5.08.01 Wireless Number Portability Testing Subcommittee

Bellevue, WA – AT&T Wireless - HOST

Agenda for Meeting:
DAY 1
9:00 AM - 10:30 AM	Introductions, overview of WNP timeline and purpose of test team
10:45 AM - 12:00 PM	Different phases of testing
	-Internal, SOA/NPAC, and inter-carrier testing
1:00 PM - 2:00 PM	Differences in provider testing
	- Wireless, wireline, reseller
2:00 PM - 5:00 PM	Review WNP Industry test plan (Sections 1-3)

DAY 2
8:30 AM – 10 AM	Process of coordinating test times, MSAs, etc.
10 AM- 11 AM	Propose future meeting sites/dates
11 AM –12 PM	Provide list of 100 msa
1 PM – 3 PM	Review WNP Industry test plan (Sections 4)
3-4 PM	Open forum for general questions
4PM – 5PM	Action items, agenda for next meeting

Much of the following information is available on the npac website under the following presentations:
"WNP-Test-Team-Guidelines.ppt" and "WNP-Presentation050801.ppt"

- The wireless subcommittee on testing was created April 2001, and reports to WNPO, it's main purpose to coordinate inter-carrier testing
- Reporting structure breakdown
  FCC <= NANC <= LNPA <= WNPO <=WTSC
  Wireless number portability subcommittee is dissolved

- Who is invited, (wireless service providers, wireline, resellers, vendors (soa/lsms, service bureau, non-porting
- What the test committee will do?
  - Establish forum,
  - discuss test cases
  - coordinate test schedule (as possible)
  - publish testing SPOCs on website
  - report minutes and or problems to WNPO team
  - provide LNP information, support

- What the test committee will not do
  - Discuss service provider features
  - Provide testing resources
  - Determine service provider test markets, cases
  - Discuss soa/internal markets outside top 100
  - Create SLA form for providers
  - Test committee co-chairs will provide recommendations but have not authority to require testing.

- What is allowed methods and procedures for improving communication, efficiency
  - Suggestions to create new test cases outside the baseline document
  - Volunteers to host future meetings.
- What is not allowed
  - criticism among carriers

- sales opportunity for vendors,
- personality, logistics complaints
- any sp specific complaints

- Why are we here, coordination, communication, and allow sp to be involved in testing.

- **The ultimate goal for WTSC –**
  June 1, 2002 all SPs will be done with testing in top 100 MSAs.

- Timeline introduction (just a suggestion)
- Helpful documents to have
  - Industry test plan
  - WNP T&O Version 1.7 (Technical and Operations Document_
  - CTIA WICC Version 2.0, Posted on www.ctia.org
  - NANC Arch and Admin LNP Issue 2
  - Wireless to Wireline Integration report, 3rd report.
- Contact information
- **Wireless testing distribution majordomo@telcomse.com**
  - **'subscribe wireless testing'**
- Bridge: SLA?s, need to be agreed amongst the wireless carriers. For testing purposes you don't need an SLA, but you'll need for porting perspective. Bridge: there should be an expectation of what you want to achieve. The recommendation is that everyone makes their own SLA.
- Issue: is publishing numbers as portable within the LERG with regards to deployment date. In order to test you'll have to mark npa-nxx as portable to test. Or as a fake "test". You could turn up NPA-nxx in the LERG with an effective date and starting moving toward implementation date. Use a future date to implement. You might have a problem with mechanized flow through and your queries may fail. You may have to turn-up real NPA-NXX to test. You may need to leave test markets open. This is a WNP issue (tabled for James Grasser).
- We should make the recommendation to WNP, because it's difficult to use pseudo codes, for testing you actually should turn up the NPA-NXX, as marked as portable, and once you've turned up as portable and leave as portable. The downside is queries are made before wireless deployment. And there is a risk, numbers could be ported prior to launch. Billing ramifications take place.
- Issue: Is there a regional test teams-it's the only way to get down to that detail. (Ron)
  - Wireless usually focuses on national picture – so we will probably have national coordinators, not regional
- There should be a recommendation to develop a geographical matrix to look at testing amongst providers in markets. When a lot of people want to test, it's hard to test, you'll need to meet face to face with wireline you met at rate centers, discussed network topology, done on a network by network, region by region basis. And you had a separate meeting done at regional perspective. If this is the scope like wireline there will need to be a lot of work done to coordinate. You'll probably be doing a lot of work. (jerry hill of cingular)
- Jerry Hill Cingular: You could identify MSA, then go regional, then look at regular meeting with MSA. Not everyone tested . Geographic locations should not be larger than a region. You'd have a larger meeting, then break off into regional meetings. This might be too much for SPOC. Hierarchy would be that test coordinator would know the regional stuff, and be in charge of what's going on. We'll keep this meeting at the national level test coordinators will have to work on logistics.
- If you want to port wireless to wireline then you'll have to go regional. Fine testing of technology you'll have to go regional.

