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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Marlene H. Dortch, Secretary  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW, Room TW-A325  
Washington, DC 20554

Re: TTY Forum's Aggregate Report of Carriers  
for 2<sup>nd</sup> Quarter 2002, CC Docket No. 94-102

Dear Ms. Dortch:

Enclosed are an original and four copies of the TTY Forum 22 Meeting Summary. Appendix L contains an aggregate report of wireless service providers, handset and infrastructure manufacturers for 2<sup>nd</sup> Quarter 2002 filed on behalf of ATIS' sponsored TTY Forum and in response to the Commission's Fourth Report and Order in the above-captioned case. Please date-stamp and return the enclosed extra copy of this filing to our messenger.

Please contact me at 202/434-8830 if you have any questions or comments.

Sincerely,

Toni E. Haddix  
Staff Attorney

Enclosures

cc: Barry Ohlson, Chief, Policy Division, WTB  
Pamela Gregory, Director, Disabilities Rights Office, CGB  
Mindy Littell, Attorney Advisor, Policy Division, WTB

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# **TTY Forum – 22**

## **Meeting Summary Report**

**June 4, 2002**  
**ATIS Conference Center**  
**Washington, DC**



## Table of Contents

|  |    |
|--|----|
| AGENDA.....  | 4  |
| MEETING SUMMARY.....                                       | 5  |
| 1. Call to Order, Introduction and Attendance Roster ..... | 5  |
| 2. Call for and Numbering of Contributions.....            | 5  |
| 3. Review and Approve Agenda.....                          | 5  |
| 4. TTY Forum #21 Summary.....                              | 5  |
| 5. TTY Liaison Reports .....                               | 5  |
| 6. Review TTY Forum #21 Agreements and Action Items.....   | 7  |
| 7. Technical Activities .....                              | 7  |
| 7a. Review of draft contribution to TR30.1 .....           | 7  |
| 7b. TTSI Report .....                                      | 7  |
| 8. Industry Implementation Status Reports.....             | 8  |
| 9. Consensus Statement for the FCC .....                   | 10 |
| 10. Next Meeting .....                                     | 11 |
| 11. Adjournment .....                                      | 11 |
| Meeting Roster.....  | 12 |
| APPENDIX A.....  | 14 |
| APPENDIX B.....  | 20 |
| APPENDIX C.....  | 21 |
| APPENDIX D.....  | 22 |
| APPENDIX E.....  | 24 |
| APPENDIX F.....  | 36 |
| APPENDIX G.....  | 37 |
| APPENDIX H.....  | 41 |
| APPENDIX I.....  | 42 |
| APPENDIX J.....  | 47 |
| APPENDIX K.....  | 49 |
| APPENDIX L (IMPLEMENTATION STATUS REPORTS).....            | 53 |



## TTY/TDD Forum – 22

June 4, 2002

ATIS Conference Center  
1200 G Street, NW, Suite 500  
Washington, DC

### Agenda

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Chaired by Steve Coston, Sony Ericsson

1. Call to Order, Introductions and Attendance Roster
2. Call for and Numbering of Contributions  
(All Contributions will be numbered as follows: TTY22/02.06.04.XX)
3. Review & Approve Agenda
4. TTY Forum #21 Summary
5. TTY Correspondence and Liaison Reports: *FCC; CTIA; NAD; TDI; NENA; ATIS*
6. Review TTY Forum #21 Agreements and Action Items
7. Technical Activities
  - a. TTSI Report
  - b. Review draft contribution to TR30.1: Proposed Change to TIA/EIA 825
8. Industry Implementation Status Reports:  
**Importance Notice to all stakeholders:** *Given that this is the final TTY Forum before the implementation date of June 30, 2002, please be prepared to announce, explain and or discuss, your company's/organizations positions, level of readiness and or options for meeting the deadline.*
9. *Consensus Statement for the FCC:* An effort will be undertaken at this TTY Forum to agree, in principle, to a common message that can be sent to the FCC and industry as a whole that reflects the status / level of readiness: The following PROPOSED text can be used to initiate discussions.  
  
