Before the
Federal Communications Commission
Washington D.C. 20554

In the Matter of	)	
	)	
2002 Biennial Review of FCC	)	
Telecommunications Regulations	)	CG Docket 02-311
	)	

Comments of the Rehabilitation Engineering Center on Telecommunications Access of the Trace Center, University of Wisconsin and Gallaudet University

The Rehabilitation Engineering Research Center on Telecommunications Access (RERC) submits these comments in response to the 2002 Biennial Review of FCC Telecommunications Regulations.

The RERC is a joint project of Gallaudet University and the Trace Center of the University of Wisconsin, Madison. The primary mission of the RERC is to find ways to make standard systems directly usable by people with all types and degrees of disability, and to work with industry and government to put access strategies into place. The RERC has been involved in the research and dissemination of information telecommunications accessibility since 1996. RERC staff are active participants in numerous industry groups working on guidelines and standards for accessible telecommunications. The principal investigators of the RERC participate in the Technological Advisory Council of the FCC (Vanderheiden) as well as the Commission's Consumer/Disability Telecommunications Advisory Committee (Harkins). The RERC project is funded by the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education. (The opinions stated herein are those of the commenters and not those of the US Dept of Education.)

In this Biennial Review, the Commission has opened all of the telecommunications access regulations for review, to determine whether they are no longer necessary to the public interest, in light of technological and market changes.

The FCC's regulations on accessibility exist because Congress has repeatedly directed the Commission to oversee legislation aimed at removing barriers to telecommunications. These barriers occur when market forces are insufficient to provide adequate access to mainstream telecommunication technologies that are widely used in U.S. society. Regarding those rules covered by the biennial review, unfavorable market conditions persist for people with disabilities, and the rules are necessary to the public interest.

The Commission's rules on telecommunications relay services (Part 64, Subpart F) are mandated by the Americans with Disabilities Act. These rules are critical because the need persists for a bridge between people who use the telephone for voice communication and those whose disabilities prevent them from being able to converse via speech and hearing on the voice telephone network. The opportunity for people with disabilities to contact many people directly via e-mail and text messaging has increased over the past decade, but the fundamental function of making phone calls to millions of people and organizations, including emergency service providers and employers, is still very much a necessity of modern life. The timeliness of telephone communication, the ubiquity of telephones, and the role of the telephone in times of emergency have not been replaced by Internet-based and wireless text technologies. The overwhelming need for telephone access prompted the Commission, approximately two years ago, to conduct a much improved overhaul of its relay service rules, to enable relay users to benefit from

new technologies such as video relay and speech-to-speech relay. And within the past few months, these rules were updated again, to exploit Internet technologies for the improvement of telephone access via an Internet form of relay service.

Similarly, the need persists for rules that enable people who use TTYs to make phone calls over wireless services with their TTYs (Part 20). The FCC rules requiring carriers to make their systems accessible via TTY were just recently implemented in carriers' wireless networks, and handsets that will support TTY communication are only just beginning to appear in retail outlets. These rules, which originated in the FCC's E911 proceeding, recognize that emergency numbers such as 9-1-1 are accessible only by phone, not by wireless or Internet messaging services. Moreover, coverage of wireless telephone networks is much greater that those of the pager networks that many TTY users currently subscribe to. Insofar as market forces have not provided a means for emergency calling via these or other alternative technologies, the regulations covering these telecommunications services remain necessary in the public interest.

Requirements for hearing aid compatibility and volume control (Part 68 – Connection of Terminal Equipment to the Telephone Network) serve a wide variety of people with hearing loss. Inductive coupling is particularly needed by people with severe hearing loss, who are unable to use acoustic coupling at the high levels of gain required for them to hear over the telephone. People with less severe loss are able to have full access to the telephones only because of the mandate for volume control, a mandate which began less than two years ago. Both of these requirements have deep impact on the employment and safety of people who are hard of hearing. The rationale for the these rules, which implement the Hearing Aid Compatibility Act (HAC), is as strong as ever before.

The HAC Act originally exempted wireless telephones from its mandate that all telephones be hearing aid compatible. As a result, the problem of RF and electro-magnetic interference in new digital wireless and cordless phones has caused a regression in the effectiveness of this legislation, originally designed to ensure ubiquitous access to the telephone by individuals who are hard of hearing. As the use of these wireless devices has mushroomed, a shrinking proportion of phones in society have remained accessible to people who need inductive coupling with their hearing aids in order to use the telephone. Rules on this issue are needed now to address this inequity. Without directives from the FCC, industry has shown little progress in offering new solutions and has offered only wired accessories in place of built-in access. The FCC now has an open proceeding in which it is considering lifting the HAC exemption for digital wireless telephones. It is noteworthy that since the initiation of both this proceeding and the Commission's acknowledgement of the problem of lack of access to digital wireless telephones in its Part 22 proceeding, we are observing the beginning of new work by industry to evaluate telephone products for their effectiveness in coupling with hearing aids. We submit that rules are indeed necessary to the public interest.

Rules implementing the accessibility requirements of Section 255 (Part 6 – Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities) are by no means negated by marketplace forces.

In fact, marketplace forces in telecommunications are causing new problems that the rules do not explicitly address. For example, some IP telephony has been shown to create problems in TTY transmission similar to those noted for digital wireless systems. Indeed, we believe that rules covering Section 255 need to be altered to make clear that

all telecommunication services, regardless of underlying packetization and transmission protocol, should be accessible by people with disabilities.

The rules under Part 7, implementing requirements for access to voicemail and interactive menu services and equipment by people with disabilities, have resulted in little progress in terms of products on the market. However, the process of exploring solutions has been facilitated to some extent by the fact that the FCC has reminded industry of its obligations under this rule. This reminder has begun to bring companies to the table in an industry and consumer forum, the IVR Forum, hosted by the Alliance for Telecommunication Industry Solutions. IVR systems persist as telecommunication barriers to people who are deaf, hard of hearing, and those with manual dexterity or coordination disabilities. Rules to require the accessibility of these systems are very much in the public interest.

In summary, the effect of removing or weakening any of the rules requiring telecommunications access would be a serious setback to many people with disabilities. Not only have market factors failed to solve the access problems addressed by these mandates; these rules and the legislative mandates which they implement are the direct response to a marketplace that has consistently failed to address telecommunications accessibility needs. The telecommunications rules discussed above have created mandates that have given millions of Americans with disabilities the opportunity to live independent and productive lives. The rules remain in the public interest and should not be weakened or repealed.

Respectfully submitted,

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