

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.

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- 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 de minimus 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

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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 LNPA's 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

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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

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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.

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- 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.

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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".

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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.

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NPAC Vendor Selection Summary

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

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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.

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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.

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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

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- 6.6.5.1 Separate NPAC systems for each state would clearly be uneconomic and inefficient, while a single, nationwide NPAC system would be technically and administratively unwieldy.
- 6.6.5.2 Regional databases make sense. Although state-of-the-art system architectures are available for industry use, a single database is not desirable because the amount of routing information would, in time, become overwhelming as number portability is deployed nationwide. In addition, having several diverse and independent regional databases reduces the scope of impact if a given regional vendor were unable to fulfill its contractual obligation. Also, by establishing regions that match RBOC territories, the RBOC will (at least initially) have to connect to only a single regional database. This will simplify and speed up an otherwise complicated implementation and may lead to lower costs.
- 6.6.5.3 State commissions, the industry and the FCC have become accustomed to working with the RBOCs within their regions. State commissions within RBOC service territories have formed associations to address regional issues. The industry is working in state commission-sponsored workshops. Therefore, the RBOC region provides a base within which both incumbents and new entrants are currently working. In addition, state commissions have been asked by LLCs to focus their NPAC efforts on established RBOC territories. The industry, when faced with the opportunity for system efficiencies and a need to meet an aggressive schedule, has leaned toward the established RBOC territories.
- 6.6.5.4 The designation of the RBOC serving territories and the appropriate NPAC coverage areas has been agreed to by all industry segments in these and state/regional LNP forums.

6.7 LNPA Standards

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

6.7.1 Process

The LNPA Selection Working Group delegated responsibility to define standards to the LNPA Technical & Operational Requirements Task Force.

6.7.2 Report Reference

Sections 7 through 11 of the Task Force report contained in Appendix E describe in detail the recommendations made by that team.

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6.7.3 Summary of Findings

- 6.7.3.1** The LNPA Technical & Operational Requirements Task Force developed industry standard NPAC SMS Provisioning Process Flows. See Section 7 and Appendix B of the LNPA Technical & Operational Requirements Task Force Report contained in Appendix E of this report for more details.
- 6.7.3.2** The LNPA Technical & Operational Requirements Task Force developed an industry standard NANC Functional Requirements Specification (FRS) document that defines the functional requirements of the NPAC SMS. See Section 8 and Appendix C of the LNPA Technical & Operational Requirements Task Force Report contained in Appendix E of this report for more details.
- 6.7.3.3** The LNPA Technical & Operational Requirements Task Force developed an industry standard NANC Interoperable Interface Specification (IIS) document that contains the information model for the NPAC SMS mechanized interfaces. See Section 9 and Appendix D of the LNPA Technical & Operational Requirements Task Force Report contained in Appendix E of this report for more details.
- 6.7.3.4** The LNPA Technical & Operational Requirements Task Force developed an industry wide process to enforce compliance with the policy developed by the LNPA Architecture Task Force for porting of reserved and unassigned numbers. The process includes notification to non-compliant Service Providers followed by the Service Providers right to invoke the NANC Resolution of Numbering Disputes procedures or other escalation as the service provider deems appropriate should a dispute arise. See Section 10 of the LNPA Technical & Operational Requirements Task Force Report contained in Appendix E of this report for more details.
- 6.7.3.5** The LNPA Technical & Operational Requirements Task Force developed an interim industry wide procedure to control the change management process for designing, developing, testing, and implementing changes to the NANC FRS, NANC IIS, and related processes. This interim process was developed to ensure consistency in the submission and consideration of changes to requirements until a permanent process is adopted as recommended in 7.1.1.D.

6.7.4 Recommendation

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6.7.4.1 The LNPA Selection Working Group recommends adoption by NANC of the documents described in Sections 6.7.3.1 through 6.7.3.3 above, and the processes described in Sections 6.7.3.4 and 6.7.3.5 above.

