February 4, 2002

Thomas J. Sugrue
Bureau Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: CC Docket No. 94-102

Dear Mr. Sugrue:

The purpose of this letter is to notify the Federal Communications Commission of problems discovered during field-testing performed by the Alliance for Telecommunications Industry Solutions' (ATIS) sponsored TTY Technical Standards Implementation (TTSI) Incubator. The problem occurs when a TTY call is terminated at certain Public Safety Answering Points (PSAP), whereby the character error rate, at times, is greater than one percent (1%). As detailed below, the magnitude of the problem is unknown. Nonetheless, the industry participants involved in the testing effort feel the problem is serious enough to impact the June 2002 deadline for digital wireless service provider capability to transmit 9-1-1 calls made with TTY devices.

The TTSI Incubator was established to provide a technical information exchange forum for TTY testing. The TTSI Incubator has developed a test methodology and communication methodology that provides for the interoperability testing of multiple manufacturer or vendor TTY devices through a single process. The test results, in turn, permit the industry participants to identify and address critical technical and operational issues relevant to the implementation of existing standards and allow TTY solution developers to focus on those same issues.

The testing is based on compliance with TIA/EIA 840 specifications (Minimum Performance Standards for Text Telephone Signal Detector and Text Telephone Signal Regenerator). Testing in mobile-to-mobile and mobile-to-landline connections began in September 2001. To date, these tests have all met an acceptable Total Character Error Rate (TCER) using off the shelf TTY landline equipment. Subsequent testing with PSAPs in December revealed problems...
with certain PSAP vendors’ equipment. Further information regarding the TTSI Incubator and
the testing may be found at: www.atis.org/atis/aitsinfo/atishub.htm.

In many cases, the TTY testing to a PSAP has resulted in a TCER under one percent (1%).
However, a TCER of greater than twenty-five percent (25%) at the PSAP occurred during a
service provider’s First Office Application (FOA) testing. An error of this magnitude renders
the TTY message unintelligible at the PSAP. There are at least 36 different vendors of PSAP
equipment (includes TTY equipment, soft TTY equipment and PSAP software that impacts the
TCER) that the TTSI Incubator participants are aware of, deployed in the public network and
that equipment may not be built in compliance with TIA/EIA 825 (Frequency shift keyed modem
for use on the Public Switched Telephone Network).

The TTSI Incubator is taking steps to address this PSAP issue. First, the National Emergency
Numbering Association (NENA) has been contacted and brought into the process to arrange
testing with the other equipment vendors not already involved in the testing process. ATIS also
plans to send a letter to the National Association of Regulatory Utility Commissioners (NARUC)
to notify state regulatory bodies, having authority over the PSAPs, of the situation. Second, ATIS
is working on the possibility of making available specifications and a test script for PSAP
equipment vendors to determine compliance. Third, the TTSI Incubator will continue to test
with PSAPs.

ATIS, the TTSI Incubator and their members remain committed to providing emergency services
access to TTY users with digital mobile phones. Yet, for the sake of the consumers, we must
ensure that the entire process is effective prior to implementation. While the magnitude of the
problem identified with some PSAP TTY equipment vendors is unknown, steps are being taken,
and the industry will continue to work towards the June 2002 deadline. The impact to the June
2002 mandate is unknown and will be better understood as progress is monitored over the next
few months.

We will keep the Commission apprised of our efforts and new developments, and we welcome
any assistance the Commission can offer. Should you have any questions, you may contact me
at 202-434-8847 or James Turner, ATIS Technical Coordinator, at 630-972-1454 or via
electronic mail at jturner@atis.org. ATIS and the TTSI members would welcome the opportunity
to further discuss this and other TTY issues with the appropriate Commission staff and, as such, I will be contacting your office to inquire about a meeting.

Sincerely,

Megan L. Campbell
General Counsel

cc: Ms. Mindy Littell, Attorney Advisor, Policy Division, WTB, TTY Forum Representative (mlittell@fcc.gov)
Pamela Gregory, Director, Disabilities Rights Office, CIB (pgregory@fcc.gov)
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