- Presentation again

SOA testing
- May 1, 2001 to September 30, 2001
- Neustar is the vendor for the wireless NPAC. It's the pooling there is a debate.
- Gustavo from Npac: There is a problem that not many wireless SP's are registering with NPAC for testnig. There needs to be registration from the sps to participate testing. If your not connected to NPAC you won't be able to test with other providers.
- Neustar needs to know if you're going to use service bureau, LTI (low-tech interface), or SOA lsms. Response is needed right away. Because phase I has been supported, there may be some LSMS's out there that have been certified already. Each provider will need to set up their test schedule with NPAC.
- Turn up testing deals with new service bureau, new soa implementations you'll need a SPID.
- Bridge: question on timeframe, npac testing completed by 9/30, tony hopkins of Neustar turn up testing needs to be completed by 4/2002.
- It is preferred to finish turn-up then go to intercarrier. There is a test plan on the npac website.

Presentation:
Internal Company Testing
- Should be completed by 9/30/2001
- There are guidelines on Section 1.0.1 of industry test plan.

Wireless/wireline porting.
- Wireless to wireline porting will default to "Long" timers.
- Differences to porting
  - Wireless= WPR FORM, WIRELINE= lsr form
  - Hours of op, you can port anytime, but you may or may not have times available. You need concurrence- even if timers are off. Testing will follow these guidelines.
  - Icc time- 24 hrs, 6 hours for wireless
  - Npac t1-t2 timer
There are hours of operations 7-7 cst and days of operations
  - Issue: Clarify timer issues and differentiate between hours and days.
  - Outside of the hours operations you can not activate, it will pickup up at leave off time upon opening.
- Resellers Porting, facility based provider is responsible, npac communication for its reseller
  - FB provider's SPID will be on the NPAC RECORD
  - Responsibility for ICC process is determined by each carrier.
  - Diagram, available in WNP, document
  - Issue: define fixed wireless technologies, as whether wireless or wireline

WNP Industry Test Plan
  - CTIA Number Advisory Working Group Intercarrier test Plan (Version 1.0)
    - Section 1 Scope
      - Vertical services (black box)
      - Lnp compliance
      - After porting business as usual
      - No Vendors mentioned in test plan.
  - Test scenarios
    - Provisioning 9 cases
    - Wireless-wireline 36 tests
    - 4.2 16 tests
    - 4.3 16 tests
    - enhanced services (4 tests)
Total 81 tests, description procedure results for each case
  - Issue (Bridge): What is everyone's view of sms in test environment. The reason, the method of performing sms in a porting environment has yet to be validated. (this is possibly a functionality

issue) The industry might have to regulate, but with this group, this should be carrier by carrier basis. This might have to go to WNPO? SMS is a vertical service, on the wireline. Or do you support sms in the roaming environment, something has to be determined. (reference 2.o document and IS-41.) It's an assumption that SMS fields are part of porting subscription record. Open issue. Are you going to populate this field?

