

I. Time, Date and Place of Meeting: The North American Numbering Council held a meeting, commencing at 8:30 a.m., at the Federal Communications Commission, Portals II, 445 Twelfth Street, S.W., Washington, D.C.

II. List of Attendees:

A. Council Members

<u>Voting Members</u>	<u>Organization</u>
1. Beth Kistner	ALTS
2. Edmund Gould	AT&T Corp.
3. Dan Hochvert/Jim Castagna	Bell Atlantic
4. Paul Kenefick	Cable & Wireless, Inc.
5. Ronald Binz	Competition Policy Institute
6. Robert McDowell	CompTel
7. Lori Messing	CTIA
8. Alan Hasselwander	Frontier
9. Bernard Harris	GTE
10. Peter Guggina	MCI WorldCom
11. Gerry Thompson	Mobility Canada
12. David Rolka	NARUC
13. Vincent Majkowski/Bruce Armstrong	NARUC
14. Jo Anne Sanford/Erin Duffy	NARUC
15. Natalie Billingsley	NASUCA
16. Philip McClelland	NASUCA
17. Beth O'Donnell	NCTA
18. Larry Krevor	Nextel Communications, Inc.
19. Dan Gonzalez	NEXTLINK
20. Ray Strassburger/Joe Kingrey	Nortel Networks
21. Carl Hansen/Michelle Thomas	Omnipoint
22. Trent Boaldin	OPASTCO
23. Cathy Handley	PCIA
24. Bill Adair	SBC Communications, Inc.
25. Ron Havens	Sprint Corp
26. Lou Almeida	Stentor
27. Gerry Rosenblatt	TIA
28. Paul Hart/Tony Pupek	USTA

Special Members (non-voting):

Leo Mevel Industry Canada
Ron Conners NANPA

B. Commission Employees

Kris Monteith, Designated Federal Official

Blaise Scinto, Deputy Chief, Network Services Division (NSD)
Diane Harmon, Assistant Chief, NSD
Jared Carlson, NSD
Les Selzer, NSD
Patrick Forster, NSD
Jeannie Grimes, NSD
Linda Simms, NSD
David Furth, Wireless Telecommunications Bureau (WTB)

III. Estimated Public Attendance: Approximately 43 members of the public attended the meeting as observers.

IV. Documents Introduced. Each member received the following handouts:

- (1) Agenda
- (2) February 17-18, 1999, Meeting Minutes (Draft)
- (3) LNPA Working Group Status Report to NANC
- (4) WNPSC Status Report to the NANC (Wireless only issues)
- (5) NEXTLINK LNP Implementation Problems
- (6) INC Report, Issue 154 500/900 Portability
- (7) Calendar of Events, Numbering (provided by ATIS)
- (8) Policy Statement of the North American Numbering Council (NANC) Concerning the Scope of Requirements of NANPA for Central Office Code Administration and NPA Relief Activities
- (9) Guidelines, March 16, 1999
- (10) Statement of the California Public Utilities Commission to the NANC Regarding Use of Court Reporters at Public Meetings.
- (11) NANPA First Annual Report, March 17, 1999
- (12) Cost Recovery Working Group Update
- (13) NANPA Fund Performance Status Report & Funds Projection
- (14) CIS Issue Management Group Report
- (15) Lockheed Martin Responses to the NANC CIS Issue Management Group Recommended Warburg Pincus CISAC/CIS Criteria
- (16) Mitretek Response to the NANC CIS Issue Management Group Report
- (17) Public Notice, DA 99-516, FCC Extends Deadline for Comments
- (18) NANP Exhaust Review Team Meeting Summary
- (19) NANPA Oversight Working Group Report to the NANC

V. Summary of the Meeting:

A. Welcoming Remarks. Ron Binz, Co-Chairman of the Council, provided welcoming remarks, noting that Chairman Hasselwander would not chair the meeting on March 16, but was expected to chair the meeting on March 17.

B. Approval of Minutes of February Meeting. The minutes of the February 1999 NANC meeting were approved with one attendance correction, to include Mobility Canada.

C. LNPA Working Group Report. Paula Jordan, AirTouch, Anna Miller, BellSouth Cellular Corp., and Tom Sweeney, AT&T, together presented the LNPA Working Group Status Report to the NANC. Initially, Mr. Sweeney reviewed the items contained in the Status Report. Ms. Jordan began the Wireless Number Portability Subcommittee (WNP SC) Report portion of the Status Report by noting that she would only review what had occurred at the previous week's WNP SC meeting. Ms. Miller would go into greater detail about the Work Plan and the Work Schedule.

Ms. Jordan reviewed the Key Issues, as well as the Action Items, from the meeting, all of which are contained in the WNP SC - 3/99 handout. Although the wireless industry is researching a thousands-block pooling alternative, a detailed analysis will not be ready until June 1999.

Ed Gould, AT&T, questioned the significance of the pooling alternative, and Paul Hart, USTA, questioned whether the pooling alternative was a method that did not employ LRN LNP. Ms. Jordan responded that the pooling alternative was an option presented to the LNPA WG that may allow for the early implementation of number pooling. The alternative may not require the MIN/MDN separation. Karen Mulberry, MCI WorldCom, asked whether the Wireless LNP Implementation Work Plan would be made available to NANC members and Ms. Jordan replied in the affirmative.

