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Federal Communications Commission
Office of Secretary

May 1, 1997

CC Docket no. 95-116 In the Matter of Telephone Number Portability

~~CC 92-237~~

The Honorable Reed Hundt
Chairman
Federal Communications Commission
1919 M Street N.W.
Washington, D.C. 20554

Dear Chairman Hundt :

As Chairman of the North American Numbering Council I am hereby forwarding to you on behalf of the Council its recommendation with respect to local number portability issues as required in the above cited Docket.

Sincerely,

Alan C. Hasselwander
Chairman, North American Numbering Council

Enclosure

CC: FCC Commissioners

Rachelle Chong

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Acting Secretary

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North American Numbering Council

Local Number Portability Administration Selection Working Group

April 25, 1997

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1. EXECUTIVE SUMMARY

1.1 The LNPA Selection Working Group prepared this report to address all issues delegated to North American Numbering Council (NANC) by the Federal Communications Commission (FCC) regarding Local Number Portability Administration (LNPA) selection. The report begins with an Introduction (see Section 2) that gives a brief background concerning formation of the LNPA Selection Working Group by NANC followed by the mission, composition of both the Working Group and related Task Forces, and the processes used in administering Working Group activities. An overarching operating premise is discussed where the state/regional activities that preceded formation of the Working Group were reviewed and compared to recommended national selection criteria to determine the adequacy of the selection process.

1.2 The activities of the Working Group and associated Task Forces focused primarily on the wireline segment of the industry, therefore a brief section (see Section 3) regarding potential issues involving wireless number portability follows the Introduction.

1.3 The LNPA Vendor Selection section (see Section 4) defines in some detail the criteria governing the selection process followed by a description of the actual process including an example of the neutrality requirement placed on LNPA vendors. Also included is a discussion of limited liability companies (LLCs) formation and the LLC processes designed to maintain competitive neutrality. The LLC discussion concludes by describing the LLC attributes that support the remaining selection criteria and legal and practical considerations. This section sets the stage for the recommendations made in Section 6.

1.4 Section 5 contains descriptions of the reports developed by the two (2) associated Task Forces. The LNPA Architecture Task Force report, "Architecture & Administrative Plan for Local Number Portability", is contained in Appendix D. The report of the LNPA Technical & Operational Requirements Task Force is contained in Appendix E. These documents support and expand on the contents of the Working Group report.

1.5 The Working Group Recommendations section (see Section 6) describes the recommendations developed in response to the list of seven (7) determinations left to NANC by the FCC regarding LNPA.

1.6 The Future Role section (see Section 7) describes seven (7) areas relating to LNP implementation and ongoing operation where the Working Group believes there is a continued need for national oversight. Each area is described and a recommendation made concerning future oversight activities. Certain of these are critical issues that require early NANC attention.

2. INTRODUCTION - LNPA SELECTION WORKING GROUP

2.1 Background

2.1.1 On July 2, 1996, the FCC ordered all local exchange carriers (LECs) to begin the phased deployment of a long-term service provider local number portability (LNP) method in the 100 largest Metropolitan Statistical Areas (MSAs) no later than October 1, 1997, and to complete deployment in those MSAs by December 31, 1998[1]. A separate schedule was established for Commercial Mobile Radio Services (CMRS) provider portability. In addition to setting the schedule and addressing LNP performance criteria, the FCC made two important determinations regarding the appropriate database architecture necessary for long-term LNP. First, the FCC found that an architecture that uses regionally-deployed databases would best serve the public interest; and second, the FCC determined that the LNP databases should be administered by one or more neutral third parties[2].

2.1.2 In support of those findings, the FCC directed the NANC, a federal advisory committee, to "select as a local number portability administrator(s) (LNPAs), one or more independent, non-governmental entities that are not aligned with any particular telecommunications segment, within seven months of the initial meeting of the NANC".[3] The FCC directed the NANC to make several specific determinations regarding the administration selection process, the overall national architecture, and technical specifications for the regional databases. At the initial meeting of the NANC, the committee established the LNPA Selection Working Group to review and make recommendations on these database administration issues. Two sub-groups, the LNPA Architecture Task Force and the LNPA Technical & Operational Requirements Task Force, were also established to support the Working Group efforts.

2.1.3 This report documents the organization and processes adopted by the Working Group and its Task Forces, and presents and supports recommendations on all issues designated for their review.

2.2 Mission

2.2.1 The LNPA Selection Working Group was formed to address and to submit recommendations on all issues delegated to the NANC by the FCC regarding LNP administration.

[1] First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, July 2, 1996 (LNP Order). On March 11, 1997, the FCC released a First Memorandum Opinion and Order on Reconsideration, in which the LNP deployment periods for the first two implementation phases were extended. However, the essential requirements of the LNP Order as they relate to the Working Group's efforts were unchanged. The LNP Order also addressed other issues not germaine to the current LNPA Selection Working Group activities, including: Interim portability measures, service and location portability, 500 and 900 number portability, and cost recovery for long term LNP.

[2] *Id.* at ¶ 91-92.

