EUROPEAN UNION’S NEWLY ADOPTED REGULATORY FRAMEWORK FOR TELECOMMUNICATIONS, 17 (2002) (discussing the interaction between NRAs and the EU for the related Framework Directive) *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-224213A2.pdf. The Universal Service Directive is even more ambiguous and lacks language giving the EU the ability to set definitions and/or overturn NRA contentions.

¹¹³ ITU, SG 16 Work on Accessibility, <http://www.itu.int/ITU-T/studygroups/com16/accessibility/achievements.html> (last visited Oct. 28, 2006).

III CONCLUSION

A free-market telecommunications system with a requirement for TRS provision and the use of a shared funding mechanism will provide the strongest domestic TRS regime, which can be supplemented by international standardization to overcome extraterritorial technological, legal, and regulatory concerns.

By utilizing a free-market approach where providers compete on service with a requirement for TRS provision and a shared funding mechanism, nations can ensure the best TRS systems for their citizens, but may face extraterritorial legal issues. Concerns of regulatory applicability and funding can be alleviated, however, with the use of international standardization that in the far future could lead to a supra-national TRS system. Specific recommendations include: 1) use of a registration system and specialized technology for IP Relay; 2) creation and/or maintenance of a shared funding mechanism tied to TRS usage (or another competitive metric); 3) a requirement of TRS provision supplementing the shared funding mechanism; 4) removal of non-domestic revenues from fund contribution formulas; and 5) international negotiation in private industry bodies or the ITU for promulgation of TRS technology industry-wide standards.

All of these recommendations are interrelated, and are made in a relative vacuum. Of course, practical funding and political concerns could make the recommendations infeasible, at which point, politicians and regulators would need to consider the extraterritorial effects of their choices regarding requirements, funding, and standardization of TRS systems. After all, "accessing communication services is vital to the ability of the individuals with disabilities to participate fully in society."¹¹⁴

¹¹⁴ Congratulatory letter from Kevin J. Martin, Chairman, FCC, on the ADA Anniversary, <http://www.fcc.gov/cgb/dro/martinadaletter.html> (last visited Oct. 28, 2006).