*Following five years of dedicated technical research, design development and functional testing the stakeholders represented by the TTY Forum are pleased to announce....*
10. Next Meeting
  - Conference Call to approve message to the FCC
  - Tuesday, September 17, 2002
11. Adjournment



## Meeting Summary

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### 1. Call to Order, Introduction and Attendance Roster

Steve Coston, Sony Ericsson, Acting Chair, called the meeting to order at 9:05 a.m. He thanked all the participants in attendance for their participation, and explained that Ed Hall, Chair, would be unable to attend today's meeting. All participants took the opportunity to introduce themselves.

### 2. Call for and Numbering of Contributions

Mr. Coston introduced all contributions, and asked for any additional contributions. All contributions provided to the Secretariat electronically are available for download on the TTY Forum web site at <http://www.atis.org/atis/tty/documents>, or by sending a request to Megan Hayes ([mhayes@atis.org](mailto:mhayes@atis.org)). Contributions were submitted and numbered as follows:

| Number            | Title                                 |
|-------------------|---------------------------------------|
| TTY22/02.06.04.01 | Agenda                                |
| TTY22/02.06.04.02 | Roster                                |
| TTY22/02.06.04.03 | TTY 21 Meeting Summary                |
| TTY22/02.06.04.04 | TTY 21 Agreements and Action Items    |
| TTY22/02.06.04.05 | TTSI Report to TTY Forum #22          |
| TTY22/02.06.04.06 | TR-30.1 Contribution                  |
| TTY22/02.06.04.07 | Ericsson Infrastructure Status Report |

### 3. Review and Approve Agenda

The agenda was distributed and one change was made moving the Review of the draft Contribution to TR30.1 prior to the TTSI report. The agenda was approved as modified.

### 4. TTY Forum #21 Summary

Mr. Coston asked if there were any suggested modifications to the TTY Forum #21 Meeting Summary. There were none and the document was accepted as final.

### 5. TTY Liaison Reports

#### **NAD (National Association of the Deaf)**

David Nelson expressed concern that small carriers were planning to file for waivers with the FCC to extend the June 30, 2002 deadline. He also explained that deaf individuals purchasing cell phones have informed NAD that some salespeople had no knowledge of TTY capabilities. In addition, some deaf consumers had informed NAD that a number publicized as a TTY number was not a TTY number, thus lengthening the process for

receiving necessary information. Mr. Nelson stressed the importance of having a trained sales force and the need for TTY customer service numbers to be widely available and publicized. Mr. Coston echoed these statements, noting the importance of consumer education and awareness.

### **CTIA (Cellular Telecommunications and Internet Association)**

Andrea Williams asked about the current status of the concerns brought to the FCC regarding Public Service Answering Points (PSAPs) (Note: This is regarding a letter sent from the TTY Technical Standards Implementation Incubator (TTSI) to the FCC in February 2002). Mr. Coston asked if the FCC would take the time to address this during their liaison report. Jim Schlichting responded that he would address this question.

### **FCC (Federal Communications Commission)**

Mindy Littell introduced the FCC participants in attendance today, and expressed her interest in hearing the upcoming industry status reports. She noted that roughly 30 companies have filed requests for a waiver of the June 30, 2002, date, and she explained that these requests are predominately for limited waivers of three to six months in a specific location. In some cases she noted that the waiver is being requested by small TDMA carriers looking to switch to a new air interface in light of larger carriers switch to GSM.

Jim Schlichting, FCC, noted the importance of the June 30, 2002 deadline, and reported that the FCC has received a mostly positive response from the industry meeting this deadline. He reported to the TTY Forum that the FCC had been approached regarding the high error rates resulting from tests involving PSAPs, he noted that it was suggested that the FCC issue a public notice regarding this matter. Mr. Schlichting explained that the FCC is considering this matter and no final decision has been made regarding any action, but that some form of public notice or consumer notice would most likely be appropriate. He noted that, ideally, any bulletin from the FCC would be issued before July 1, 2002. Mr. Schlichting explained that, for the long term, this problem should be addressed and not allowed to progress any longer than necessary. The FCC is working with this Forum and the industry to alleviate the problem. He expressed his appreciation to the TTY Forum and the TTSI for all of their efforts toward the resolution of this issue.