[3] *Id.* at ¶ 93. The initial meeting of the NANC was held on October 1, 1996. Therefore, the deadline for the NANC determinations was established as May 1, 1997.

2.2.2 At the initial LNPA Selection Working Group meeting, as part of the overview of the FCC LNP Order, the FCC staff presented a list of determinations left to NANC regarding LNP. The Working Group used this as the comprehensive list of determinations requiring review. Following is the list as presented by the FCC staff:

1. What neutral third party or parties will be the local number portability administrator(s);

2. Whether one or multiple LNPA(s) should be selected;

3. How the LNPA(s) should be selected;

4. Specific duties of the LNPA(s);

5. Geographic coverage of the regional databases;

6. Various technical standards, including interoperability operational standards, network interface standards, and technical specifications; and

7. Guidelines and standards by which the NANPA and LNPA(s) share numbering information.

2.3 Composition

2.3.1 The LNPA Selection Working Group is open to all concerned parties and is representative of all segments of the telecommunications industry. A list of the member companies and associations, as well as the representatives that generally attended meetings, is contained in Appendix A. Also, members of the FCC staff attended most of the meetings held by the LNPA Selection Working Group.

2.3.2 The LNPA Selection Working Group oversees two (2) task forces that are assigned various functions. These groups are the LNPA Architecture Task Force and the LNPA Technical & Operational Requirements Task Force. Both Task Forces also have an open membership policy and are representative of the total telecommunications industry. A list of the member companies and associations, as well as the representatives that generally attend meetings, is contained in Appendix A. In addition, members of the FCC staff occasionally attend the meetings of the two (2) Task Forces.

2.4 Assumptions and Processes

2.4.1 The LNPA Selection Working Group adopted the following working assumptions to govern the operation of the group:

A. Membership in the Working Group adequately represents the industry.

B. Membership and participation in meetings is unrestricted, but a given entity exercises only one (1) vote on any given issue.

C. Decisions are reached by consensus, which does not require unanimous consent, but is not reached if the majority of an affected industry segment disagrees.

D. Members elect co-chairs from the Incumbent Local Exchange Carrier (ILEC) and Competitive LEC (CLEC) segments of the industry to administer Working Group activities and determine consensus when required.

E. Unresolved issues are escalated to the NANC Steering Committee and/or the full NANC when required.

F. Only issues that fall within the scope of the LNPA Selection Working Group mission outlined in Section 2.2 are considered by the working group.

2.5 Operating Premise

2.5.1 At the outset, the LNPA Selection Working Group recognized that industry representatives were participating in state/regional LNP workshops, and a significant effort had already occurred to select LNPA vendors and to develop technical specifications. Efforts were well underway in at least one state in each of the seven (7) RBOC regions to select a neutral third-party LNPA vendor. For example, Requests for Proposals (RFPs) had been developed and issued in each region. In the Midwest (i.e., Ameritech) region a vendor was already selected and LNPA development was underway. In addition, the Working Group was aware that the RFPs issued in each region contained substantially similar documents that define the NPAC SMS requirements and the mechanized interface requirements.

2.5.2 In light of the considerable, and apparently consistent, state/regional LNP activities, the Working Group decided to first undertake an in-depth review and assessment of these efforts, rather than construct a separate and competing vendor selection plan. Therefore, the Working Group adopted the process of first reviewing state/regional efforts and then establishing national criteria. The Working Group would then develop national LNPA criteria, drawing largely from existing efforts, but adding and/or revising those efforts as deemed necessary. Once final national criteria had been established, state/regional selections that met these criteria could be recommended to the NANC for endorsement.

2.5.3 In order to accomplish the necessary review of state/regional efforts, the Working Group developed the following work plan and identified whether a Task Force or the Working Group was responsible for each item:

1. Create a repository of industry documentation on current efforts (e.g., RFPs, Interoperability Interface Specification, Generic Requirements Specification, etc.). Item assigned to the LNPA Working Group.

2. For each of these documents, examine technical and operational aspects to see how/if they differ. Item assigned to the LNPA Technical & Operational Task Force.

3. For those aspects that differ, determine if differences need to be eliminated. Item assigned to the LNPA Technical & Operational Task Force.

4. Establish a single set of technical and architectural criteria that each regional system must meet in order to be endorsed by the NANC. Item assigned to both the LNPA Technical & Operational and the LNPA Architecture Task Forces.

5. Determine specific duties of the LNPA(s). Item assigned to the LNPA Architecture Task Force.

6. Ensure that all geographies are covered. Item assigned to the LNPA Architecture Task Force.

2.5.4 Although the Working Group determined to make use of state/regional LNPA efforts, it did not relinquish its responsibility to create national standards and criteria for LNPA selection and operations. During the time period when the LNPA Selection Working Group was developing national LNPA criteria, the state/regional teams continued to move forward with their efforts. As a result, an iterative process developed between the national and regional efforts, with the Working Group and Task Forces becoming the forum for resolution of disputed state/regional issues. For example, a disagreement among carriers in state workshops concerning the LNP provisioning flows was brought to the LNPA Technical & Operational Requirements Task Force for resolution. After an extensive effort, the Task Force was unable to reach consensus and escalated the issue to the LNPA Selection Working Group, who subsequently brought it to NANC to inform it of the lack of consensus. NANC encouraged the Working Group and Task Force to continue working the issue and gave instructions to report the results by a given date. The Task Force continued discussions and eventually adopted a compromise acceptable to all members. This example demonstrates the role of the Working Group and Task Forces in providing a lead role in national LNP activities. Similarly, issues concerning snap back, line based calling cards, porting of reserved and unassigned numbers, Service

Provider-to-Service Provider audits, etc. were brought by the regions to the Task Forces for resolution. Each of the issues brought to the Task Forces were resolved by the Task Forces or, in some cases, were escalated to the Working Group and NANC; all issues were resolved and subsequently adopted by the regions.