Anna Miller, WNP SC Co-Chair, presented the Wireless Number Portability Timeline - Phase 2 and the Wireless-Only Issues and Tasks Lists, all developed at the last WNP SC meeting. Ms. Miller explained that on February 7, 1999, the WNP SC began working to identify the scope and logistics necessary for the wireless industry to implement local number portability. Specifically, the WNP SC wanted to determine if and how the wireless industry could implement local number portability by March 2000. After determining when NPAC Release 2.0 would be available and examining the time necessary for NPAC turn-up, intercarrier, and regression testing on this Release, it was decided that it would not be feasible for the entire wireless industry to implement number portability by March 2000.

Ms. Miller reviewed the timeline developed for wireless number portability implementation to be completed by November of 2002 and noted that the LNPA WG would finish its report on Wireless/Wireline Integration by June 1999. If any NPAC changes resulted from examination of these integration issues, then the WNP SC may have to adjust the methodology being developed to implement wireless number portability. Stressing the differences between wireless and wireline service providers, Ms. Miller reminded the NANC that wireless service providers must support nationwide roaming at the same time as wireless number portability is being implemented. To do so, the wireless industry must implement LNP in a flash-cut, rather than using a phased implementation approach afforded the wireline industry. Also, to support nationwide roaming, wireless service providers must separate the Mobile Identification Number (MIN) and the Mobile Directory Number (MDN). The MIN/MDN separation was the most critical element necessary for the implementation of wireless LNP that, at the same time, supports nationwide roaming.

Ms. Miller reported that, although there are approximately 1000 wireless service providers, only ten have been regularly attending WNP SC meetings, and suggested that a Public Notice be released in an effort to gain support for the development of wireless number portability. To allow all wireless service providers to implement wireless number portability, Ms. Miller reported that the schedule does contain

some flexibility.

Ms. Miller explained how the timeline was developed, working backwards from the November 24, 2002 implementation date for wireless number portability. Because the implementation date falls in fourth quarter of the year, the holiday season, she reported that the WNP SC had determined that it would not be wise to perform a flash-cut at that time. Thus, the WNP SC has proposed that implementation occur approximately two months prior to the deadline. In the schedule, three months are allowed for roll-out because some wireless service providers cannot roll-out number portability simultaneously in all markets.

The WNP SC identified internal, NPAC turn-up, and intercarrier testing that need to be performed prior to implementing wireless number portability. Intercarrier testing includes testing of porting processes, local service requests, service order activations, provisioning, local service management systems and porting of numbers between all types of service providers (wireless, LECS, and CLECs). One month per region is scheduled for intercarrier testing. Coordination between carriers is crucial, and because there are not many wireless service providers in all regions, the time for intercarrier testing would total approximately eight months.

For NPAC turn-up testing, Ms. Miller reported that each service provider must be certified and verify that its interfaces are interoperable with the NPAC. In addition, all service providers must be able to transfer data between themselves. For inexperienced service providers using uncertified platforms, the WNP SC estimated that it would take about two to two and one-half months to complete NPAC testing for ten service providers, due to the limit on the number of service providers that can test with the NPAC at one time. Experienced service providers using certified platforms may take less time, but the time-frame would be determined by the inexperienced service providers that will use uncertified platforms. Ms. Miller reported that the five months scheduled for NPAC turn-up testing may be ambitious because there could be a large number of inexperienced service providers using uncertified platforms.

The internal requirements necessary to implement the MIN/MDN separation, which is necessary to support wireless number portability, were divided into three categories: functional specifications, system development, and testing. First, functional specifications must be identified, and then systems must be developed accordingly. Testing requires that each service provider evaluate all network elements and process flows to ensure that the LNP LRN and MIN/MDN separation both function properly. Because some service providers have a large number of systems that must be evaluated, six months are scheduled for identifying functional specifications. Systems development would take approximately nine months after that. Three months are scheduled for testing of network systems.

Vince Majkowski, NARUC, questioned what was meant by different platforms for CMRS, whether modulations were part of this, and whether modulation techniques were included as part of the interoperability testing. Ms. Miller replied that there were several different platforms, e.g., cellular service order applications, which includes all of the operations support and back-office systems, and platforms to support custom local area signaling services. Platforms did not concern modulation types such as Time Division Multiple Access (TDMA) and Code Division Multiple Access (CDMA). Interoperability testing only concerns the ability to interface with the NPAC. Mr. Majkowski

questioned the timeline developed by the WNP SC given that Hong Kong has already implemented wireless number portability. Paula Jordan, AirTouch, replied that it was most likely because Hong Kong was using GSM technology, which already separates the MIN and MDN. Gerry Thompson, Mobility Canada, concurred. Outside the system, for the Advanced Mobile Phone Service (AMPS) access technology, TDMA and CDMA use Interim Standard-41. A standard for MIN/MDN separation is currently being developed. Ms. Jordan explained that intercarrier testing includes ensuring that calls from roamers are handled properly, such as for billing purposes and E911 call-back, as well as ensuring that all processes and procedures work properly when porting from wireline to wireless or vice versa.

Cathy Handley, PCIA, questioned whether the schedule proposed for systems modifications included those necessary for billing clearinghouses, and whether representatives from such companies were attending any of the WNP SC meetings. Ms. Miller replied that representatives from these companies have not been attending the meetings, and that systems in these companies could be affected by wireless number portability.

