# Attendance:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Company** | **Name** | **Company** |
| Jim Grasser | Cingular Wireless | Brigitte Brown | TeleCorp PCS |
| Anne Cummins | AT&T Wireless | Gary Sacra | Verizon |
| Gustavo Hannecke | NeuStar | Gene Perez | TSI Telecom Services |
| Marcel Champagne | NeuStar | Chris Bowe | Nextel |
| Ron Steen | Bell South | Mark Wood | Cingular |
| Jean Anthony | Telecom Software | Lonnie Keck | AT&T Wireless |
| H.L. Gouda | AT&T | Jerry Hill | Cingular Wireless |
| Julie Groenen | Verizon Wireless | Jan Dempsey | Illuminet |
| Maggie Lee | Illuminet | Doreen Kostel | Qwest Wireless |
| Sharon Bridges | Verizon | John Malyar | Telcordia |
| Brian Burch | Evolving Systems | Pascale Lacroix | Microcell |
| Cindy Sheehan | AT&T Broadband | Dave Garner | Qwest |
| Jason Lee | WorldCom | Kelly Anderson | SCC Communications |
| Patrick Lockett | Sprint | Troy Albina | TSI Telecom Services |
| Rick Jones | NENA | Jim Alton | SBC Wireline |
| Christie Brannon | AT&T Wireless | Steve Farnsworth | Evolving Systems |
| Julie Newman | AT&T Wireless |  |  |

# Meeting Minutes:

## Introductions and Agenda Review

Introductions were made and the agenda reviewed.

Approve Minutes from Previous Month

May minutes were approved once a discussion yielded that the intention to develop a model for forecasting NPDB capacity was included in the June minutes (see further discussion within this document under “Model for Forecasting NPDB Capacity”).

June minutes require a typo fix before final approval. Beyond that a clarification was made to confirm that both GTT and SMS tests would be optional tests within the inter-carrier test plan. **ACTION:** Brigitte Brown will correct the due date for the completion of inter-carrier testing in the second paragraph under the “Testing Subcommittee Update” section on page 5 of the June minutes: “…should be made if it is estimated that the end date of 5/31/01 [CHANGE TO 5/31/02] needs to be extended.”

## Model for Forecasting NPDB Capacity

At the June meeting Maggie Lee provided a contribution for a draft NPDB capacity model, which was at a national level. Gary Sacra requested that the model be created on a regional database level, and if possible, contain three categories 1) wireless to wireless ports, 2) wireless to wireline ports, and 3) wireline to wireless ports. The team agreed that the model should be on a regional level, that it should incorporate volumes related to both wireless and wireline volumes, and that it should encompass individual TNs for pooled blocks with a footnote indicating the amount related to pooled numbers so that volumes with EDR in place can be derived. Maggie Lee indicated that she could incorporate these into a revision of the Illuminet contribution.

**ACTION:** Illuminet will prepare revisions, as discussed above, to the original contribution for discussion at the August meeting.

## Introduction of New Business Items

1. CTIA Pooling Data:

CTIA was to be publishing data on number pooling. Anne Cummins requested this information from CTIA. **ACTION:** Anne Cummins to continue to work with CTIA to obtain the number pooling data.

1. NPAC Tunables for Wireless:

NeuStar reviewed the 8 tunables for which wireless service providers need to consider settings. These items are tunable by region, and can be set to hours between one and 72. Refer to the appendix in the FRS document for definitions of the following items.

* 1. T1 Timer – The default value is 1 hour.
  2. T2 Timer – The default value is 1 hour.
  3. Long Business Day Start Time – NeuStar indicated that the default is 8:00am central time regardless of the region.
  4. Long Business Day Duration – The default value is 12 hours.
  5. Long Business Day Definition – The default is currently Monday to Saturday, and with release 3.1 it will change to Monday to Sunday.
  6. Conflict Resolution – Prevents the NSP from unilaterally removing a conflict. There is a long and a short value. The NSP can remove the conflict after the conflict resolution timer has elapsed. It is currently defaulted to 6 hours for both short and long values. This would apply per region, and cannot be set per service provider.
  7. Short Cancellation Initial Concurrence Window – There are two values for this, since there are two timers. After both SPs have sent the create, but the port is not going forward, one of the SPs sends out a cancel. The SV changes to cancel pending status, and the other SP then has to acknowledge the cancellation. For that process there are two notifications. After the second timer expires and the other SP does not send a notification, the SV will either move to cancel or conflict (depending on the situation). The default is 9 hours for both the short and long timer

**ACTION:** All team members to provide input at the August meeting on what the values should be for each of the eight tunable settings for inter-carrier testing. These settings may change for launch in November of 2002.