2.6 Meetings

2.6.1 The first meeting of the LNPA Selection Working Group was held on November 8, 1996. At this meeting members were introduced, work activities were discussed, and the co-chairpersons were selected. Subsequently, ten (10) Working Group meetings were held, where the activities of the Task Forces were reviewed and escalated issues considered. Meetings were open to all interested parties from both member and non-member companies and associations. The dates and locations of all meetings are shown in Appendix B.

2.6.2 The first meeting of both Task Forces occurred on November 18, 1996. At these meetings, co-chairpersons were selected and potential work plans discussed. Subsequently, the LNPA Architecture Task Force met eight (8) times and the LNPA Technical & Operational Requirements Task Force met seventeen (17) times. The Task Force teams adopted the same open meeting policy as that used by the Working Group. The dates and locations of all Task Force meetings are shown in Appendix B.

2.6.3 Regular reports of the LNPA Selection Working Group's activities were made to the NANC by co-chairpersons. LNPA Selection Working Group issues that were not resolved by reaching consensus were referred to the NANC for resolution.

2.6.4 Minutes of the LNPA Selection Working Group meetings are available on the FCC website (see Section 2.7.2 for website address).

2.7 Documentation

2.7.1 The LNPA Selection Working Group and associated Task Forces developed a communication process using e-mail to distribute meeting notices, minutes, and other correspondence, followed by posting most documents to a website.

2.7.2 Following are the address for the website provided by the FCC and a list of documents it contains.

http://www.fcc.gov/ccb/Nanc

- Meeting minutes from the Working Group and Task Forces
- Meeting Notices
- Conference Call Notices
- LNPA Vendor Selection Schedule (Appendix C)

- This one-page document identifies the significant activities of the vendor selection process and displays the due dates for each activity by region
- Request For Proposals (RFPs)
  - The RFPs prepared by the regional LLCs are documents issued to primary vendors to invite participation in submitting proposals for developing, implementing, and operating the regional Number Portability Administration Center - Service Management System (NPAC SMS) (i.e., LNPAs). Contained in the RFPs are the requirements necessary to prepare such a bid.
- LLC Operating Agreements
  - These are the agreements in each region that define the operational requirements for each LLC.

2.7.3 Following is the address for a website containing technical NPAC SMS documents:

http://www.npac.com

- NANC Functional Requirements Specification (FRS)
  - The NANC FRS defines the functional requirements for the NPAC SMS. The NPAC SMS is the hardware and software platform that contains the database of information required to effect the porting of telephone numbers.

- NANC Interoperable Interface Specification (IIS)
  - The NANC IIS contains the information model for the NPAC SMS mechanized interfaces. These interfaces reflect the functionality defined in the NANC FRS.

2.7.4 Following are the address for a website provided by the Illinois Operations Committee and a list of documents it contains:

http://www/ported.com

- Illinois NPAC SMS RFP
- Generic Switch Requirements
- LNP Test Plan
- Generic Operator Services Requirements
- Generic Download SCP Requirements Document

3. WIRELESS NUMBER PORTABILITY

3.1 The work plan executed by the LNPA Selection Working Group and related Task Forces was directed primarily to the wireline portion of the industry and did not fully address wireless concerns. The assumptions used in preparation of the "Architecture and Administrative Plan for Local Number Portability" explicitly excluded wireless. The LNPA Technical & Operational Requirements Task Force did not consider wireless concerns in depth during NPAC SMS requirements development. Therefore, modifications to the Functional Requirements Specification (FRS) and the Interoperable Interface Specification (IIS) may be required to support wireless number portability.

3.2 Discussion of potential impacts of wireless number portability was deferred to insure completion of requirements associated with wireline LNP implementation to comply with the FCC deployment schedule. The Cellular Telecommunications Industry Association (CTIA) and other standards and industry forums are currently addressing number portability technical solutions. Therefore, it is necessary to develop and update the FRS and IIS documents with wireless requirements and to develop a schedule to include these changes in a subsequent NPAC SMS release.

