VoIP Service Providers' Access Requirements for NANP Resource Assignments

NANC Report and Recommendation

by the
Future of Numbering Working Group

July 19, 2005

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Note:
The recommendations contained in this report apply only in the USA and do not necessarily apply to the 18 other nations participating in the NANP.

Executive Summary

In its order granting the SBC Internet Services, Inc. (SBCIS) waiver request for direct access to North American Numbering Plan (NANP) numbering resources, the FCC tasked the North American Numbering Council (NANC) with determining what changes in the numbering rules might be required for making numbering resources generally available to IP-enabled service providers. This report of the NANC's Future of Numbering Working Group (FoN) is in response to the Commission's request.

The FoN reviewed the criteria that the FCC adopted in its SBCIS Order along with a review of existing industry guidelines and regulatory directives to determine what if any of these number assignment requirements would need to be modified in order to support direct number assignments to IP-Enabled Service Providers (VoIP providers).

FoN based its analysis on the underlying principle that NANP telephone numbers should be available to all providers, including VoIP providers connecting to the PSTN, with the proviso that such numbers should be reachable when called from the PSTN.

Therefore the FoN recommends that NANP resources be directly assigned to providers whose intent is to ensure calls from the Public Switched Telephone Network (PSTN) will or can complete to the telephone numbers assigned the provider's end-users. The recommendations contained within this document will require existing numbering application forms to be modified, the alteration of some current number assignment criteria, and the adoption of the principle that all providers should share and bear the same "numbering-related" responsibilities.

In developing this report the FoN focused its attention to the specific areas directed by the FCC order ("how our numbering rules should be modified to allow IP-enabled service providers ***access*** to numbering resources in a manner ***consistent with our numbering optimization polices***"). [Italics and bold added for emphasis] During this effort other areas relating to operations, implementation, and maintenance activities were identified and discussed. For example, a detailed analysis of the impacts on Local Number Portability (LNP) and the LNP related rules and orders have not been completed. Additional items have been identified in Appendix A. Furthermore, impacts on other industry-recognized standards and guidelines outside the scope of this work product would also need to be reviewed and potentially modified.

Section 1.0 Introduction

In Order FCC 05-20 (Administration of the North American Numbering Plan, CC docket 99-200, adopted January 28, 2005), the FCC granted a waiver for SBCIS to obtain numbering resources for deploying Voice over Internet Protocol (VoIP) and other IP-related services directly from the North American Numbering Plan Administrator (NANPA) or the Pooling Administrator (PA). The FCC also requested that "the NANC … review whether and how our numbering rules should be modified to allow IP-enabled service provider's access to numbering resources in a manner consistent with our numbering optimization policies." This report is in response to an FCC's request to the NANC, January 2005.

Section 2.0 Background

SBC Internet Services, Inc. (SBCIS) formerly known as SBC IP Communications, Inc. (SBCIP) an information service provider affiliate of SBC Communications, Inc., petitioned the FCC for numbering resources for use as a VoIP entity. The FCC granted the waiver request for access to numbering resources for VoIP providers. The key points of the waiver in FCC 05-20 released February 1, 2005 addressing the SBCIS VoIP request are summarized as follows:

1 The FCC grants SBCIS permission to obtain numbering resources directly from the North American Numbering Plan Administrator (NANPA) and/or the Pooling Administrator (PA) for use in deploying IP-enabled services, including Voice over Internet Protocol (VoIP) services, on a commercial basis to residential and business customers. ¶1

2 The waiver will be in effect until the Commission adopts final numbering rules for IP-enabled services. ¶1

3 The FCC requires SBCIS to comply with the Commission's other numbering utilization and optimization requirements, numbering authority delegated to the states, and industry guidelines and practices,[1] including filing the Numbering Resource Utilization and Forecast Report (NRUF). ¶4

4 To the extent other entities seek similar relief the FCC would grant such relief to an extent comparable to what is set forth in this Order. ¶4

5 The FCC further requires SBCIS to file any requests for numbers with the Commission and the relevant state commission at least thirty days prior to requesting numbers from the NANPA or the PA. ¶4

6 SBCIS will be responsible for processing port requests directly rather than going through a LEC. ¶9

1 See 47 C.F.R. Part 52.

7 The FCC imposed on SBCIS the "facilities readiness" requirement set forth in section 52.15(g)(2)(ii). If SBCIS is unable to provide a copy of an interconnection agreement approved by a state commission, it is required that it submit evidence that it has ordered an interconnection service pursuant to a tariff that is generally available to other providers of IP-enabled voice services. The tariff must be in effect, and the service ordered, before SBCIS submits an application for numbering resources. SBCIS, however, may not rely on the tariff to meet the facilities readiness requirement if the Commission initiates a section 205 investigation of the tariff. ¶10

8 The FCC's waiver rules for VoIP are not final (paragraph 11) but are under review by the NANC for any recommended changes at the request of the FCC. ¶11

In the wake of the SBCIS waiver, other IP-enabled SPs have requested "me-too" waivers and one carrier has petitioned the FCC for clarification.