Paul Hart, USTA, questioned how many service providers are actually out there, and whether CTIA and PCIA support the implementation plan. Mr. Hart also expressed concern as to how to notify cellular and PCS carriers who are probably not aware of the number portability requirements for wireless service providers. To ensure that these service providers are notified, however, Mr. Hart volunteered that USTA would publish a technical dispatch, to be prepared in conjunction the WNP SC. Ms. Jordan reported that such a letter had already been sent to the CTIA and PCIA for distribution.

Beth O'Donnell, NCTA, questioned whether all tasks in the timeline had to be performed sequentially, or if overlap was possible. Ms. Jordan replied that some overlap already was indicated in the timeline. Ms. Miller replied that the critical paths were shown in the timeline. For example, internal requirements and testing must be completed before NPAC turn-up testing is started. Then, NPAC turn-up testing must be completed and certified before intercarrier testing is begun. While the timeline was developed with the idea of being representative of the entire industry, some carriers could implement and test various stages faster than specified in the timeline. Limitations on the number of service providers able to test with the NPAC at one time, however, could lengthen the schedule.

Discussion followed on the wireless number portability implementation timeline, during which Ron Binz reminded the WNP SC that the request from Chairman Hasselwander was to determine the earliest date by which the wireless industry could participate in pooling. Instead, the WNP SC had only developed a schedule for wireless number portability implementation by using the implementation deadline specified by the FCC and working backwards. Although the date for wireless participation in pooling may turn out to be the same if a schedule is developed beginning at March 16, 1999 and working forward, Mr. Binz expressed doubt that the question asked by Chairman Hasselwander had actually been answered. Also, Mr. Binz noted that it appeared that some of the tasks outlined in the timeline could be completed simultaneously. Thus, Mr. Binz felt that the NANC should neither endorse, nor disapprove, the report until the earliest date when the wireless industry can participate in pooling is determined.

Beth Kistner, ALTS, questioned whether pooling could be implemented before support for nationwide roaming was implemented. In other words, could wireless carriers participate in pooling before work is completed on the MIN/MDN separation, and, if so, would this shorten the schedule. Ms. Miller replied that implementing pooling before being able to support roaming would not be possible. Without the MIN/MDN separation that has been deemed necessary for wireless number portability that also supports roaming, roaming support and proper routing for numbers that are pooled could not be accomplished later. Ms. Kistner also pointed out that the timeline appears to assume that pooling would begin on the same day as wireless number portability. She questioned whether this assumption true, or whether additional time would be needed beyond this date to implement pooling. Ms. Jordan replied that November 24, 2002 was the earliest date that wireless could participate in pooling, but that it could be longer depending on unforeseen requirements. Participation in pooling would, most likely, be incremental beyond the implementation of wireless number portability.

Lori Messing, CTIA, noted that CTIA has made efforts to educate small and rural service providers and to include them in number portability related forums, but only a small number have participated. Ms. Messing supported the idea of publishing a technical dispatch, possibly with some assistance from the FCC's Wireless Telecommunications Bureau in identifying current licensees, and volunteered CTIA's support. Trent Boaldin, OPASTCO, also expressed concerns that many small wireless service providers are not aware of the requirement to implement portability, and also supported publishing a letter to convey this information to these service providers.

Carl Hansen, Omnipoint, in response to concerns that there may not have been enough time allotted for all of the tasks identified in the timeline, suggested that if the steps were identified and examined working forward, rather than backward, that the date for wireless number portability implementation could extend well beyond November 24, 2002. Mr. Hansen also expressed concern about the flash-cut needed to implement wireless number portability, which would make implementation dependent on service providers that have not necessarily implemented number portability.

Gerry Thompson, Mobility Canada, questioned whether it was reasonable for small service providers to be required to implement number portability considering the capital costs needed to implement wireless number portability. Mr Thompson also asked whether "flash-cut" meant that all switches were thrown at the same time or whether all carriers must be ready by November 24, 2002. Ms. Miller replied that the flash-cut meant that all carriers had to be ready by the above-noted date.

Paul Hart, USTA, expressed concerns that the November 24, 2002 date could be moved up, and about the dichotomy that could be established between LNP capable wireless service providers, and non-LNP capable wireline service providers. Ms. Jordan replied that many wireless service providers would only be required to implement MIN/MDN separation, and would not necessarily receive a request or be required to implement number portability.

Cathy Handley, PCIA, expressed concerns about the ambitious schedule prepared by only ten service providers, that there could be many service providers that are not aware of the implementation requirements, and that roaming support should not be affected by wireless number portability implementation. In response, Ed Gould, AT&T, suggested that some wireless service providers could use the services of third party companies to implement number portability. Ms. Jordan said that she

was not aware of any service provider doing so. Ms. Jordan also reported that, at the last WNP SC meeting, the SC developed a timeline working forward, and that the completion date was the same.

Beth Kistner, ALTS, questioned why functional specifications are not scheduled for development until Fourth Quarter 1999. Ms. Miller replied that it was because it would be necessary to know what all the LNP processes are, especially those that support wireline to wireless porting of numbers. In addition, three new alternatives for wireline to wireless porting were identified in December 1998, and the WNP SC hoped to finish its evaluation of these alternatives by June 1999.