4. LNPA VENDOR SELECTION

4.1 Criteria Governing the LNPA Selection Process

4.1.1 The Telecommunications Act of 1996 and the FCC's July 2, 1996 LNP Order established mandatory criteria (Criteria, individually Criterion) for the selection of the LNPA and all related activities. Central among these Criteria are competitive neutrality, which is a requirement for the third party LNPA itself (LNP Order, ¶93), the LNPA's administrative activities (LNP Order, ¶92), and the manner by which LNPA costs are borne by telecommunications carriers (1996 Act, §251(e)(2)). Additional significant Criteria that apply to the LNPA selection process include: (1) equal and open access to LNP databases and numbers (1996 Act, §251(e)(1) and LNP Order, ¶98)); (2) uniformity in the provision of LNP data (LNP Order, ¶91); (3) cost effective implementation of LNP (LNP Order, ¶¶91, 93, 95); (4) consistency in LNPA administration (LNP Order, ¶93); (5) LNPA compliance with NANC-determined technical and functional proficiency standards (LNPA Order, ¶¶95, 99); and (6) regionalized LNPA deployment within the FCC deployment schedule (LNP Order, ¶91 and Appendix F).

4.2 Mechanics of the LNPA Selection Process

4.2.1 The LNPA Selection Working Group reviewed the state/regional selection process and determined that each and every action undertaken as part of the LNPA selection process conforms to, and thus satisfies, the Criteria. These actions consist of a sequence of carefully planned steps taken by telecommunications service providers interested in advancing implementation of LNP in each of the seven (7) regions where LNPAs are being selected. The Working Group determined that all of the regions were following substantially similar vendor selection processes, as documented in Appendix C, LNPA Vendor Selection Schedule. The Working Group determined that any differences in vendor selection process were inconsequential and of an administrative nature only.

4.2.2 Service Providers in each region first consulted with a broad community of groups interested in LNP, including state regulatory commissions, providers of database services and carriers of all types, to develop request for proposals (RFPs). The RFPs were then widely distributed to firms that could provide NPAC SMS services (Vendors). The Service Providers received and answered RFP-related questions raised by Vendors. A crucial element of the RFPs was the imposition of a neutrality requirement for all Vendors. For example, Section 1.3.4 of the Mid-Atlantic Region's RFP provided:

A. In order to prevent a real conflict of interest, the Primary Vendor/System Administrator must be a neutral third party that has no financial or market interest in providing local exchange services within the United States.

B. To prevent such a conflict of interest, the Primary Vendor/System Administrator "NPAC" function *will not* be awarded to:

1.) any entity with a *direct material financial interest* in the *United States portion* of the North American Numbering Plan (NANP), and number assignments pursuant to the Plan, including (but not limited to) telecommunications carriers;

2.) any entity with a *direct material financial interest* in manufacturing telecommunications network equipment;

3.) any entity affiliated in other than a deminimus way in any entity described in 1.) or 2.) above, and;

4.) any entity involved in a contractual relationship or other arrangement that would impair the entity's ability to administer numbers fairly under the NANP and in accordance with the procedural delivery schedule set forth in the RFP.

Identical or substantially similar neutrality requirements appeared in the other six (6) RFPs. The Vendors ultimately selected in the seven (7) regions, Lockheed Martin and Perot Systems, have thus established their neutrality following a review and approval screening process by seven (7) different groups of Service Providers conducting their own independent investigations in their seven (7) respective regions.

4.2.3 This screening process was implemented as part of a pre-qualification procedure undertaken by the Service Providers. Pre-qualification also considered such Vendor attributes as financial responsibility, experience and ability to deliver on time. Subsequently, the Service Providers conducted an exhaustive evaluation of those Vendors satisfying the pre-qualification requirements, which primarily focused on the proficiency, pricing and contract requirements of Vendors. By these pre-qualification and evaluation procedures, the Service Providers sought out qualified Vendors that could provide timely, cost-effective and technically proficient services in conformity with the Criteria. This two-step review process culminated in the Service Providers' selection of the best qualified Vendors.

4.2.4 Those Service Providers that organized themselves into a contracting entity (see Section 4.3 below) then began negotiations with one or more best qualified Vendors of a master contract that would govern the obligations and rights of the parties and establish the conditions for the provision of LNP data to all utilizing carriers. By requiring compliance with certain technical requirements (see Section 6.7) for the provision of LNP data to all utilizing carriers, the master contract conformed to the Criterion which requires uniformity of provision of LNP data. By conducting negotiations with one or more Vendors, those Service

Providers secured competitive pricing in maximum conformity with the cost effectiveness Criterion.

4.2.5 Currently, Master Contract negotiations are either just completed or near completion. It is contemplated that upon execution of a master contract with the winning Vendor (LNPA), those Service Providers that organized themselves into a contracting entity (see Section 4.3 below) will conduct on-going supervision of the LNPA. As authorized under the terms of the master contract, those Service Providers will oversee the LNPA with regard to quality control, system modifications and enhancements, contract administration and timely delivery. It is fully anticipated that these supervisory activities will be conducted in strict conformity with the Criteria.

4.2.6 Finally, the experience of the Service Providers conducting this sequence of events has been that a minimum of 12-18 months is required. Service Providers have found that concerted and intense efforts are necessary to complete this sequence within such a time period. It is for this reason that Service Providers have proceeded to launch LNPA selection efforts in advance of NANC's LNPA selection date of May 1, 1997. To commence such efforts on or about May 1, 1997, would effectively preclude any prospect of timely compliance with the FCC's deployment schedule.