Ms. Williams asked if coordination efforts had begun regarding the dissemination of information to consumers regarding TTY accessibility. Mr. Schlichting noted that work had begun on a public bulletin.

Mr. Nelson expressed his concerns about the ability for consumers to assess the situation within the PSAPs. Mr. Schlichting agreed with this concern and noted the importance of this issue. He informed the Forum that the FCC had no jurisdictional authority over PSAPs, and they can only approach the issue via consumer information and education. Through these methods, he said, the awareness level would be raised at the PSAPs. He stressed the importance of having public safety representatives aware of the problems, and gaining their assistance to correct the problem. Judy Harkins, Gallaudet University, noted the difficulty of advocacy of this issue on the local level, and suggested that

perhaps the FCC could query the Department of Justice on this matter, as they have jurisdiction over PSAPs.

Mr. Schlichting noted that updated testing information would be important to the FCC, and the FCC would consider any updates from the TTY Forum or the TTSI for inclusion in any future public notice. Several participants noted the importance of balancing the flow of immediate, less detailed, information, and the long-term dissemination of detailed information. Mr. Nelson commented that many in the deaf and hard-of-hearing community check their association web sites, rather than sites like the FCC, when searching for information. It was noted that it would be important for the industry to send the same information to consumers, and it was recommended that web site links to the FCC web page be widely used to disseminate information. Cary Barbin, Gallaudet University, suggested that the FCC take the individual language use abilities of deaf consumers while drafting any bulletin targeted to the deaf community.

#### **6. Review TTY Forum #21 Agreements and Action Items**

Mr. Coston reviewed all agreements and action items from the TTY Forum #21. He detailed where these items would be reviewed in the agenda. Megan Hayes, ATIS, reported that a press release had been distributed regarding the use of the TTY symbol on the packaging of TTY compatible equipment. There were no further comments submitted on these items at this point.

#### **7. Technical Activities**

##### **7a. Review of draft contribution to TR30.1**

Dick Brandt, Gallaudet University, presented Contribution TTY22/02.06.04.06, a draft contribution to TIA's TR30.1 regarding problems discovered in ITU-T Recommendation V.18, which were also included in ANSI TIA/EIA-825. The document defines a problem caused in interworking between these implementations and existing TTYs over digital wireless connections. The contribution proposes a change to the text to the ITU-T, and opening a project to remove the corresponding text from ANSI TIA/EIS-825. Some suggestions were made to strengthen the statements in the recommended text, and Mr. Brandt indicated he would make the appropriate changes before presenting the contribution to TR30.1.

*Action Item: Dick Brandt will edit Contribution TTY22/02.06.04.06 and send it to Megan Hayes for contribution to TR30.1*

*Agreement Reached: Contribution TTY22/02.06.04.06 will be sent, as edited by Dick Brandt, to TR30.1.*

##### **7b. TTSI Report**

Jim Turner, ATIS, presented Contribution TTY22/02.06.04.05, the TTSI report to TTY Forum #22. He noted that the TTSI has been a precedent-setting collaboration of industry players gathering to solve a specific issue. His report addressed several areas of testing in TTSI, some issues are still in progress and some issues have been closed.



Blaise Scinto, FCC, asked if any of the tests the TTSI used could be used by an end-user as a diagnostic tool to identify problems with a PSAP. Mr. Turner noted that there were test procedures trialed by users, and full reports were produced and returned to the users. He noted that the consumer would not find the diagnostics as useful for diagnosing a problem with a PSAP since the focus of the test is to solve potential consumer problems with the TTY device, not to diagnose problems originating from the PSAP.