1. Industry WLNP Schedule & Wireless Progress:

In June, NANC requested that a wireless timeline, including the major milestones leading up to 11/24/02, be presented at the July NANC meeting. Gary Sacra indicated that NANC’s primary interest is to get a feel for wireless progress and where the industry stands.

The WNPO team discussed two timelines: a) the timeline (dated January 2001) that has been communicated thus far and b) a more updated view that should be communicated to NANC.

* 1. Original timeline communicated as of January 2001:
     1. 1/31/01 – MIN/MDN separation complete
     2. 2/15/01 – Communication to NPAC of intent to test
     3. 5/1/01 to 9/1/01 – Internal testing
     4. 5/1/01 to 9/30/01 - NPAC turn-up testing (note: members indicated that a later version of the timeline communicated an end date of 4/02)
     5. 10/1/01 – Start inter-carrier testing. The WNPO team indicated that wireless to wireless testing should occur before wireless to wireline testing on a per MSA basis.
     6. 5/31/02 – End of inter-carrier testing
     7. 9/1/02 – Soft Launch
     8. 11/24/02 - Launch
  2. More updated timeline that should be communicated to NANC:
     1. 1/31/01 – MIN/MDN separation complete
     2. 2/15/01 – Communication to NPAC of intent to test
     3. 5/1/01 to 9/1/01 – Internal testing
     4. 5/1/01 with no end date - NPAC turn-up testing. Footnote should indicate that the NPAC turn-up testing should be completed prior to participating in the inter-carrier testing, and only those carriers that decide not to participate in inter-carrier testing should be performing NPAC testing during or after the inter-carrier testing timeframe.
     5. 10/1/01 – Start inter-carrier testing. The WNPO team indicated that wireless to wireless testing should occur before wireless to wireline testing on a per MSA basis. Note that inter-carrier testing is not a requirement, as it has not been mandated, however it is highly recommended that carriers participate in inter-carrier testing. The risks of not participating in inter-carrier testing should be noted. The risks of not conducting inter-carrier testing with the WLNP solutions that a service provider intends to launch with should be noted (i.e. not testing the systems with which they plan to enter into production). For example, if a service provider performs inter-carrier testing with a service bureau solution or an LTI, yet intends to launch with in-house solutions, the service provider is increasing the risk of encountering porting problems.
     6. 5/31/02 – End of inter-carrier testing
     7. 9/1/02 – Soft Launch
     8. 11/24/02 – Launch

NANC may also be interested in what has been done to help ensure that wireless carriers are informed about WLNP and its implications. A team member indicated that CTIA did a public notice. A public notice was written for the Common Carrier Bureau (CCB) to send out, however, the CCB did not send it out. The WNPO also requested that PCIA and CTIA send something out to their members, however, nothing was sent out. The USTA did send out information to their membership. TSI brought up WLNP at their last quarterly users group meeting. Illuminet held a WLNP meeting and invited everyone on the CTIA list. A team member also suggested that at the CTIA critical issues forum in July it could be emphasized that service providers need to setup an account with the NPAC if they have licenses within theTop 100 MSAs.

The team decided there is a need to determine who the facilities-based wireless carriers are within the Top 100 MSAs to determine who should be participating in inter-carrier testing and NPAC testing. NeuStar indicated that 3 more companies have communicated their intent to test, bringing the current total to 12.

**ACTION:** Patrick Locket, Maggie Lee, Jim Grasser, Dave Garner, and Jason Lee to determine for the August meeting who the facilities-based wireless carriers are within the Top 100 MSAs by using wirelessadvisor.com. This website allows individuals to enter either city names or zip codes and the site will provide the names of wireless providers that have licenses in those areas.

**ACTION:** Jim Grasser will send out an email indicating how the efforts should be split up between the five volunteers.

1. Defining a Wireless Bonafide Request Form (BRF) and Process:

Patrick Locket brought up the issue of how wireless carriers will be opening codes, especially outside the Top 100 MSAs. For wireline porting, there is an actual bonafide request form that needs to be submitted. However, wireless still needs to define the process and the form. **ACTION:** Patrick Locket will provide a Bonafide Request Form and/or process contribution to be discussed at the August meeting. This process is even needed within the Top 100 MSAs because there is no requirement, mandate, or contractual agreements indicating that SPs will be opening up all of their codes in the Top 100 MSAs by 11/24/02.