4.3 Organization of the LNPA Selection Process

4.3.1 To implement the extensive sequence of LNPA selection activities described in Section 4.2 above, the Service Providers needed an organization that could perform all these actions and take on all the associated risks and responsibilities. The Service Providers also recognized that, in light of the LNP Order, any such organization and all its activities would be required to conform to the Criteria.

4.3.2 Based on extensive research and discussion, the Service Providers concluded that the optimal means of conducting these activities in conformity with the Criteria were to operate jointly and equally with one another in an organization open to any carrier interested in porting numbers. Following significant legal research, the Service Providers chose the limited liability company (LLC) as the most advantageous organizational form. Other organizational forms, including a C corporation and a limited partnership, were deemed viable alternatives, but based on the circumstances surrounding LNPA selection, the LLC was determined to be best suited to accomplish all objectives and simultaneously conform to the Criteria.

4.4 LLC Attributes Complying with the Competitive Neutrality Criteria

4.4.1 In each of the seven (7) regions where LNPAs are being selected, LLCs have been established and specifically designed to maintain competitive neutrality. Membership in the LLC is open to any local exchange carrier, whether or not

certified, intending to port numbers in the region. This open membership policy would apply equally to incumbent and competing local exchange carriers, as well as to any new entrant into the business of local exchange service. To fund the LLC's administrative expenses, capital contributions are imposed equally on LLC members (in modest allotments of $10,000 to $20,000). All these requirements permit open and barrier-free membership in a manner that treats all local exchange carriers equally.

4.4.2 Each LLC member possesses a single, equal vote in all matters decided by the LLC. Most LLC decisions are made by a simple majority vote. In recognition that under such conditions the voting power of a single member can be diluted by the collective votes of other members, and that this circumstance may not always be appropriate for certain matters of significant importance, LLCs have required that certain decisions be made unanimously or by super majorities. These extraordinary majorities have been required for such decisions as LLC operating agreement amendments, master contract execution, debt issuance and mergers. To maintain the one-vote-per-member policy in an industry filled with affiliated interests and constantly evolving corporate structures among carriers, affiliated members are collectively entitled to a single vote. Affiliation thresholds are at 10 percent (or 15% in the Western Region LLC), in conformity with the definition of affiliation established in the 1996 Act. Because of various business and policy considerations, the West Coast Region LLC adopted a 50% affiliation threshold. The overall voting regime of the LLC guarantees each member an equal voice and in appropriate circumstances an equally magnified voice or equal veto power, and thus has carefully and effectively achieved competitive neutrality among members.

4.4.3 The combination of open membership and a one-vote-per-member policy facilitates full and vigorous neutrality in the actions of LLCs. The LLCs are comprised of RBOCs, CLECs, and carriers providing local services in combination with an array of other services. All of the LLCs are open to CMRS provider membership at such time as they intend to or are porting numbers. These members are in competition with each other. With equal voices in LLC decision making, these competitors will scrutinize all activities for any hint of favoritism, and thereby act as an effective check and balance on each other.

4.4.4 The LLC is a flexible and simple organization. These characteristics are uniquely well suited to permit an LLC to establish its own governance, as well as to submit to the governance of federal and state regulators. This has led all seven (7) LLCs, by the terms of their respective operating agreements, to empower themselves to comply with any and all directives from such regulatory authorities. LLCs have also informed LNPAs that they, too, shall comply with regulatory directives, and by language to this effect in both the RFPs and the master contracts, LNPAs are so obligated by force of contract. Such actions were deemed necessary by the LLCs to permit regulatory authorities to govern the LLCs' compliance with competitive neutrality. Such actions were deemed

appropriate by the LLCs in light of such measures as the FCC's delegation to NANC of LNPA selection and oversight recommendations activity. Under these circumstances, the LLCs determined to continue to move forward on deployment activities knowing that with full and unqualified submission by LLCs to regulatory directives, competitive neutrality could always be maintained by regulators.

4.4.5 This express action by LLCs to subject to regulatory directives is a crucial element of the LLCs. In its LNP Order, the FCC recognized the significant progress of LNPA selection efforts in the states made possible by the LLC entities. The FCC raised no concern or objection to this early progress in its LNP Order, nor did it discourage further progress. In its more recent March 11, 1997 Order, the FCC applauded and supported these ongoing commitments by the LLCs to make LNP a reality in their respective regions.

4.4.6 By submitting to regulatory directives, the LLCs allow for the resolution of disputes in a competitively neutral manner. Each LLC has established a dispute resolution process that provides in part for the resolution of disputes by the directive of an appropriate regulatory authority. Because disputes can be expected to center precisely on competition issues, these dispute resolution processes greatly enhance the ability of regulators to maintain competitive neutrality. Moreover, in the event that a permanent NANC LNPA dispute resolution process were established (see, Section 7.1.1, Future Roles), unresolved LLC disputes could be submitted to such a NANC process, as appropriate.

