WTSC June Meeting Minutes
June 9 and 10

Meeting Hosts: AT&T
Location: New York, New York

The WTSC wishes to thank AT&T for the excellent accommodations that were provided for this meeting. AT&T representatives ensured that we had all the facilities needed to ensure an efficient and effective meeting.

PLEASE NOTE - Correction from May meeting recap:
In the May meeting minutes, reference to NPAC processing stability was misstated. The statement that read "NPAC stability proved to be an issue" in regard to ICT accomplishments, ***should have more clearly stated*** that a connectivity (circuit) problem was encountered between a SOA vendor and NPAC, and was beyond the control of either that vendor or NPAC. We thank NPAC representative Steve Adicks and Neustar associates for clarifying this and apologize for any concerns that this caused. Statistics clearly prove that the NPAC test environment has historically provided a high level of availability and support of ICT, to the credit of all who maintain this for our testing purposes. The WTSC strives to provide accurate and informative account of all meetings and appreciates being informed when misstatements such as these occur. NPAC has detailed statistics of operational performance of the test environment if details are needed.

Joint meeting – WNPO / WTSC:
A brief joint session was held with WNPO; with a report on WTSC activities scheduled for this session and confirm the completion and acceptance of the WICIS 2.0 ICP Test Scripts. It also was requested that the Glossary of Acronyms be reviewed and updated as necessary to provide understanding to new members. WTSC will review and clarify the Glossary as needed.

WTSC Session
Role call was taken.

Attendees:
Janet Bishop-AT&T Wireless Services
Susan Sill-AT&T Wireless Services
Joe Charles-Cingular
Binata Bose-Nextel Communications
Mike Van Boven-Nextel Communications
John Weakley-QWEST Wireless
Dianna Bordenaro-Sprint LTD
David Alexander-Sprint PCS
Kathy McGinn-Rural Cellular
Jason Kempson-Telecordia
Gary Williams-T-Mobile
Darren Paffenroth-TSI
Gary Eads-US Cellular
Tracey Patterson-US Cellular
Julie Groenen-Verizon Wireless

Main topics of discussion of the June meeting included:
- ➢ Definitions for the different categories of testing were finalized
- ➢ Inter-Carrier test schedule was updated and posted to the NPAC website
- ➢ The WTSC agreed that the large lengthy test plan would be replaced with an updated condensed version.
- ➢ Lessons learned from the USC/Verizon Wireless/AWS testing were reviewed. Circuit / connectivity problems prevented execution of test plans. Re-testing between these carriers will be scheduled.
- ➢ "Black-out" testing dates for the holiday retail season were discussed. These dates will be noted in the Inter-Carrier Testing Schedule
- ➢ Network testing schedule format and content were reviewed and updated.
- ➢ Sprint PCS submitted a contribution regarding a contingency plan to be used for managing the influx of carriers anticipated participating in Industry testing at the last minute prior to 11/24/03. The concern is that additional carriers will desire to begin ICTing late this fall, and strain testing resources and capabilities of carriers currently conducting testing. Carriers will take this issue on internally within their companies'.
- ➢ WTSC expressed concern about the amount of Phase I and Phase II 911 testing. It has been recommended that further testing is needed to encompass all phases of the 911 rollout.
- ➢ Round Robin testing was discussed and is being planned for the fall.
- ➢ Performance testing (utilizing a volume of transactions to explore processing capability) discussions were again held, with further activity planned.

Discussion Items and Actions Taken:

- ➢ Question asked by Nextel-What does it mean when carriers say they are including their back office systems when testing?
  Nextel felt that there were different expectations with each carrier involved in testing. Cingular stated that the definition of "back office" means including Operational Support Systems (OSS) and eventually Point of Sale (POS) systems. Verizon Wireless stated that they would test with any carrier that does not include their back office systems. Carriers should state if they are using their back office or production like test environment when entering into test negotiations.

- ➢ The group approved version 2.0 of section 4.0 the ICP ICT scripts. This document will be updated and posted to the website as the current industry test plan.
  The previous version will be archived.
  Documents to be included/excluded in the new 2.0 version from the long 1.0 version are as follows:
  - ✓ *Appendix A-Inter carrier test guidelines*. Group decided that these guidelines should be available as separate file to all carriers. Topologies have not been used at all.
  - ✓ *Appendix B-Test case matrix*. Keep as separate document.
  - ✓ *Appendix C- Multiple test scenarios*. Do not keep.
  - ✓ *Appendix D- Call flow diagrams*. This would be included in a separate file to be used as a reference to help clarify test scenarios. These diagrams do not include SMS testing.
  - ✓ *Appendix E-Entrance criteria*. This is already included in the condensed version of the test plan. Optional items will be listed and noted.
  - ✓ *Appendix F- Test Network Information*. Carriers stated they do not use this appendix.