Team members seemed to agree that a centralized and universal website for submitting and receiving BRFs is a good idea. **ACTION:** Jim Grasser will check with CTIA on possible vendors and costs to provide a universal website for handling bonafide requests.

The design the of the form and process will be added to the WNPO Issues & Action Item List as item 0016.

Within the Top 100 MSAs, the request for a SP to open switches and codes must be submitted 9 months before 11/24/02 (before the intended port date). SPs should receive the bonafide requests by 2/24/02 if another SP wants to port-in one of their subscribers within the Top 100 MSAs on 11/24/02. Outside the Top 100 MSAs, SPs have up to 6 months after 11/24/02 to become compliant.

1. Short Message Service (SMS):

Patrick Locket brought up several items related to short messaging, including whether or not the standards are defined for SMS with the implementation of WLNP.

NPAC release 2.0 has a short message flag in the profile that indicates whether or not the SP receives the SMS fields. NeuStar indicated that all LSMS and SOA vendors except one have completed NPAC testing with the SMS flag both on and off. Wireless providers will need to perform the normal regression testing once the flag is turned on.

SMS can be tested during the inter-carrier testing, however the SMS test cases are optional.

**ACTION:** Gary Sacra will check into whether or not standards/requirements have been defined for SMS indicating how the NPDB and SMSC vendors need to handle SMS with the implementation of WLNP.

A TR45 PN4411 document dated June 2000 indicates that MDN based routing will be used to support SMS, but the document does not go into details. The document acknowledges that new fields exist, but requirements are not defined.

Anne Cummins cited a reference indicating that SMS requirements will be published in PN4411-756-B which has not yet been published. On 7/10 - Anne Cummins provided an update indicating that there is a TR45 – PN4411 document that was published in September 2000. **ACTION:** Anne Cummins to send September 2000 TR45 PN4411 document to Jim Grasser and Brigitte Brown for distribution to the group.

**ACTION:** If it is determined that standards/requirements have not yet been defined for SMS, then:

* + 1. the WNPO needs to prepare a contribution to T1S1.3 and/or TR45 requesting that requirements for SMS be defined, and inviting them to a WNPO meeting.
    2. **ACTION:** Anne Cummins will check if a letter has already been drafted inviting the standards bodies to attend a WNPO meeting.

1. SLAs for Inter-Carrier Testing:

Patrick Locket brought up a concern regarding SPs which might require SLAs to be in place for inter-carrier testing, and how that might impede the progress of the testing. The general thought of the team was that SPs requiring SLAs for testing will inhibit the testing process, and will cause more harm to their business by preventing themselves from being able to efficiently move through the inter-carrier testing process.

1. Impacts on WIN Services:

Need to discuss the impacts of WLNP on WIN services.

## Review of Open Issues & Action Items List

0001 – NANC Change order 328 for Sunday NPAC business hours - Leave open for tracking purposes. It has been accepted at the LNPA working group.

0002 – Ongoing maintenance of the ICP document – CTIA will not maintain the document, the WNPO needs to consider other alternatives. **ACTION:** Jim Grasser will take this up to the OBF to determine if they would be willing to maintain the document. Until such time that a long-term solution has been decided upon, the ICP subcommittee will continue to maintain the document.

0003 – Verizon “clearinghouse” contribution – this is currently being handled by the ICP subcommittee. It was included in version 2.1.3 of the ICP document. This item can be closed.

0004 - Operator Services PIM 12 - This item is on the agenda for LNPA working group meeting on 7/10/01. Keep open.

0005 – Letter to LLC requesting support of NPAC business hours for Sunday porting – Anne Cummins had drafted a letter, which was sent to the LLC on 4/25/01. The email response back from LLC indicated that the letter was discussed in the May LLC meeting, and LLC requested the write up to be incorporated in the change orders for release 3.1.

0006 – Closed. It covered the same issue as item 0004.

0007 – Directory Listing – On 6/11/01 all SPs took an action item to indicate which directory listing requirements they cannot support. Jim Grasser received input from one SP, and is passing that information along. Jim Grasser completed the action items assigned on 6/11/01 to email a softcopy of the Directory Listings presentation to the WNPO team.

