Standards Committee T1

Carrier Liaison Committee

Telecommunications
Industry Forum

Ordering and Billing
Forum

Network Interconnection
Interoperability Forum

Industry Numbering
Committee

Protection Engineers
Group

Standards Committee O5

Network Reliability
Steering Committee

Internetwork
Interoperability Test
Coordination Committee

Telecommunications
Fraud Prevention
Committee

Generic Requirements
Users Group

International Forum on
ANSI-41 Standards
Technology

Interactive Voice
Response Forum

TTY Forum

Administrative Council for
Terminal Attachments

IMSI Oversight Council

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
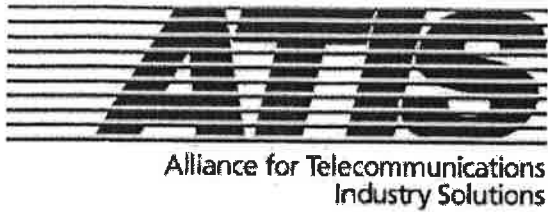developers to focus on those same issues.

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

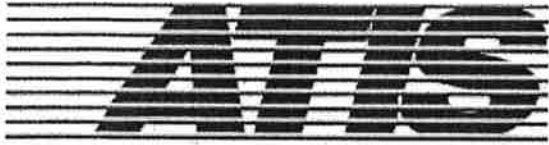**Alliance for Telecommunications Industry Solutions**

with certain PSAP vendors' equipment. Further information regarding the TTSI Incubator and the testing may be found at: www.atis.org/atis/aitsinfo/atisincubator.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

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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)
        Kris Monteith, Chief, Policy Division, WTB (kmonteit@fcc.gov)
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        Beth Wilson, Executive Director, SHHH (bwilson@shhh.org)
        Ed Hall, Vice President – Technology Development, ATIS TTY Forum Chair
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