- ✓ *Appendix G-Exit Criteria*. No one has ever used this appendix yet. Edit the checklist for optional items.
- ✓ *Appendix H-Test criteria and results*. This document will be replaced with the new document developed to report results.
- ✓ *Appendix I-Related Documents.* Document has never been updated. Will not be included.
- ✓ *Appendix J-Acronyms and Terms*. Document will be updated and included in the new version.
- ✓ Suggestion made about adding information about the NPAC and ATIS websites to documentation was noted and will be clarified in the documentation.
- ➢ Suggestion made about making a global lessons learned document that other carriers can view. Example of items to be included are; CNAM, LIDB and telemarketing.
  Janet Bishop offered to submit a document that can be used for the format of the global lessons learned.

- ➢ Lessons learned-review of ICP Inter Carrier tests since last meeting.
  - ✓ Verizon Wireless, Sprint PCS, Nextel, US Cellular
    The back office does add complexity when included in the ICP testing but is an essential ingredient in verification readiness.

    Carriers continue to schedule a "2-week window" when testing when including back office systems.

    SOA/ICP (only) testing can be accomplished in 1 week when not using back office systems.

    It is suggested that when problems are found, where possible, fixes are to be re-tested at a later time in the testing process rather than delaying test plans.

    Verizon Wireless suggested that each carrier test to see if they will be able to send a SUP 2 after a confirmation is received. They discovered that accepting a Sup 2 confirms the entire port even if other problems exist, and recommends using Sup 3 after confirmation. Further examination of this is warranted and may result in recommendation qualifying use of Sup 2.

    US Cellular concerned that they not been able to successfully execute a negotiated suite of end-to-end tests.

- ➢ Question raised: Can the vendors have a SWAT team available to test and install patches when problems are discovered during ICT? Problems discovered that couldn't be fixed in relatively short amount of time will impact the testing schedules. Vendors should discuss this and get back to their clients.

- ➢ ICP test schedules were updated.

- ➢ Network testing-AT&T Wireless will continue to do network, vertical services and 911 testing.

- ➢ AT&T Wireless and Verizon Wireless stated that they would be able to provide test numbers to carriers wishing to do network testing.

- 911 testing will be done one on one with carriers. 911 testing should be included in end-to-end ICT.

- It is recommended that carriers provide 4th quarter (2003) blackout dates for inclusion in ICT Schedules. The following carrier schedules are known:
  - Sprint PCS-no testing after 11/24
  - US Cellular- no testing after 11/1 (tentative)
  - T-Mobile-no testing after 11/24
  - AT&T Wireless-no testing after 11/24
  - Verizon Wireless-no testing after 11/24
  - Nextel – TBD
  - Rural Cellular-does not have a testing blackout
  - QWEST Wireless-will test right up until 11/24/03
  - Cingular-TBD

- Performance/Volume Testing discussion
  If conducted, this will be encompassing wireless-to-wireless porting. Additional intra-month discussions will be held and this subject will be addressed at the next WTSC meeting in July. Discussion points included:
  - Expectations, criteria and scope need to be further defined.
  - Metrics need to be well defined? How do we measure? -Transactions per second?
  - Production environment would be needed for this test or method of determining equivalence from test environment to production performance capability.
  - Suggest running the tests in non-peak hours.
  - A simulator would be needed to do this testing.
  - Testing would be done in one day.
  - Carriers were asked to take this information back to their companies and discuss among themselves.
  - An interim call is scheduled for 6/25 to further discuss this type of testing.

Tuesday, June 10

- Friendly User Trial Testing (utilizing end users to conduct ICT)
  - Verizon Wireless is asking to do this with each company
  - Timeframe would be mid-October for one week.
  - This could be incorporated with end to end testing
  - Production personnel would be used for this testing
  - Perhaps using 20 test numbers
  - Take from POS out to the NPAC
  - This would be a way to validate companies training programs
  - Look at this as an opportunity to validate business rules between carriers
  - Carriers asked to take this back and discuss with their companies.

Items for the July agenda:
1. Lessons learned from inter carrier testing
   - AWS and Rural Cellular

- Cingular and Verizon Wireless
2. Performance/Volume Testing planning
3. Review updated Round Robin testing schedule
4. Review redlined entrance and exit criteria documents.
5. Friendly User Trial Testing
6. Test schedule update
7. New co-chair position (replacement for Gary who regrettably must step down from the co-chair position)

July Meeting Logistics:

July 7 and 8 *WTSC* meeting will be hosted by SBC at their facilities at:
SBC
225 W. Randolph
Chicago, IL.