0008 – Generate a Risk Assessment Document to be forwarded to the NANC; outline risks of implementing porting/pooling w/o every WS SP MIN-MDN split compliant - Contributions discussed during this month’s meeting (see separate section below).

0009 – Wireless Pooling Document - **ACTION:** All SPs to review the INC pooling guidelines to see if there is anything lacking that needs to be included for wireless, and provide input for discussion at the August meeting. Based on the input received, perhaps modifications could be made to the existing document eliminating the need for a separate document for wireless.

0010 – Vendor Readiness - Letters were mailed out to the vendors. Heard back from one switch vendor (Motorola). The attachment below contains their response. **ACTION:** Due to some confusion, Jim Grasser will email Motorola and request confirmation from them on timing of when the feature interactions like SMS, Voicemail with MIN/MDN separation will be supported.

0011 – Only a few wireless carriers indicating intent to test with NPAC - Anne Cummins put in a request to CTIA to send out a mailing, and has not heard back yet. **ACTION:** Anne Cummins will resend the request to CTIA.

0012 – Monitoring & Recording Wireless NPAC Turn-Up Testing Status – Attached below is the updated status document from NeuStar. Keep open for discussion at next month’s meeting.



0013 – Inter-Carrier Testing - Gene Perez indicated that TSI is working on soliciting involvement for carriers, and is preparing a letter to be sent out.

0014 – Vendor (Clearinghouse) for Receiving/Submitting Requests for Opening codes for Porting - One carrier provided an estimate of 386 NPAs in Top 100 MSAs. Based on the May LERG, Patrick Locket indicated that in both non-Top 100 and Top 100 MSAs there are 275 NPAs that are currently open for porting. The team expressed that most likely a universal website/clearinghouse for handling requests to open codes would be necessary for the non-Top 100 MSAs, and it would also be needed if carriers opted not to open all codes in the Top 100 MSAs by 11/24/02.

**ACTION:** All WNPO team members to revisit the action item to determine the number of NPAs that are in the Top 100 MSAs (not NXXs) for the August meeting.

**ACTION:** Jim Grasser to check with CTIA regarding the cost for a vendor to serve as a universal website for communicating requests to open codes for porting.

A new item will be added for defining NPAC maintenance windows including a) renegotiating when maintenance window should be and b) whether timers should run during the maintenance windows.

A new item will be added for determining whether a contract revision is necessary to provide for NPAC personnel working on Sundays.

Review of Risk Assessment Report Contributions – Implementation of Pooling/Porting Without Ubiquitous MIN/MDN Split Compliance:

The team reviewed contributions for the Risk Assessment report. **ACTION:** Brigitte Brown will consolidate contributions and put them in a report format.

Team member raised a potential concern that if after 11/24/02 there are a flurry of requests outside the Top100 MSAs to open codes for porting, would the NPAC resources be unable to support a large number of NPAC testing requests at one time for turn-up testing. However NeuStar indicated that the risk is not high because carriers could go through a service bureau first, instead of doing in-house and complete NPAC testing very quickly. Those carriers operating only in non-Top 100 MSAs are mostly smaller carriers, which would likely opt for a service bureau offering anyway.

A team member asked whether there is a maximum number of SPIDs that a service bureau could support, and NeuStar and Illuminet both indicated that there is no limit.

Section 1 - Regulatory Background: Reviewed contribution (see attachment) and there were no additional comments from the team.



Section 2 – Technical requirements to support nationwide roaming for Pooling and Porting: Reviewed contribution (see attachment) with the team, following are the comments and questions.

A question was raised as to whether TSI requires customers to test with the Ciber x2 record (record to accommodate WLNP) before beginning to use it? **ACTION:** Gene Perez will check on who has tested with the Ciber X2 record, and what is required in terms of testing. **ACTION:** Gene Perez will ask his Ciber managers to review the Risk Assessment contributions and minutes in order to provide additional input.

The Ciber x2 record is not required, but rather it is optional. Both MIN and MDN are required fields in the x2 record. SPs could continue to use the Ciber 2.0 record however, and not provide both MIN and MDN. If all carriers are using the x2 record correctly there should not be a problem. However, since there is no requirement to use x2 some carriers may not be doing so, or there is the potential that the x2 record could be populated incorrectly. Roaming partners should exert some efforts to ensure their partners are compliant with x2.

Guiding might be based on MDN, and if a Ciber 2.0 record is sent and not a Ciber x2 record, then the MIN will be populated not the MDN. Therefore the guiding of the usage to an account may associate the usage to an incorrect MDN.