#### **8. Industry Implementation Status Reports**

Mr. Coston noted that Ericsson submitted a written report, and that verbal reports would be accepted from other participants. He noted written submissions to the FCC through the TTY Forum should be sent to Megan Hayes, TTY Forum Secretariat, by July 10, 2002. 5 p.m. Eastern Time. Reports should be e-mailed to [mhayes@atis.org](mailto:mhayes@atis.org) in Microsoft Word Format.

##### **Nextel**

Bob Montgomery reported that Nextel would be ready by June 30, 2002. Currently, there are 19 out of 22 markets complete for infrastructure and the rest to be complete in the next week. He noted that Nextel had five TTY handset models ready for sale.

##### **Cingular**

Ken Evans reported that Cingular scheduled deployment for the end of June 2002. He noted that their network switches could now be made without the loss of any circuit switch data. He reported that documented testing was occurring at each switch and 65% were currently complete with June 28, 2002 as the target date for the completed testing. He thanked the vendors for all of their work with the carriers on this issue.

Mr. Evans also reported on a trial that was conducted with nine TTY users from Gallaudet University, and that several consumer issues had already been discovered. He noted that many more discoveries would probably be made after complete roll-out. He thanked Gallaudet University for their assistance in the testing process.

Mr. Evans informed the TTY Forum that Cingular had begun the process of training their sales staff and updating their web sites to help educate employees and consumers. He added his concern about the status of the PSAPs, and noted that Cingular is open to any suggestions as to how the industry can help mitigate the problem.

##### **VoiceStream**

Roy Richmond noted that VoiceStream uses hardware from three vendors, and despite some issues encountered through one vendor, roll-out is continuing and expected to be complete by June 21, 2002. He noted that VoiceStream used the Gallaudet University scoring program for their tests, and that VoiceStream is working on a test kit to be deployed in different markets. He explained that two different handset options are being evaluated.

### **AT&T Wireless (AWS)**

Lori Buerger reported that AWS utilizes two air interfaces: TDMA (the company's existing national network) and GSM (the company's new network, currently being developed), with multiple infrastructure vendors for each air interface. She noted that multiple handsets are available for the TDMA interface, and that a GSM handset will be available by June 30, 2002. She noted that deployment of TTY compatibility on the TDMA infrastructure would be complete, for all vendors, for the June 30, 2002 date. The GSM infrastructure was encountering a finite delay with a single infrastructure vendor (of three total), and AT&T would be filing with the FCC for a brief extension for that one infrastructure vendor's equipment, on the single air interface. She noted that this issue should not impact customers because the complete timely compliance of TTY deployment in the company's national TDMA network TDMA will be able to fully meet the needs of customers seeking TTY-digital compatibility.

### **Sprint PCS**

Scott Freiermuth reported that Sprint PCS works with a CDMA based network, and he noted that the infrastructure has been up and functional since May 15, 2002. He reported that Sprint expected to launch nine, if not more, handsets, with some already available on the market. There had been some handset bugs, but at this point they had all been resolved. He noted that internal support and training was in place and ready for deployment, and he added his concern about the PSAP issue.

Mr. Freiermuth reported that barring any unforeseen obstacles, Sprint PCS was ready to deploy.

### **Ultratec**

Ron Schultz reported that Ultratec was manufacturing a Compact C model to be compatible with digital technology. Ultratec has eliminated the Baudot interrupt feature, incorporated the new logo into their packaging, and included new consumer instructions with their products. Ultratec is communicating with their sales force to instruct them on digital wireless compatibility, and have updated their web site to include a list of TTY compatible handsets. When asked if it was possible to provide the Forum with the information from the web site, Mr. Schultz noted that it was on the public Ultratec web site (<http://www.ultratec.com>). He noted that Ultratec would also be making an upgrade available to the existing Compact C unit.

### **Ericsson**

Amy Johnson presented Contribution TTY22/02.06.04.07, Ericsson infrastructure status report. Ms. Johnson reported that Ericsson would be ready for deployment on all air interfaces (CDMA, TDMA and GSM) by the June 30, 2002 date.