Carl Hansen, Omnipoint, pointed out that small wireless service providers may have an incentive to implement number portability at the same time MIN/MDN separation is implemented in order to realize a payback by competing for wireline customers. Also, the use of third parties for querying to determine the LRN of ported numbers does not diminish the call processing that must be still be performed by the service provider. Karen Mulberry, MCI WorldCom, expressed concerns that the timeline did not actually specify the date the wireless service providers could participate in pooling.

Following additional discussion on the status of the WNP SC report, the NANC decided that further work on actually answering the question proposed by Chairman Hasselwander about wireless participation in pooling should be performed. Mr. Binz requested that a progress report be submitted at the next NANC meeting.

Ms. Miller reviewed the WNP SC Work Plan contained in the WNP SC Status Report to NANC (Wireless Only Issues) (as of 3/12/99). This plan, which was reviewed by the LNPA WG, was prepared in response to the NANC request that a list of wireless only issues be developed. The timeline contained in the WNP SC Work Plan was based on the deadline date contained in the CTIA Forbearance Petition Memorandum Opinion and Order.

Mr. Sweeney presented the balance of the LNPA WG Status Report to NANC. The use of the word "moratorium" with regard to NPAC hardware/software changes from November 1, 1999 until March 1, 2000 was again discussed. The NANC agreed that a "quiet period" was possible with the actual description of the "quiet period" to be worked out later. A schedule for addressing the suspected "slow horse" problem was included in a table in the report.

D. NEXTLINK LNP Implementation Problems. Dan Gonzalez and Brad Baxter, NEXTLINK, together presented NEXTLINK's report on LNP implementation problems. Mr. Gonzalez stated that any remarks were NEXTLINK-specific, but discussions with other carriers had revealed they are experiencing the same sort of problems. Mr. Gonzalez also expressed concern that, although LNP implementation problems were being examined regionally, no national forum is in place to address these frequently recurring problems, some even occurring cross-regionally. In addition, some kind of enforcement mechanism should be developed to ensure that LNP is properly implemented.

Brad Baxter reviewed NEXTLINK's report. From the report, problems include: incomplete switch translations, improper delivery of called-party number, local service management system/service control point information screening resulting in incorrectly routed calls, delays in processing of local service requests after receipt of a firm order commitment, refusal to port certain types of lines, *e.g.*,

ISDN lines, failure to identify portable NPA-NXXs in the LERG or NPAC, and incomplete implementation of intercarrier default LNP call routing. Mr. Baxter recommended that there be a working group to examine these issues and, in answer to Paul Hart's, USTA, question, said that regional meetings include Lockheed Martin and are open to all service providers.

Discussion followed on how to address these problems and which group might be best suited to do so, particularly in light of the time and expense involved in participating in multiple forums, and the full schedule that already exists for many. Ms. Monteith, FCC, advised that the issues raised by NEXTLINK were appropriately before the NANC and that the most important thing was to develop expeditious procedures to address and resolve these problems. As a result, an Issues Management Group, consisting of ALTS, NEXTLINK, CTIA, Sprint, Bell Atlantic, MCI, and AT&T, was formed and tasked with addressing this problem. Dan Gonzalez will coordinate the effort and will report at the next NANC meeting.

E. INC Report. Co-Chair, Shawn Murphy, AT&T, presented the INC Report. Mr. Murphy reviewed the updates made to the Thousands Block Pooling Administration Guidelines, as well as the 500/900 Portability Workshop Meeting Contributions, both contained in the report. Mr. Murphy reported that the INC had concluded that LRN technology was not appropriate for 500/900 portability and any architecture should be transparent to 500/900 callers. The 500/900 Workshop rescinded the agreement that all 900 numbers would be pooled at the individual telephone number level so additional pooling architectures can be considered. The NIIF, in response to an INC liaison letter, has opened a Technical Feasibility of 500/900 Number Portability issue. Details of plans to address this issue are contained in the INC Report. Mr. Murphy also reviewed the 500/900 Portability Workshop Work Plan.

NANC members discussed the architectures to be used for 500/900 number portability and whether these numbers should be pooled. The 500/900 Portability Workshop has already begun developing evaluation criteria for the type of 500 and 900 number pooling to be employed. Peter Guggina, MCI WorldCom, stated that he believes that the issue of 500/900 number pooling is a policy one that NANC should address, and requested that the NANC do so.

The Workshop Report also contains a schedule for the next several Workshop meetings and the logistics for the next two months' meetings. Discussion followed about available resources, meeting conflicts, and added tasks. NANC Co-Chairman Ron Binz suggested, and the NANC members agreed, that this last issue would be discussed at the NANC Steering Group Meeting.

F. Policy Statement of the NANC Concerning the Scope of Requirements of NANPA for Central Office Code Administration and NPA Relief Activities -- Discussion. Co-Chairman Binz, CPI, introduced the topic. Mr. Binz stated that the revised policy statement handout contains revisions from last month's meeting, which was adopted with the two amendments: on page 1, reference was added to the NANPA transition plan as one of the documents that set up the core responsibilities for NANPA; and a clarification was added in the last bullet on page 2, to note that whether a specific proposed activity is within the responsibilities of the NANPA might be guided by whether the activity reflects a practice that is, or will likely become, commonly used in multiple state regulatory jurisdictions. Mr. Binz stated that the revised Policy Statement should be used to resolve

the California Court Reporter issue.