Discussed issues when Ciber records are delayed and a MIN has been reused, and the possibility of the wrong customer being billed for old roaming calls belonging to the original subscriber. The team decided that the report should indicate that SPs would need to keep a history of MIN assignments, corresponding MDNs, and timeframes so that records with a certain date can be properly billed if the MIN was re-assigned to another customer. Additionally, some team members suggested that there might be a need for a vendor to centrally capture the MIN/MDN association history and dates on behalf of their customers. Also, a minimum 60-day aging period for MINs would lessen this problem.

Section 2.2 – No comments on first paragraph.

**ACTION:** Jim Grasser and Brigitte Brown to update Section 2 for the August meeting.

**ACTION:** Jim Grasser and Brigitte Brown to include comments on prepay billing in Section 2.

Section 3 - Network routing and call completion for Pooling and Porting: Reviewed contribution with the team, following are the comments and questions.

**ACTION:** Anne Cummins to note that section 3.2 is an example of a serving switch that is not MIN/MDN compliant. Another note should be made that switches must also be IS41 Rev C compliant as well.

Section 3.2.1 – For a wireless roamer on a visited switch that does not support MIN/MDN split, the switch would only store the MIN not MDN. The customer’s PIC would get the ANI containing the MIN, but the LD carrier would assume that the ANI was the MDN, so LD would be billed incorrectly. For LD carriers, the only field that they can bill on will be the MDN, which will be in the Care record. LD carriers use the ANI for billing, and assume that the MDN is provided as ANI.

Clarified that the mandate DOES apply to non-Top 100 MSAs, because carriers must support roaming, which requires switch upgrades. It was noted that without the support of the MIN/MDN split in a switch, a carrier could still support call origination and termination while roaming (based on MIN), however ANI would be incorrect, billing would be affected, and there would be E911 impacts for callbacks.

**ACTION:** Anne Cummins to further develop section 3.2.3.

**ACTION:** Anne Cummins to provide more qualifications on section 3.2.4 (e.g. not passing ANI).

Section 4 - Billing:

Jason Lee indicated that it is WorldCom’s belief that they do bill the majority of IXC traffic to wireless carriers as opposed to individual subscribers. **ACTION:** Jason Lee will continue to work on getting the percentage information.

**ACTION:** H.L. Gouda will put together a contribution to address IXC impacts in section 4 for discussion at the August meeting.

**ACTION:** Gene Perez to provide a contribution on section 4 from TSI for discussion at the August meeting.

Kelly Anderson indicated that she requested input at OBF and is awaiting feedback. Initial concerns included getting the wrong ANI, causing incorrect billing.

Question arose related to the impact on CABs (Carrier Access Billing).

Section 5 - Customer Care: Reviewed contribution (see attachment) with the team, following are the comments and questions.

Questioned if a SP was MIN/MDN split compliant but they still used the old 2.0 Ciber record what number would they input (MDN or MIN) in the 2.0 record and what impacts that would have. Team indicated that SPs should begin guiding usage to accounts based on the MIN/MDN combination so that it is allocated to the correct account.

Team indicated that many of the issues raised in the contribution could be resolved if the carriers who are not MIN/MDN split compliant implement home customer care routing.

**ACTION:** Jim Grasser & Brigitte Brown to refine section 5 for the August meeting.

NeuStar Update:

Attached is the Wireless NPAC Testing Update report provided by NeuStar.

As of 7/9/01, NeuStar indicated that 12 wireless carriers have expressed their intent to participate as an NPAC user. Three of them are using service bureaus, nine need to complete NPAC turn-up testing for in-house solutions. All 12 are working on User Agreements or already have one in place.

NeuStar indicated that SP1 has already completed NPAC testing for both SOA and LSMS. SP2 and SP3 are scheduled to finish turn-up testing within the next two weeks.

Testing Subcommittee Update:

Held a conference call on 6/21/01. Working on standardizing language in 4.0 and revising Appendix A. Discussed adding test cases for GTT, and the Ad hoc team will meet on 8/6/01 to discuss these tests.

Created a Testing Subcommittee action item list which will be posted on the website.

Mark Wood presented at the IIR WLNP conference on 6/25/01, and is hoping to reach more carriers at the CTIA forum next week.

The Testing Subcommittee discussed SLAs and concluded that they need to be handled between the providers themselves.