### **Motorola**

Al Lucas reported that Motorola is on schedule for deployment on June 30, 2002. He reported that Motorola has roughly nine handset models available for deployment over three air interfaces, with several more on the horizon.

Mr. Lucas also noted that this would be his last time attending the TTY Forum, as he would be retiring on June 28, 2002. He expressed his pleasure at participating in the TTY Forum, and he noted that it was an outstanding example of the industry working together. The participants in the TTY Forum gave Mr. Lucas a warm round of applause.

### **Sony Ericsson**

Matt Kaltenbach reported that Sony Ericsson has handsets available for three air interfaces. TDMA handsets will be released prior to June 30, 2002, and GSM handsets are currently available through the Sony Ericsson Special Needs Center. Extensive conformance testing had occurred with the CDMA handsets, and the issues have been communicated to Qualcomm for patch code evaluation and parameterization.

### **Nokia**

Chris Wallace reported that Nokia has produced handsets for TDMA, CDMA, GSM and multi-mode phones, and although there have been some issues with the S10 model, Nokia is committed to the completion date sighted by the carriers.

## **9. Consensus Statement for the FCC**

The participants of the TTY Forum discussed the reasons for creating this document, and the best way of producing it. It was agreed that a consensus statement to the FCC would be important to demonstrate all that the TTY Forum had accomplished. It was determined that the Secretariat would draft the document based on some main points supplied by the Forum, and the document would then be reviewed by the forum via e-mail prior to being sent to the FCC.

S. Coston explained to the Forum that based upon the recent status reports given the Wireless Industry considers the Development Phase of TTY Compatibility to be Closed. Products are now in the Production Phase of the Plan and are moving into early launches through efforts of both the Wireless Manufacturers and Carriers. Released products for the Production Phase will progress through its cycle encompassing stronger field use by consumers, evaluation and feedback mechanisms channeled through Customer Service Departments that ultimately influence future designs of products. Effective support and handling of these feed-back mechanisms while in the Production Phase are typically referred to as Maintenance updates. It was agreed by all Wireless Industry that Digital Wireless TTY Compatibility has now moved into a Production Release and Maintenance Phase for all future changes.

***Agreement Reached: The TTY Forum will send a consensus statement to the FCC that reflects the readiness of the industry for TTY deployment over the digital wireless network by the June 30, 2002 deadline.***

***Action Item: The Secretariat will draft a consensus statement for the FCC and distribute it to the members of the TTY Forum by June 18, 2002 for their consideration. The participants will submit their comments by June 25, 2002, and the Secretariat will forward the final document to the FCC.***

## **10. Next Meeting**

The next meeting of the TTY Forum was scheduled for Tuesday, September 17, 2002, in the ATIS Conference Center, Washington, D.C.

## **11. Adjournment**

Mr. Coston declared the meeting adjourned at 3:03 p.m.

**TTY – 22**  
**Meeting Roster**  
**June 4, 2002**  
**Washington, DC**

| <b>Name</b>      | <b>Company</b>            | <b>Phone</b>     | <b>Fax</b>   | <b>Email</b>                       |
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| Steven Coston    | SEMC                      | 919-472-7527     | 919-472-6105 | steve.coston@sonyericsson.com      |
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| Patrick Forster  | FCC                       | 202-418-7061     | 202-418-7247 | pforster@fcc.gov                   |
| Scott Freiermuth | Sprint PCS                | 913-315-8521     |              | sfreie02@sprintspectrum.com        |
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| Chris Wallace    | Nokia                     | 972-894-4947     | 972-894-5525 | chris.wallace@nokia.com            |
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| Andrea Williams  | CTIA                      | 202-736-3215     | 202-785-8203 | awilliams@ctia.org                 |

The following companies submitted their TTY Implementation Status Reports for the second quarter of 2002 through the TTY Forum, but did not attend TTY Forum #22.