Mr. Binz opened the discussion stating that he had chaired an Issue Management Group that initially drafted the policy statement. After receiving some comment from the NANC, the group came back to the NANC at last month's meeting with information about this issue. Chairman Hasselwander had moved that the issue be decided at the April NANC meeting.

Discussion ensued with two members of the California Public Utilities Commission (CPUC) participating by conference bridge: Helen Mickiewicz, Legal Division, and Risa Hernandez, Telecommunications Division. Bill Adair, SBC, then noted that this issue has been discussed for several months within the working group, that NANC discussed it last month, and that the NANC should vote the issue up or down at this meeting. Mr. Adair offered the following proposal on behalf of SBC: "NANC directs the NANPA to provide, as part of its responsibilities as the NANPA, court reporters required by the California industry and the CPUC, at NPA relief or public meetings in the state of California. This requirement will be grandfathered in California since this function was clearly a part of the ongoing activity of the incumbent number administrator prior to the transition to Lockheed Martin. This requirement will apply only to the State of California and will be a part of the NANPA responsibilities for the duration of the existing contract. This decision is not precedent-setting for future applications."

Vincent Majkowski, NARUC, queried whether the proposed resolution to grandfather California enjoyed the consensus of the industry. Mr. Majkowski remarked that California had been prudent in incorporating into a specific document a list of state-specific functions to be transferred to the NANPA, whereas the remaining 49 states may not have published such a list. Mr. Majkowski stated that, in general, NARUC agrees with the grandfathering proposal; but he and other state officials would be looking to ensure that fairness follows. Mr. Adair, SBC, explained that the intent was to grandfather this specific activity only because the California situation predated the transition to Lockheed Martin; the recommendation was not intended to make California special, but to capture what clearly was a pre-transition function of the-then CO code administrator. In response to a question regarding the total obligation for funding of the court reporters, Ron Conners, NANPA, estimated the cost at approximately \$1,600 per NPA relief planning meeting for a total estimated cost of \$48,000 for the four years of the remaining NANPA term.

Jo Ann Sanford, NARUC, asked whether NANPA is aware of other contractual responsibilities or state orders requiring court reporting services or other requirements unique to one or more specific states. Ron Conners, NANPA, expressed reluctance to state that NANPA is aware of all unique state requirements. Helen Mickiewicz, CPUC, clarified that California has not required the industry to use court reporters at public meetings held in connection with area code relief planning in California; instead, the CPUC simply requires that an adequate record of the meeting be maintained.-

The NANC discussed whether the use of court reporters at these types of meetings is a "core responsibility" of the NANPA. The NANC agreed that it is not a core responsibility but that the California situation presented a special case. Natalie Billingsley, NASUCA, remarked that she had personally made the NANPA Work Group aware of the California court reporter issue prior to -the creation of the Requirements Document. With respect to the length of any grandfather period, the

NANC agreed that no rational basis exists for requiring the NANPA to provide court reporters at public meetings in California for any period less than the full length of the five-year NANPA term.

Following further discussion, consensus was reached on the motion to support grandfathering the court reporter function as part of the fixed price contract services to be provided by NANPA for the remainder of the current five-year term. The NANC co-chair will draft a letter to the FCC stating the outcome reached by the NANC on this issue. The CPUC will be copied on the letter.

G. Numbering Resource Optimization Working Group. Co-Chair Beth O'Donnell, NCTA, explained that as a result of meeting schedule, the NRO WG will report the results of its March 17-19 and April 12-14 meetings at the April NANC meeting.

H. Issue Management Group (CIS IMG) LM CIS Petition. Peter Guggina, MCI WorldCom, provided the report to the Council. Mr. Guggina reported that the Issue Management Group, consisting of Bill Adair, Ron Havens, Beth O'Donnell, and Dan Hochvert, had developed a set of criteria as a recommended proposed framework to address the neutrality and performance of the NANPA. Separate, but very similar criteria, were developed for both a Warburg, Pincus-owned NANPA and a Mitretek NANPA. Mr. Guggina stated that the Issue Management Group only focused on the criteria that should be addressed by the NANC and not whether Mitretek should be allowed to assume the NANPA responsibilities as the named alternate in the *Third Report and Order*. Some of the criteria include: although CIS itself may be neutral, CISAC and Warburg, Pincus must be subject to the same neutrality criteria; the structure of the CISAC board of directors must be comprised of a minimum 20% for outside participants, with a maximum of 40% for CIS management and a maximum of 40% for Warburg, Pincus management; Warburg, Pincus board members should not be involved in day-to-day CISAC operations; Warburg, Pincus must assume the equivalent liability of the former Lockheed Martin/CIS; CISAC cannot provide consultative services to telecommunications providers; CIS should demonstrate how maintaining the suggested strict "code of conduct" will be accomplished; and finally, quarterly scheduled audits must be published, that include a code of conduct performance measurement, and that address industry concerns and requirements.

The Mitretek criteria state that Mitretek was found to be a neutral entity in 1997, and noted that any future investments in telecommunications service providers (users of NANP resources) must be limited to 10 percent. The Issue Management Group also recommended that Mitretek's board members should be free from conflict of interest, and not affiliated with any telecommunications service providers. Other criteria recommended by the Issue Management Group, referring to code of conduct, audits, and the prohibition to participate in consultative services with telecommunications service providers, are identical to those applicable to Warburg, Pincus.

Mitretek and Lockheed Martin CIS were provided time on the agenda to respond to the criteria set forth by the Issue Management Group.