We would like to socialize this issue with the WNPO meeting next week and bring into the subcommittee forum.
1) *testing issue*
2) *functionality issue*

- Issue: The document lacks pre-port ICP process
  SLA's need to be in place with service providers, there is no nitty gritty within the test plan.
- Issue: Writing a test case scenario with ICC? Do we want to expand 4.0.2? There is a recommendation to test the delay path and not take the happy path and have failure stress testing. When this documentation was written, there wasn't a specification but now there is so you should expand the test plan. (evolving). You'll have to run these test cases to validate things that need to be worked out. If you have some test cases supporting the ICC process you'll get rid a lot of ambiguity. You could also divide the tests according to interfaces (edi, corba, fax)
- Once concern not all interfaces have been defined, and you may have change management issues within the project plan. The issue should be with the agreement, of the interfaces agreed upon with the service providers, and not defining. This is CTIA version 2.12
- When you use LSRs, you could have multiple versions of LSRs, So, maybe you should have EDI interfaces within the WIRELINE to wireless test cases. You need to specify the situations when you use the EDI interface. What we're trying to avoid is using the wrong interface in a wireless to wireless port. The edi applies to wireline to wireless, and not use edi interface to wireless to wireless.   There should be a location within the test suites to specify the interfaces with the situations. Action item for this group? (come up with more test cases specifically to this groups product.)
- What is the process for writing and inserting test cases? Who owns the document (the WNPO) This is covered within the test plans. (co-chairs will submit draft process)
- There is a recommendation to nominate someone to write test cases. You'll have to put a sub-team together to possibly develop the test cases. This is a ad-hoc group. You should have focus groups to look at test cases. You'll need folks familiar with ICC process.

    - An important part is verifying the OSS within the company. Then you can head to the inter-carrier testing.

- Issue: Documenting what switches have been tested, and what company mfgs that switch. Most of the switch errors are the translation errors. You will need to look at the inter-operability test SS7 issues.   What are you able to disclose (interoperability, vendor problems, a lot of NDAs and legal aspects are involved here when you track errors according to mfg.)

- Issue: Can you test technology which is different in different areas?

Vertical Services: Jerry (cingular) The assumption is if you have vertical services not impacted by porting, then you don't need to test it. But if you it's included within the translation data to NPAC, maybe it should be included within the test scenarios. We need to identify vertical services.

Issue: Do we want to address vertical services as a committee?

Contention is that we should test these, because it involves GTT. Any vertical services GTT functionality should be included within the test scenarios. (SMS uses GTT functionality)

Vertical Services

First as a subcommittee we need to identify vertical services that will be impacted by GTT. This is a bigger issue than test cases. Right now only 5 vertical services are listed within the NPAC. This

document could be out of scope with regards to the new services that have come online that are associated with GTT translation.. Then you have to report to the WNPO that you want to change the document. Then you could start looking at vertical services.

Richard: In Houston LIDB, vertical service was tested but agreed by each carrier.
Ron: However there was a test case to choose from regarding vertical services, this document doesn't have test cases for vertical. So the idea would be. If this involves trunk screening issues and GTT transactions, then yes you should be dealing with vertical services.

Reseller Services
- There is a note about resellers and the addition of test cases. There needs to be reseller participation.

Publishing of SLA's amongst the service Providers
Maybe ask Jim Grasser on do we want to publish SLA's or is this proprietary?

5/09/01 Day TWO

- Pertaining to looking at older test plans you could go to common go to common carrier bureau, for www.fcc.gov, to look at Wireline report on testing.
  - Common Carrier Bureau
  - NANC
  - Working groups (lnpa)
  - Documents (Impact Regional Coverage)

Action Item: To validate this document. This has been marked as an action item to validate this document and see how we can adapt this to a wireless environment

Testing Logistics Planning:
- Test Coordination Matrix Overview (Draft)
  - We're not sure how detailed we could be on a test coordination matrix
    Issue: Is this to report to higher level, or is just a coordination matrix? Are we creating a report or a schedule? You have proprietary restrictions.   This is probably just for the subcommittee. Jerry wants to see a testing schedule, all he sees is an identification. Telecordia: From the wireline side they didn't report externally the activities. Jerry is a strong advocate with schedule.
    Another option is to list MSA contacts.
  - Mark: Thinks we should be able to organize this according to MSA's
  - Issue was brought up how many companies are ready to begin testing in October? Not many people were, so this helps in the allocation of resources, planning for testing. But you shouldn't necessarily back off of this. Ron proposes using the test document. From a wireline perspective they are ready to port in October.
  - Ron: From a wnp background is the MSA's for wireless the same as wireline? This is the same assumption it's the same 100 MSA's.   The rule is if you have an FCC license within the LATA, MSA. In Wireline it's according to BFR (BONA FIDE REQUEST) if they want to compete.