4.4.7 The conduct of business by LLCs is a process open to any interested person. LLC meetings are public with the exception of certain limited portions of those meetings deemed by the members or Vendors to be proprietary, due to discussion of such sensitive matters as the negotiation of the master contract. Every element of the LLCs, including powers, composition, membership criteria, activities and voting, are set forth in written operating agreements, all seven (7) of which are freely available to any interested person (and are on the FCC's website discussed in Section 2.7.2). This openness permits regulators, as well as non-member carriers and the public, to verify that the LLCs are conducting their affairs in a competitively neutral manner.

4.4.8 LLCs facilitate the management of financial risk in a competitively neutral manner. Each LLC has obtained liability insurance, separate and apart from any coverages or self insurance of individual LLC members, covering the full scope of affairs conducted by the LLC and its members. Each LLC member shares equally in risk management by paying an equal share of the insurance premium, and each LLC member derives an equal benefit of the full amount of the insurance coverage. An incidental benefit of this risk management strategy is that the entire risk of LNPA selection falls on and is managed by the LLC, thereby assuring that other persons, including non-members, regulators and end-user customers, are shielded from risk.

4.4.9 Significantly, those carriers that are ineligible for LLC membership or for whatever reason choose not to become an LLC member are not in any way disadvantaged in their use of the LNPA's services. Thus, such carriers will also be permitted to operate in a competitively neutral environment. This is because LLC membership has been specifically designed *not* to be a prerequisite to utilization of the LNPA's services. Any telecommunications carrier that requires rating or routing or any entity that performs billing for such a telecommunications carrier, including both members and non-members of the LLC, will have non-discriminatory access to the LNPA's services. To do so, a user agreement (User Agreement) must be executed directly with the LNPA.

4.4.10 This open and equitable access to the LNPA through execution of a User Agreement also facilitates competitively neutral conditions by which utilizing carriers obtain services from the LNPA. The LLCs recognize that NPAC SMS cost allocation and recovery will be determined by the FCC and/or state regulator jurisdictions. However, each User Agreement will set forth standard cost elements and prices that could be uniformly charged to utilizing carriers if so required by the FCC and/or state regulators. Thus, each User Agreement will ensure that each utilizing carrier will be subject to uniform terms, conditions and potentially prices for the LNPA's services. These terms, conditions and prices have been or will be extensively negotiated by the LLC to be as low and favorable as possible, and are set forth in the master contract so as to be enforceable by law upon the LNPA. Significantly, this approach guards against any utilizing carrier obtaining preferred treatment from the LNPA, which clearly would violate competitive neutrality. For practical reasons, each User Agreement may vary to accommodate engineering or technical modifications suiting particular network configurations, so long as no other utilizing carrier is placed at a competitive disadvantage.

4.5 LLC Attributes Complying With Other Criteria

4.5.1 The LLCs are specifically designed and well suited to conform to the Criterion calling for regionalized deployment by LNPA. The formation of an LLC within each RBOC region, combined with the open membership policy for any local exchange carrier intending to port numbers in the region, facilitates development on a regionalized basis. LLCs also are requiring in their RFPs and in their master contract negotiations that Vendors bid on the provision of NPAC/SMS services on a regionalized basis.

4.5.2 LLCs also conform well to the Criterion requiring consistency in LNP administration. Although the seven (7) LLCs are established under state laws, the LLC laws in the 50 states are substantially similar (in contrast, laws governing partnerships and other corporate forms contain wide variation among the states). Accordingly, the seven (7) LLCs are virtually identical in their structure and operation, and they are governed by operating agreements which are

also substantially similar (there are minor variations in operating agreement provisions reflecting certain policy and business determinations made on a region-specific basis). Accordingly, there will necessarily be substantial uniformity and consistency in the manner of contracting with and supervising of LNPAs.

4.6 LLC Attributes Addressing Legal and Practical Considerations

4.6.1 Early in the RFP process, it became clear to the Service Providers that LNPA selection necessarily entailed the procurement in each region of a large and sophisticated database service provider that would be deriving multi-million dollar compensation for regionalized deployment of its services. This presented several problems. There needed to be a single legal entity contracting with the LNPA to implement such a procurement, and such an entity had to be an acceptable and even attractive business venture to Service Providers that would comprise and govern it. Such a procurement had to be completed well within the FCC's stringent deployment schedule so as to permit NPAC SMS development and testing in advance of the deployment deadlines. Given the potential financial liabilities associated with such a business venture, Service Providers were initially quite reluctant to participate in joint contracting activity. LLCs were uniquely well suited to resolve all of these legal and practical concerns fully.

4.6.2 An LLC affords its members complete statutory protection from liability, whether in tort, contract or otherwise. All liability is assumed exclusively by the LLC itself, and any liability exposure can be fully managed and protected against by liability insurance coverages secured by the LLC. These advantages served to allay the liability concerns of Service Providers. No other corporate or organizational form possesses such attributes.

4.6.3 An LLC was a suitable, single legal entity with which an LNPA would agree to contract. The reality of procuring LNPAs is that they would not undertake the impractical approach of bidding or contracting with multiple organizations for a single service, nor would they contract with an entity that excluded any party intending to port numbers or newly enter the local exchange service market. The LLC, with its open membership policy allowing all interested Service Providers to be organized under the auspices of a single legal entity, created the conditions necessary for the LNPAs to proceed to contract.