6.7.5 Justification

6.7.5.1 The LNPA Technical & Operational Requirements Task Force reviewed the activities in each of the seven (7) regions to evaluate the LNP planning activities currently underway. It was determined that certain documents were under development concurrently in each region. The regional LNP documents that had relevance to the Task Force mission included:

A. Requirements Documents

Request for Proposals (RFPs) were developed in each region to invite neutral third party vendors to submit proposals to provide NPAC SMSs. The RFP in each region included, either as an attachment or by reference, the Functional Requirements Specification (FRS), which defines the functional requirements for the NPAC SMS and the Interoperable Interface Specification (IIS) which contains the information model for the NPAC SMS mechanized interfaces. Since these two (2) requirements documents were being discussed concurrently in all regions, the Task Force determined that immediate consideration for standardization across the regions was required.

B. NPAC SMS Provisioning Process Flows

The NPAC SMS Provisioning Process Flows document describes the inter-service provider and NPAC SMS process flows. This series of nine (9) flows was also being addressed independently in each region. The Task Force determined that the flows also required immediate consideration for standardization.

6.7.5.2 The LNPA Technical & Operational Requirements Task Force reviewed the content of the above regional documents and determined that they were substantially similar to each other. The Task Force concluded there were significant advantages to the industry if standard FRS, IIS, and NPAC SMS Provisioning Process Flows were developed and endorsed as industry standards. These advantages are defined in greater detail in Section 5.2 of the Task Force report contained in Appendix E. At a high level the advantages include:

- Facilitates meeting FCC schedule
- Better use of LNP resources in all companies

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- Facilitates design of associated processes by other industry groups
- Produces timely and cost effective offers of LNP related products
- Minimizes expenditure of time and resources and increases quality for nationwide Service Providers

6.8 Numbering Information Sharing

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

6.8.1 The manner in which the North American Numbering Plan Administrator (NANPA) and the LNPA(s) might share numbering information is considered to be an aspect of number pooling. While number pooling may certainly be a desirable outcome made possible by LNPA, it was considered outside the scope of the Working Group's immediate mission, and was therefore not addressed.

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7. **FUTURE ROLE**

7.1 **Future Roles**

7.1.1 The LNPA Selection Working Group and associated Task Forces have addressed the specific LNPA selection, technical and architectural issues designated by the FCC. However, the Working Group has identified several important areas relating to LNP implementation and ongoing operation that, in the opinion of Working Group members, require continued regulatory and industry oversight. The current structure and membership of the NANC and the LNPA Working Group and Task Forces are well suited to assist in carrying out these activities or at a minimum, initiate the activity by investigating issues and making recommendations. Following is a list of these activities, and recommendations for a potential role for the Working Group and/or its Task Forces.

- A. **Number Pooling** - Number pooling and any other steps required to achieve number utilization efficiency are a short term priority. Area code splits and the advancement of NANP exhaust are issues of grave concern. To ensure a coordinated number pooling effort, interaction between NANPA and LNPA is required during the design, development, and implementation of number pooling. It is recommended that the LNPA Selection Working Group work jointly with the NANPA Working Group in support of this effort.

- B. **LNPA Initial Deployment Oversight** - To ensure compliance with the FCC order, there is a need to review LNPA deployment on a national basis through, at a minimum, the top 100 MSA deployment period. The successful introduction of 800 portability was fostered by an Oversight Committee, chaired by FCC staff, and a committee modeled along these lines could be equally important and necessary to successful LNPA deployment. Specifically, such a committee could be chaired by the Chief, Common Carrier Bureau (or her designate) and staffed by LNPA Working Group members. In support of this Oversight Committee recommendation, the Working Group notes that the FCC has already delegated responsibility to the Chief, Common Carrier Bureau, to take action to address any problems that arise over specific implementation procedures, and the Working Group is already comprised of industry experts in LNPA implementation.

- C. **LNPA General Oversight** - NANC will provide oversight to ensure that LNPA activities support FCC objectives of neutral operation of the LNPAs and to ensure that national uniformity and interoperability in LNP administration are achieved. The LLCs, by terms of their respective operating agreements, accept the role of NANC in this oversight capacity, and acknowledge that they will comply with FCC directives. Further, the LNPAs are obligated to comply with regulatory directives through requirements in both the RFPs and master contracts. See Section 4.4.4 for additional information. Details of how NANC recommendations will be

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applied to the LLCs will be developed by the LNPA Selection Working Group for NANC consideration.