  Intercarrier Testing Subcommittee Meeting
- Action Items: Everyone will need to check to see if they have opinions regarding their testing.
- **Agreed Action Item: There was a preference that drafts will be sent via E-Mail, and final documents will be posted.**

- Action Item: Service Providers are to check with their network personnel to determine if they are going to need additional support with the NPAC during testing activities? They will be monitoring activities.

Future Meetings:
- Future Meetings
  - 1 year until testing should be complete 6/2001 to may 5/2002
  - propose 12 monthly face to face meetings the week before WNPO two days meetings
  - 12 monthly conference calls (1/2 day) meetings)
  - 24 meetings altogether (

Issue was brought up how do you plan 2 days meeting w/o agenda couple of months ahead.
> Teleport- will host next month.

Section 4.0.4 Review of Testing Document:

Redefine 4.0.1 and 4.0.2 test section within 1.0 test document, (paper passed around to get names to volunteer to redefine test case scenarios, this group will define interfaces) There will need to be specific test cases that deal with these situations and need to be re-written.   You'll need to have more refinement.

Most of these were noted within the document by Mark and Jennifer
- Do we have the interface for 4.0.4?
- Rewrite the test case-
  - There should be additional clarifying statements
- Providers need to work with vendors need to know they have capabilities to handle LSR.

- Issue: 1) define what a porting number is vs ported number 2)The testing scenarios are general, even though there are different ways to run the test case (done company by company) the provider wouldn't be sure of the outcome.

- The two conditions: Npa-nxx had to have been marked as ported within the lerg to launch the trigger

- Issue: How do you look at switch billing records since you are trying to validate the roaming network, and reports are created 1 month later?
- Issue: If you have ports from wireless to wireline, is the wireline developing test cases and scenarios to address porting and should they be involved within our meetings?
  1. WNPO Issue: does the wireline companies wish to invoke any test scenarios within our test plans.

End of meeting – Wednesday March 9th, 2001

Issues for discussion at the next meetings

CONF CALL (5/24/01)
- Review Changes made to test document from this meeting – Jim Grasser
- Test MSAs for your company – Test SPOCs
- Reporting matrix on testing - ALL
- Responses back from WNPO – Mark W.
- Ad hoc groups to rewrite test cases - ALL

FACE TO FACE (6/5/01)
- Timers discussion
- SMS/GTT test cases – discuss concerns,

Items to take to WNPO:
Lerg: Marking NPA-NXX for porting
- should NPA-NXXs be closed after testing?
- should ALL NPA-NXXs be opened at once?
- How long do we have to open NPA-NXX (difference circumstances)?

SMS and any other vertical services.

ACTION ITEMS:
- Teresa (Cingular) has the signup sheet, for ad hoc

- Julie from Verizon will work on the matrix (Appx A)

- Appendix E Test execution and exit criteria, and mutually agreed test cases. Define required optional?

- Asking for SPOC, test coordinator, and test manager, network, it roaming personnel. Also provide backup for vacation purposes. Coordinator will go to carriers to schedule time, the test manager (could be the same person) logs in the results.

- What version of edi will you be using with wireline carriers?

-Co chairs will submit process for recommending changes to the Test plan.
Take this document and it's test scenarios and validate with your network personnel. And ask what is missing (with regards to the test scenarios).

- Should vertical services impacted by more than one carrier be addressed by this committee and be tested ?

- Due date: next conference call, you will need to ID MSAs you will be doing testing. Global schedule will need to be tracked internally.

- Provide your SPOC(test coordinator) to co-chairs if you have not done so alread.