Mitretek, Dr. H. Gilbert Miller. Dr. Miller stated that Mitretek remains the same company as it was when it submitted a proposal in response to the Requirements Document in 1997. He reviewed Mitretek's structure, the composition of the Mitretek Board of Trustees, key aspects of Mitretek's proposal, and other points relating to Mitretek's ability to perform as the NANPA, as indicated on the handout provided to NANC members. Dr. Miller confirmed Mitretek's continuing commitment to

assume the responsibilities of the NANPA.

Lockheed Martin IMS CIS, Jeff Ganek. Mr. Ganek stated that neutrality is the most important issue to Lockheed Martin/CIS and CISAC is committed to remaining neutral in order to continue to perform the NANPA work. Mr. Ganek noted that it is a challenge to keep the NANPA and the LNPA neutral in a practical way, given the Lockheed Martin announcement in August of 1998 of its intention to enter into the multi-billion global telecommunications market. Mr. Ganek indicated that Lockheed Martin had spoken with several leading brand names in the systems integration market that would have been natural homes for CIS but each of those potential acquirers had an interest in providing services to third party telecommunications services providers, or had a conflict of interest because it was pursuing alliances with telecommunication service providers. As a result, Lockheed Martin formulated a different approach to the problem, by create CIS as a free standing company to provide neutral third party services. CIS, as a free standing company, will be the neutral party for the provision of NANPA and LNP services. Warburg, Pincus will provide the capital for a free standing CIS, but will not manage CIS directly.

Mr. Ganek then described some of the steps that CISAC and Warburg, Pincus have taken to ensure the neutrality of the CISAC. For example, CISAC will engage a fourth party to perform a neutrality audit of CISAC and Warburg, Pincus every 90 days, the results of which will be presented to the NANC and the FCC. Mr. Ganek described the proposed neutrality audit in detail. Mr. Ganek stated that CISAC believes that the proposed structure of the organization is the very best structure for the NANPA.

The NANC then discussed the criteria developed by the Issue Management Group. Kris Monteith, FCC, clarified that the FCC had not asked the NANC to develop a new set of criteria, but instead seeks NANC review of the CIS proposal in light of the existing neutrality criteria.

Co-chair Binz questioned what kind of activities the CISAC could undertake. Mr. Ganek stated that only third party services that would result in no breach of neutrality; that is, the CISAC could not undertake to perform work on behalf of any particular telecommunications service providers and any particular segment of the telecommunications industry. During the discussion, NANC members noted that the incentive for Warburg, Pincus to finance an independent CISAC is the future business growth to be achieved through the provision of additional third party services, such as billing services, interfacing of operational support systems serving as a clearing house for transactions with a standard interface, provisioning, and networking.

Several NANC members questioned the seemingly intense scrutiny of the Lockheed Martin/CIS proposed transfer of NANPA. Lou Almeida, Stentor, noted, however, that it is important to understand the growth opportunities for CIS. Kris Monteith, FCC, added that the FCC is required by statute to ensure neutrality and that the FCC believes that the NANC's time is well-spent in exploring all aspects of the proposed transaction and asking all of the hard questions upfront. The discussion was continued to the March 17 meeting.

March 17, 1999

I. Cost Recovery Working Group (CR WG). Co-Chair Anne La Lena, MCI WorldCom, provided the report to the Council. Ms. La Lena reported that the CR WG had received correspondence from the Illinois Number Pooling Subcommittee, regarding the development of a recommendation for the treatment and funding of common pooling costs. The CR WG requested NANC approval to respond to the March 2, 1999 letter. The NANC reached agreement that the CR WG will develop responses to the questions presented in the Illinois letter and report back to the NANC at its April meeting.

NBANC Report. John Ricker, NECA, provided the report to the Council. As of March 10, 1999, the financials are as follows: current fund balance is \$823,000; payments to Lockheed Martin total \$3.3 million in the first year, year two payments will to \$4.28 million. Payments to NECA total \$258,000 for year one, with Board expenses of \$20,409; year two payments to NECA will total \$25,000. Payments to the external auditor for year one and for year two total \$22,000 per year.

With respect to the 1999 Funding process, Mr. Ricker reported that as of March 4, 1999, 3,241 forms have been received and entered into the database, reflecting total industry gross revenues of \$244 billion with net revenues of \$200.3 billion. Mr. Ricker also reported that 122 carriers did not file and will be subject to late filing fee. Approximately, 2,092 carriers fall into the \$100 minimum category; with 826 carriers in the less than \$1,200 category. There were 196 entities whose annual payment requirement is based on revenues in excess of \$1,200. The total billing for all U.S. carriers amounts to \$4.3 million. The NECA's web page and the NBANC page contain meeting minutes and activity announcements. The Canadian process has improved; therefore, NECA does not expect problems with future international payments for 1999.

Mr. Ricker explained that the year one factor for NANPA was .000022 applied against gross revenues less payments to other carriers for services; the factor for year two is .000020. Mr. Ricker reported that the downward adjustment was made after gathering a better understanding of the Fund's needs for year two. Also, NECA will deplete at least part of the year one surplus in year two.