4.6.4 An LLC was ideally suited as a flexible and easily governed organization that could quickly implement the procurement of an LNPA within the FCC's stringent deployment schedule. LLCs can be formed quickly, and unlike other corporate and organizational forms, they can make decisions and conduct their business with great speed and flexibility and without the statutory constraints, formalities and time requirements associated with more traditional corporate governance.

4.6.5 The LLCs are aware that NANC will ultimately review and act on the selection of LNPAs and determine the guidelines for LNP deployment. As part of this authority, NANC will review the full scope of all past and current LLC activity. The LLC's intention is, and has always been, to present its progress for NANC to embrace and adopt as NANC's own progress. Given the FCC's stringent deployment schedule, the LLCs reasonably believe that NANC will adopt (and alter as appropriate) the LLCs' significant progress as the common sense, practical course of action, rather than commence deployment efforts anew and recreate existing progress.

5. TASK FORCE REPORTS

5.1 LNPA Architecture Task Force Report

5.1.1 The LNPA Architecture Task Force developed the "Architecture & Administrative Plan for Local Number Portability" report for presentation of the Task Force's recommendations to the LNPA Selection Working Group. The report contains an overview of LNP, a brief history of LNP, the LNP performance criteria adopted by the FCC and a list of LNP assumptions. Following are recommendations concerning NPAC geographic coverage and the NPAC certification process including technical and business requirements and the NPAC roles and responsibilities.

5.1.2 A draft copy of the "Architecture & Administrative Plan for Local Number Portability" was provided to the NANC membership at their February 5, 1997, meeting. The draft provided information in advance of the delivery of the final report from the LNPA Selection Working Group.

5.1.3 See Appendix D for the complete "Architecture & Administrative Plan for Local Number Portability" report.

5.2 LNPA Technical & Operational Requirements Task Force Report

5.2.1 The LNPA Technical & Operational Requirements Task Force prepared the report contained in Appendix E for presentation to the LNPA Selection Working Group. The report consists of four (4) administrative sections followed by sections describing standards rationale and the contentious issues addressed by the team. The final sections contain a series of five (5) recommendations offered for consideration by the task force. Finally, five (5) appendices contain the major documents developed by the team.

5.2.2 A draft of this report was presented to the NANC membership at their February 26, 1997, meeting. NANC was requested to review the recommendations made in Sections 8 and 9 for early concurrence. The remaining sections were informational and were intended to prepare the NANC members for receipt of the final report in April.

5.2.3 See Appendix E for the complete "LNPA Technical & Operational Requirements Task Force Report".

6. LNPA SELECTION WORKING GROUP RECOMMENDATIONS

6.1 Introduction

6.1.1 The LNPA Selection Working Group used the determinations left to NANC as described in Section 2.2.2 as the comprehensive list of determinations requiring review and recommendation. Each of the determinations listed in Sections 6.2 through 6.8 below, reviews the process used by the Working Group to address them (i.e., to which Task Force the issue was assigned), where in a specific Task Force report the issue is addressed, a summary of the findings, the Working Group's recommendation, and justification for the recommendation.

6.2 LNP Administrators

- What neutral third party or parties will be the local number portability administrators?

6.2.1 Process

The issue was assigned to the LNPA Architecture Task Force.

6.2.2 Report Reference

See Section 4 of this report for description and justification of the regional vendor selection process. See also Section 12 of the "Architecture & Administrative Plan for Local Number Portability" contained in Appendix D for technical, business and architectural requirements that must be met by regional NPAC systems.

6.2.3 Summary of Findings

The Working Group reviewed the vendor selection processes used by each of the regional LLCs (described in detail in Section 4 of this report), and determined that selections made according to these processes met basic criteria for neutrality.

6.2.4 Recommendation

The Working Group recommends that the NANC approve the NPAC vendor selections made by the regional LLCs. The LLCs selected the following vendors for their respective NPAC region, subject to final contract negotiation.

Northeast	Lockheed Martin IMS	No
Mid-Atlantic	Lockheed Martin IMS	No
Midwest	Lockheed Martin IMS	Yes
Southeast	Perot Systems, Inc.	No
Southwest	Lockheed Martin IMS	No
Western	Perot Systems, Inc.	No
West Coast	Perot Systems, Inc.	Yes

6.2.5 Justification

The Working Group determined that the above selections were made according to the process described and justified in Section 4 of this report. This recommendation assumes that the technical, business and architectural requirements in Section 12 of the LNPA Architecture Task Force report will be approved, and has determined that these selections comply with those requirements. Therefore, the Working Group recommends that these selections be approved by the NANC as the LNPAs for their respective regions.

6.3 Number of LNP Administrators

- Whether one or multiple LNPA(s) should be selected.

6.3.1 Process

This issue was assigned to the LNPA Architecture Task Force.

6.3.2 Report Reference

It was not necessary to address this issue in the LNPA Architecture Task Force report. See 6.3.3 below.