- D. NPAC SMS Change Management Process - There is an immediate need to maintain a centralized focus on the change management process for future NPAC SMS enhancements. The LNPA Technical & Operational Requirements Task Force developed an interim procedure to fill this role over the last four (4) months and currently fills the role of reviewing, selecting, and prioritizing NPAC SMS release two (2) and release three (3) changes. The Task Force recommended adoption of this interim change management process in Section 6.7.3.5 above.

The LNPA Selection Working Group recognizes that, having recommended technical and operational standards for the industry to follow for the implementation of NPAC SMS, ongoing changes to the requirements must be managed. The Working Group recommends that an open industry group, such as the LNPA Technical & Operational Requirements Task Force or other similar group designated by the NANC, be charged to continue to maintain ongoing technical standards for the NPAC. The recommendation includes development of a permanent change management process that will provide an open and neutral facility for the submission and consideration of changes requested to the NANC FRS and/or NANC IIS requirements. The procedure should include the definition of standard change request documents, vehicles for the submission and distribution of requests, and timetables for the process of open consideration and prioritization of such requests.

- E. Location/Service Portability and Wireless LNP - A number of other concerns will require oversight. For example, inclusion of wireless in LNP and implementation of location and service portability are areas that will potentially require changes to the NPAC SMS design, and will therefore require NANC oversight. The LNPA Selection Working Group, with task force support, or similar teams as NANC deems appropriate, are required in the future to oversee these changes.
- F. LNP Dispute Resolution - The NANC Dispute Resolution Working Group developed a dispute resolution process called "Resolution of Numbering Disputes". The LNPA Selection Working Group recommends that a common NANPA and LNPA dispute resolution process be developed jointly by the two (2) Working Groups. The LNPA Selection Working Group further agrees to recommend modifications to each LLC's dispute resolution process to incorporate these new NANC dispute resolution procedures. LLC disputes and other LNP disputes as may be defined by the process could then be submitted through dispute resolution to NANC, as appropriate.

North American Numbering Council
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- G. Expanded NANP Environments - To ensure effective development and implementation of expanded NANP (12-13 or more digits) environment, interaction between NANP and LNPA is necessary. It is recommended that the LNPA Selection Working Group work with the NANPA Working Group in support of future expanded NANP environments.

Appendix A

**LNPA Selection Working Group
and
LNPA Task Forces Composition**

North American Numbering Council
LNPA Selection Working Group

LNPA Selection Working Group

Company/Association	Name
Airtouch Communications	Kim Mahoney
Ameritech	Terry Appenzeller (Co-Chair)
APCC, Inc.	Greg Haledjian
AT&T	Ellwood Kerkeslager (Co-Chair)
Bell Atlantic	Renie Spriggs
Bell Atlantic	John Rudden
Bellcore	John Malyar
BellSouth	Bill Shaughnessy, Jr.
BellSouth Wireless	Ken Buchanan
California PUC	Natalie Billingsley
Cox	Carrington Phillip
Florida Public Service Commission	Stan Greer
Frontier	David Keech
GTE	Bob Angevine
Interstate Fibernet	Steven Brownsworth
Lucent Technologies	Doug Rollender
Maryland PSC	Geoffrey Waldau
MCI	Beth Kistner
MCI	Woody Traylor
Nextel	Rob Chimsky
Nortel	Mike Sutter
NYNEX	Frank Saletel
Ohio PUC	Scott Potter
PACE/COMPTEL	David Malfara
Pacific Bell	Joanne Balen
Perot Systems	Tim McCleary
SBC	Gary Fleming
Selectronics	Daniel Owen
Sprint	Hoke R. Knox
Sprint PCS/PCIA	Larry Grisham
Stentor	Rich Leroux
Telefonica de Puerto Rico	Roberto Correa
Teleport	Ed Gould
Time Warner/NCTA	Dan Engleman
US West	Cathy Handley
USTA	Dennis Byrne
WorldCom	Scot Lewis