J. NANPA Oversight Working Group. Co-Chair Andrea Cooper, AirTouch, provided the report to the Council. The annual performance evaluation will be completed by the April NANC meeting. In response to the action items from the February NANC meeting, Ms. Cooper reported that the NANPA performance survey was released with a cover memorandum from Chairman Hasselwander, with a due date of March 22, 1999. The NANPA Working Group indicated that it would accept late-filed responses to the survey. Linda Hyman, Texas Public Utilities Commission, is collecting the responses. Ms. Cooper expressed thanks to the NANC representatives of industry associations who assisted in the wide-dissemination of the survey through their respective association newsletters, bulletins, web sites or other means: ALTS, Comptel, OPASTCO, PCIA, USTA. The survey and memorandum were posted to the NARUC web page. Additionally, NCTA ensured that its key members were notified as well.

Ms. Cooper reported on the Working Group meeting held on February 24 in Walnut Creek, California, at which Bruce Bennett, NANP CO Code Administration, demonstrated a Part I input, and how the overall CO Code Administration process is conducted. The site visit was part of the overall performance evaluation to be completed by the April NANC meeting. Additionally, representatives

from Lockheed Martin met with the Working Group that evening and had a fruitful two way dialogue addressing performance concerns. Further, the senior NPA relief planners will meet face-to-face with the NANPA Oversight Working Group at its Dallas meeting. The WG will meet again, April 6-8, in Denver to finalize the report. The report will be available electronically to the NANC by close of business Friday, April 16, 1999.

Ms. Cooper noted that NANPA's Annual Report, as required by FCC rule, has been received and Lockheed Martin has provided copies for NANC members and for the public.

Ms. Cooper reported that the Working Group had nominated a new co-chair, Pat Caldwell, BellSouth, to replace former co-chair Brent Struthers and requested NANC approval of the co-chair selection. The nomination was approved by the full NANC. Ms. Cooper also expressed participation concerns raised with respect to the NANC calendar of events. She was advised that the issue would be considered by the Steering Group that evening.

K. NANPA Report on Exhaust Study Review Team. Tom McGarry, Lockheed Martin, presented the report and handout to the Council. The Lockheed Martin/CIS and industry team held its first meeting on March 9-10. The NPA exhaust model (top down) was reviewed and NANPA captured items that required further discussion and/or investigation. There were action items generated for NANPA that will be addressed at the next meeting scheduled for March 30-April 1. The Team also reviewed the CO Code Demand model (bottom up). NANPA committed to providing a more detailed review of the assumptions and parameters of the model at its next meeting.

Discussion centered on what the precise output of the Team would be. Chairman Hasselwander stated that the objective is to bring back a report that had as much consensus as possible, for guidance on the probability distribution of exhaust. If there are disagreements with the output, NANC members may state them or provide minority opinions to the final report; the report should represent a majority view of the folks that worked on this effort. The assumptions that underpin the model should be well-defined. In addition, there must a basis for changes to those assumption either by argument or supporting data. The sensitivities of the model to certain variables should be noted. The report will be produced by the NANPA. Chairman Hasselwander further stated that given that a NPRM, in response to the NANC report on number optimization, is on the horizon, this work effort is very important and reminded the Council that this is a collaborative effort.

Discussion echoed Chairman Hasselwander's statement. Several members expressed concerns, adding that entities should set aside personal agendas and come to the table willing to establish agreement on baseline assumptions and establish a ~~A~~date range@for NANP exhaust. Other members noted that the industry needs the best information possible by the April meeting, even though the activity will continue thereafter.

Chairman Hasselwander added that the Lockheed Martin/NANC Team should develop and maintain a record of the exhaust meeting substance, capturing the essence of each meeting. The end report should be sufficiently detailed to look at any statistical analysis and follow the path to reach the conclusions contained in the report. As a practical matter, Lockheed Martin will author the report and the team/group will review it. Chairman Hasselwander reiterated that the NANC needs the best

product possible by the April meeting.

Scheduling Conflicts. The NANC briefly discussed scheduling conflicts. Given the limited number of industry participants with numbering expertise to work many of these issues, NANC needs to prioritize what needs to be accomplished first. It was agreed that a Steering Group conference call would be scheduled to discuss this issue and work out principles by which to attempt to avoid scheduling conflicts. The Steering Group conference call will be held on March 23, at 4 p.m., EST for one hour. An international bridge number will be provided to accommodate participants attending the INC meeting in Trinidad.

L. Steering Group Report. Co-chair Vince Majkowski provided the report to the Council. In Chairman Hasselwander's absence, NANC Co-Chair Ron Binz chaired the March 16 Steering Group meeting. Four items were on the agenda. Regarding the issue of audits, the NANPA provided an update and stated that one ILEC and two wireless companies had volunteered to be auditees. Bruce Armstrong, Colorado PUC, reported on the issues raised by the Colorado Commission, with respect to non-certified carriers receiving CO codes. Bruce Armstrong and Ron Connors agreed to work together to find solutions to issues reported by the Colorado Commission.

An update from the NANC ad hoc group reviewing the Lockheed Martin response on thousands-block pooling administration was provided by Peter Guggina, MCI WorldCom, who noted that the group has requested additional information and clarification from Lockheed Martin. The Steering Group asked that Peter Guggina continue in the leadership role on this effort and Mr. Guggina agreed.

Finally, Mr. Majkowski reported that one procedural item, relating to operating principles for the NANC, was carried over to the April Steering Group meeting.