6.3.3 Summary of Findings

The Working Group endorses the outcome of the state/regional competitive bid and selection processes, which resulted in the selection of multiple vendors (Lockheed Martin and Perot Systems) to administer the regional NPAC systems.

6.3.4 Recommendation

The Working Group believes it is unnecessary to make a specific recommendation at this time regarding whether one or multiple LNPA(s) should be selected, since two different vendors were independently selected by the

regional LLCs to administer NPAC systems and services. Had only a single vendor been selected to administer all of the regional NPAC systems, the Working Group had planned to undertake a review of the consequences, and make further recommendations if appropriate.

6.3.5 Justification

The Working Group endorses the selection of multiple vendors to administer the regional databases for two reasons. First, it ensures the diversity of supply of NPAC services throughout the contract timeframe. This means that if one vendor is unable to perform, or declines to renew its initial service contract term, there will be at least one other vendor capable of providing these services within a relatively short timeframe. Thus, potential disruption to the industry of a vendor failure or default is minimized when more than one vendor is providing NPAC services. Second, the presence of more than one potential vendor in the initial and future competitive bid and selection processes enables carriers to obtain more favorable rates, terms and conditions than if only a single LNPA had been selected. This supports the FCC's directive to consider the most cost-effective way of accomplishing number portability.

6.4 LNP Administrator Selection

- How the LNPA(s) should be selected

6.4.1 Process

The LNPA Selection Working Group delegated responsibility to recommend how the LNPA(s) are selected to the LNPA Architecture Task Force.

6.4.2 Report Reference

Section 12.2 of the "Architecture & Administrative Plan for LNP" contained in Appendix D defines the recommended criteria for LNPA selection.

6.4.3 Summary of Findings

Initially, the Task Force reviewed the selection criteria as outlined in Section 4.1.1 above. The LNPA Architecture Task Force then reviewed the activities being undertaken to select LNPA vendors in the state/regional workshops and the regional LLCs. The Task Force concluded that the steps taken by the Service Providers in each region to organize the selection process led to adoption of a selection process in each region that satisfies the criteria.

6.4.4 Recommendation

The LNPA Selection Working Group recommends adoption of the process used to make LNPA vendor selections.

6.4.5 Justification

The process used for LNPA vendor selection is extensively discussed in Section 4 above.

6.5 LNP Administrator Duties

- Specific duties of the LNPA(s)

6.5.1 Process

The LNPA Selection Working Group delegated responsibility to define the specific duties of the LNPA, i.e., the NPAC, to the LNPA Architecture Task Force.

6.5.2 Report Reference

Section 12.5 of the Task Force report, "Architecture & Administrative Plan for LNP", Appendix D, describes the business roles and responsibilities of the NPAC. Further, the roles of the NPAC are defined in detail in the Functional Requirements Specification (FRS) and Interoperable Interface Specification (IIS). These documents describe, for example the NPAC responsibilities in the areas of data administration, subscription management, NPAC SMS interfaces, system security, reports, performance and reliability, and billing.

6.5.3 Summary of Findings

The Task Force reviewed the process used in each state/region to develop the FRS and IIS documents and determined that the NPAC roles and responsibilities defined in those documents were substantially similar. Further, these requirements thoroughly document standard functions necessary to administer such a system and its databases, the interfaces between the system and those of the various Service Providers, as well as the administrative functions performed by the NPAC personnel.

6.5.4 Recommendation

The LNPA Selection Working Group recommends adoption of the duties outlined in the Architecture & Administrative Plan for LNP contained in Appendix D, and those detailed requirements defined in the FRS and IIS documents.

6.5.5 Justification

The LNPA duties as defined in Appendix D and in the FRS and IIS documents represent the consensus of the industry technical experts, and the two (2) selected NPAC vendors are currently developing systems and processes (i.e., duties) in accordance with these requirements.

6.6 Regional Coverage

- Geographic coverage of the regional databases

6.6.1 Process

The LNPA Selection Working Group delegated to the LNPA Architecture Task Force the responsibility to provide a plan that identified the recommended geographic coverage of regional databases.

6.6.2 Report Reference

Section 9 of the "Architecture & Administrative Plan for LNP" contained in Appendix D identifies the geographic coverage areas of the regional databases.

6.6.3 Summary of Findings

The Task Force recognized that the significant work in state/regional workshops was directed towards selecting a vendor to serve a region rather than a single state. The lead states in LNP deployment were seeking other states with which to merge under an NPAC effort, and some state commissions (e.g., Maryland and California) had formally asked neighboring states to join the efforts of their state LLC.

6.6.4 Recommendation

The LNPA Working Group recommends that the NANC adopt the recommendations in the "Architecture & Administrative Plan for LNP" related to the geographic coverage of the regional databases. This recommendation includes adoption of a seven (7) region structure with the selected LNPA developing one (1) NPAC SMS in each region. If the LNPA operates in two (2) or more regions, the LLCs in those regions may elect to request that the administrator serve one or more regions on the same platform as long as the administrator satisfies all service requirements specified in the master contract with the LLCs and in specific user agreements. In addition, consistent with the LLC Operating Agreements, the merging of regional LLCs is not precluded.

6.6.5 Justification