Meeting Schedule:

1. Conference call on 7/26/01.
2. Ad Hoc team will meet face to face on 8/6/01 in Denver.
3. Next face-to-face meeting will be held in Denver on 8/7 and 8/8/01. The main topic of discussion will be test coordination.
4. TSI will be hosting the September meeting in Tampa.

A question was raised regarding the following statement in the June WNPO minutes “The Testing Subcommittee discussed opening codes, as well as the timing and impacts of those activities. Their main suggestion was to perform intra-company testing without communicating to the LERG. Need 60 days for LERG to process opening a code for porting.” The WNPO team wanted to clarify that codes that will be used for inter-carrier testing need to be opened in the LERG (only intra-carrier testing by a carrier that has an in-house LSMS/SOA and multiple switches in the same market can do intra-company porting testing without opening the code through the LERG). Additionally, team members commented that since carriers will use the same codes for performing intra- and inter- carrier tests, the codes should be opened up in the LERG anyway.

A question was raised within the WNPO team about whether inter-carrier testing needed to be performed for pooling. The WNPO team responded that SPs must test pooling internally, and it is not within the scope of the inter-carrier testing or Testing subcommittee.

Next Year’s Meetings – Hosts:

Note: NeuStar and Qwest have swapped months that they will host the meetings. Qwest will now be hosting the November meeting in Phoenix and NeuStar will host the December meeting in New Orleans (at the Marriott in the French Quarter).

Need to determine meeting locations for next year. The WNPO is also requesting other wireless carriers to begin hosting meetings.

**ACTION:** All WNPO team members (especially wireless service providers) to determine which months they are available to host meetings next year.

Service Provider Standard & Extended Maintenance Windows:

At the May meeting, the WNPO discussed modifying the service provider maintenance windows to 3am to 9am central time for the standard maintenance window every Sunday, and to midnight to 11am central time (11 hours) for the extended maintenance window on the first Sunday of every month.

During July’s meeting, the WNPO team approved the new proposed times for the extended maintenance window (midnight to 11am central), however team members brought up the need to also consider a second option for the standard maintenance window to be midnight to 6am central time. The team discussed the needs of SPs operating in Hawaii versus the needs of the highly populated east coast (including Puerto Rico which is one hour ahead of eastern time for part of the year as they do not participate in daylight savings time).

The letter that went to the LLC regarding the maintenance windows indicated midnight to 6am for the standard window, and midnight to 11am for the extended window on the first Sunday of the month.

**ACTION:** All WNPO team members to be prepared at the August meeting to vote on the standard maintenance window and whether it should be from 3am to 9am central time or midnight to 6am central time.

**ACTION:** Jim Grasser to mention this at the LNPA working group this month to ask them to be prepared to discuss this in August when the WNPO provides them with a proposal.

**ACTION:** Jim Grasser to draft a letter to the LLC so that once the standard maintenance window is decided upon, the letter can be sent out. The letter will also include wireless business day start time and duration.

NeuStar asked whether the timers can keep running during maintenance window, or if modifications need to be made to stop the timers during the service provider maintenance windows (which would require a significant effort from NeuStar). This issue will be added to the Issues & Action item list. Some team members indicated that allowing the timers to continue running may not present significant issues since wireless to wireless ports will utilize a pre-port process to obtain concurrence. And ports with wireline service providers would not move forward on Sundays anyway.

Draft Agenda for Next Meeting & NANC Report:

1. Tunables
2. Risk Assessment document
3. SP Maintenance Windows
4. Status of WLNP Industry Schedule

# Next Meeting:

**August 13 (1:00P – 5:00P Pacific time) and August 14 (8:30A – 12:00P Pacific time)**

**AT&T, Seattle**

# Future Meetings:

WNPO Dates: Host:

September 17 - 18 Verizon, Baltimore NOTE: date change !!!

October 8 – 9 SBC, San Antonio

November 12 - 13 Qwest, Phoenix NOTE: these two locations

December 10 – 11 NeuStar, New Orleans have been swapped!!

**Subscription to WNPO Team Distribution**:

**To subscribe to the WNPO minutes, send an e-mail to** [majordomo@telecomse.com](mailto:majordomo@telecomse.com) **and in the body write <subscribe wireless\_ops>.**

**To remove yourself from the WNPO Team distribution list, send an e-mail to Majordomo@telecomse.com and in the body write <unsubscribe wireless\_ops>.**