M. Issue Management Group LM CIS Petition (CIS IMG) Chairman Hasselwander opened the continued discussion on the CIS petition. Chairman Hasselwander noted that a Public Notice, DA 99-516, had been released on March 15, extending the time for the NANC recommendation to the FCC on this issue until March 31, with general public comment due by April 16, 1999. Chairman Hasselwander noted that the NANC had been asked to make a specific recommendation on the Lockheed Martin request, putting aside the question of whether Lockheed Martin had legally defaulted on its obligations under the NANP.

Peter Guggina, MCI WorldCom, stated that he did not feel that the NANC was in a position to do that today. Mr. Guggina noted that the NANC had just received feedback on the IMG criteria from both Lockheed Martin and Mitretek. It was suggested the NANC should schedule a conference call within the next 10 days to complete its discussion and analysis.

Ted Noeker, GTE, suggested NANC lay out the details for the FCC and emphasize that the neutrality criteria is but one criteria and not the only factor to be considered on whether to grant the divestiture and allow the new entity to assume the NANP responsibilities. Larry Krevor, Nextel, added that it is in Warburg, Pincus' and CISAC's best interest to safeguard its financial investment. Following further discussion, the NANC agreed to schedule a conference call for Tuesday, March 30, 3-5 p.m. A public

notice announcing the call will be released no later than March 18. The conference call will provide an opportunity for answers to the questions posed by the NANC today.

M. Other Business. The NANC agreed to provide funding for NARUC participation in the Lockheed Martin NANP Exhaust Team meetings being held in Washington, D.C. Funding for representation of one NARUC member per meeting will be provided. To date, Erin Duffy, North Carolina Commission, or Bruce Armstrong, Colorado Commission, have participated in the exhaust model study.

Copies of the March 17, 1999 Lockheed Martin, NANPA, first Annual Report were provided to the Council.

N. Next Meeting: April 21-22, 1999, FCC Commission Meeting Room.

VI. Action Items and Decisions Reached.

1. LNPA Working Group Report. USTA and OPASTCO stated willingness to publicize the work and activities of LNPA Working Group in an effort to inform the wireless industry of the requirement to implement local number portability by November 2002. The informational release will be based on material developed in cooperation with the NANC wireless representatives.

LNPA Working Group will revisit the use of the word "moratorium" to describe the Y2K "quiet period." USTA offered to work with manufacturers to develop statement to clarify what changes to the NPAC and other systems will be permitted and what changes should not be permitted during the critical Y2K period.

2. NEXTLINK Presentation. Assemble an issue management group (IMG) regarding LNP implementation issues. Seven volunteers offered to work the issues. NEXTLINK will coordinate the activities. The IMG will report back to NANC at the April meeting on the following: (a) What is the best way to address LNP implementation concerns (*e.g.*, throughput and porting volumes) within the industry; (2) what should be the role of the LNPA Working Group; and (3) what are the options for the industry to address such issues when they arise.
3. INC 500/900 Portability Report. The NANC requested a presentation stating the baseline commitment to pooling of both 500 and 900 codes as part of the INC report at the next NANC meeting.
4. California Court Reporter Discussion. The California condition is recognized as an exception. Support for the court reporter function will be provided by the NANPA to the end of the current contract. The NANC Chair will provide a letter to NANPA advising of the decision, with a copy to the Chief, Common Carrier Bureau.
5. Cost Recovery Working Group Report. In response to the March 2, 1999, letter from the Illinois Number Pooling Subcommittee to the NANC Cost Recovery Working Group regarding the development of a recommendation for the treatment and funding of common

- pooling costs, the working group will evaluate and develop a response to the questions presented therein and will report back at the April NANC meeting.
6. NANPA Oversight Working Group Report. Responses to the survey questionnaire are due by March 22, if possible, but may be accepted later, if necessary. Pat Caldwell, BellSouth, was confirmed as the new NANPA Oversight Working Group Co-Chair.
 7. Lockheed Martin NANP Exhaust Review Team. The NANC needs the best view available by the April meeting. Beyond April, this will be an ongoing activity into the future to assess effects of experience and further refine model as necessary. Meeting records should be of sufficient detail to capture the essence and substance of events. The April report must be clear and explain the basis for conclusions of the report. Lockheed Martin NANPA will write the report and it will be reviewed by the Exhaust Review Team. The report will identify sensitivities and assumptions subject to the greatest doubt and/or controversy.
 8. Scheduling of Meetings. There will be a Steering Group Conference Call, to work the issue of scheduling conflicts, on March 23, 1999, at 4 p.m.
 9. Steering Group Report. Peter Guggina will continue in the leadership role for review of the Lockheed Martin response to the Thousands Block Pooling Administrator Requirements Document. The details of the Lockheed Martin response are subject to confidentiality/nondisclosure agreements. Further discussion and clarification of certain issues and questions presented by the IMG will be addressed and will be reported out at the April Steering Group meeting.
 10. CIS Petition Issue Management Group (CIS IMG) Report. There will be a NANC conference call on March 30, 1999, from 3-5 p.m., to determine NANC's response and recommendation to questions presented by the FCC in the Public Notice DA 99-347 (rel. Feb. 17, 1999). Chairman Hasselwander and Co-Chair Binz will provide the Aseed@document for discussion on the conference call.
 11. NARUC Funding. Agreement reached on an assessment of NANC members to fund one NARUC member to attend the Exhaust Review Team meetings.