North American Numbering Council
LNPA Selection Working Group

LNPA Architecture Task Force

Company/Association	Name
Airtouch	Paula Jordan
Ameritech	Roger Marshall
AT&T	Karen Weis
Bell Atlantic	Renie Spriggs (Co-Chair)
Bell Atlantic	John Rudden
Bellcore	John Malyar
BellSouth	Steve Sauer
BellSouth Wireless	Karl Koster
California PUC	Natalie Billingsley
Cox	Carrington Phillip
GTE	David Wang
Illinois Commerce	Brent Struthers
Interstate Fibernet	Steve Brownsworth
Lucent Technologies	Doug Rollender
MCI	Woody Traylor
Nortel	Pat Carstensen
NYNEX	Thomas McGarry, Kevin Cooke
Ohio PUC	Scott Potter
OPASTCO	Greg Rise
Pacific Bell	Sandra Cheung
Perot Systems	Tim McCleary
Sprint	Hoke R. Knox (Co-Chair)
SBC	Bob Schaefer
Time Warner/NCTA	Dan Engleman
US West Wireless	Debbie Steele

North American Numbering Council
LNPA Selection Working Group

LNPA Technical & Operational Requirements Task Force

Company/Association	Name
Ameritech	Donna Navickas
AT&T	Bonnie Baca (Co-Chair)
Bell Atlantic	Bob Allen
Bellcore	John Malyar
BellSouth	Ron Steen
BellSouth Wireless	Karl Koster
California PUC	Natalie Billingsley
Cox	Karen Furbish
EDS	Michael Haga
GTE	Bob Angevine
IBM	J. Paul Golick
Illuminet/ITN	Robert Wienski
Interstate Fibernet	Steve Brownsworth
Lockheed Martin	Larry Vagnoni
Lucent Technologies	Doug Rollender
MCI	Steve Addicks
NYNEX	Ed Birmingham
OPASTCO	John McHugh
Pacific Bell	Sandra Cheung
Pacific Bell Mobile Service	Linda Melvin
Perot Systems	Tim McCleary
Pocketcom/CTA	Nina Blake
SBC	Marilyn Murdock (Co-Chair)
Sprint	Dave Garner
Telecom Software Enterprises	Lisa Marie Maxson
Teleport	Phil Presworsky
Time Warner/NCTA	Karen Kay
US West	Cynthia Gagnon
WinStar	Steve Merrill
WorldCom	Bettie Shelby

Appendix B

LNPA Selection Working Group
and
LNPA Task Force Meetings

North American Numbering Council
LNPA Selection Working Group

LNPA Selection Working Group Meeting Schedule

<u>Meeting Date</u>	<u>Meeting Location</u>
November 8, 1996	Washington, DC
November 18, 1996	Washington, DC
December 3, 1996	Arlington, VA
December 18, 1996	Conference Call
January 7, 1997	Arlington, VA
February 4, 1997	Arlington, VA
February 25, 1997	Arlington, VA
March 21, 1997	Arlington, VA
April 7, 1997	Arlington, VA
April 18, 1997	Conference Call

LNPA Architecture Task Force Meeting Schedule

<u>Meeting Date</u>	<u>Meeting Location</u>
November 18, 1996	Washington, DC
December 2, 1996	Washington, DC
January 7, 1997	Arlington, VA
February 3, 1997	Arlington, VA
February 24, 1997	Arlington, VA
March 10, 1997	Conference Call
March 27, 1997	Conference Call
March 31, 1997	Conference Call

LNPA Technical & Operational Requirements Task Force
Meeting Schedule

<u>Meeting Date</u>	<u>Meeting Location</u>
November 18, 1996	Washington, DC
December 2-3, 1996	Arlington, VA
December 16, 1996	Chicago, IL
December 30, 1996	Conference Call
January 7, 1997	Arlington, VA
January 14, 1997	Conference Call
January 20, 1997	Kansas City, MO
January 27-31, 1997	San Francisco, CA
February 24-25, 1997	Arlington, VA
March 5-7, 1997	Dallas, TX
March 14, 1997	Conference Call
March 18, 1997	Conference Call
March 20, 1997	Arlington, VA
March 24, 1997	Denver, CO
April 2, 1997	Conference Call
April 14, 1997	Chicago, IL
April 18, 1997	Conference Call