Section 3.0 Current Situation

Presently VoIP providers that are not state-certificated local exchange carriers (LEC) or otherwise federally licensed telecommunication providers cannot qualify to obtain numbering resources directly from the North American Numbering Plan Administrator (NANPA) or the Pooling Administrator (PA). This means VoIP carriers must obtain numbering resources through the purchase of local exchange service from other carriers. Most commonly this involves purchase of retail Direct Inward Dialing DID service that connects to the VoIP carrier gateway as though the gateway were a PBX. The serving LEC assigns numbers from its existing inventory as it would to any other end user customer and the numbers are shown in the Telcordia® LERG™ Routing Guide and/or the Number Portability Administration Center (NPAC) as associated with the LEC switch rather than the VoIP provider gateway. The VoIP provider cannot directly control the corresponding LERG Routing Guide or NPAC entries and, should numbers need to be ported in to or away from the VoIP carrier, this must be done through the LEC as the Network Service Provider. Furthermore, other parties cannot readily obtain the identity of the VoIP providers to which the numbers are assigned.

Section 4.0 Impact on Numbering Resources

Today telephone numbers for VoIP Providers end users are assigned out of LEC allocated Central Office (CO) codes or thousand blocks. Thus NANPA and the PA will only need to assign new (growth) resources to the underlying LEC if the VoIP demand increases. The serving LEC is responsible for maintaining utilization thresholds and for obtaining additional resources as needed to support end user demand. In principle, multiple VoIP providers can be served out of a single thousands block today, from a single LEC, achieving a kind of de facto lower-level pooling. Currently, VoIP service providers (SPs) obtain numbers from LEC's through a retail product which may provide a natural incentive to only obtain numbers actually needed to serve their end-users.

If VoIP carriers can easily obtain numbering resources directly from NANPA or the PA, then they would presumably be entitled to an initial CO code (from which they may only retain one thousands block) to establish a point-of-interface/Location Routing Number (LRN) per switch, per LATA and an initial thousands block in each rate center they plan to serve. The demand can roughly be calculated as:

$$NXXs = \frac{\text{(Number of Service Providers (X) Number of Rate Centers)}}{\text{(10,000/allocation block size)}}$$

where allocation block size is currently 1,000 so the denominator simplifies to 10. This calculation assumes that NXX allocation for initial LRN/POI establishment can be subsumed in the NXXs allocated to provide rate center block assignments. For example, if 10 VoIP providers each want numbers in 10 rate centers in a LATA, then effectively 10 NXXs are required with each provider being the code holder for 1 NXX to satisfy LRN/POI requirements. This represents the ideal and most efficient utilization scenario possible, but actual VoIP provider needs will likely result in less efficient consumption of resources.

Whether or not direct allocation of resources implies a significant demand on the NANPA depends on the assumptions one makes about the likely number of VoIP carriers and the number of rate centers in which they will require numbers. Some modeling of the level of demand given various assumptions about the number of VoIP providers and the number of rate centers requested would be useful and is planned to be a part of the Future of Numbering Group's ongoing work. Rate center demand profiles could be constructed based on profiles of where CLECs have requested numbering resources and of broadband Internet service availability. Consideration should also be given to the existing resource availabilities within a NPA-NXX. In some NPA-NXXs even a "minor" increase in NXX demands for numbering resources in non-pooling rate centers, or for the establishment of a LRN/POI, may be sufficient to force an NPA into jeopardy.

In addition, some VoIP providers are facilities-based, certificated carriers that already hold numbering resources. These carriers may continue to use their existing resources for VoIP services they offer rather than availing themselves of VoIP-specific resources. On the other hand, since the SBCIS order may be read to allow facilities-based carriers that are also VoIP providers to acquire a separate set of VoIP numbering resources under a different OCN, they may elect to do so in order to distinguish their VoIP service operationally. This option will also place further demands on numbering resources as VoIP service providers obtain initial numbering resources and NPA-NXXs for association with LRN/POIs.

Section 5.0 Other Considerations

Other factors may influence the degree to which VoIP providers would make use of the ability to obtain numbering resources directly from the NANPA and or PA.

First, the type of interconnection required for direct resource assignment today is Signaling System 7 (SS7) trunking to the appropriate LEC tandem or end office which may be more involved to deploy than the purchase of retail Direct Inward Dialing (DID) or Primary Rate Interface (PRI) service. Moreover, the direct assignment of resources comes with additional responsibilities: the VoIP provider will now need to handle the porting process itself as well as take on other number administration responsibilities, i.e., OCN registration and NRUF submission.

Second, and perhaps more importantly, VoIP providers may have other motivations for the purchase of PRIs. Some VoIP providers rely on the FCC's Enhanced Service Provider (ESP) exemption to provide savings for call termination to the PSTN. As commonly understood, the ESP exemption allows a VoIP service provider, where qualified, to purchase end user service rather than switched access to terminate calls. Today, terminating calls are jurisdictionalized based on the rate center associated with the PRI connecting the VoIP provider gateway to the LEC switch rather than on the location of the VoIP caller (as indicated for example by the NPA-NXX of their Calling Party Number). Thus, VoIP providers that decide to purchase PRI service for call termination to the PSTN may find it simpler to use it for receipt of inbound calls as well and so forego the need to be directly assigned numbering resources.

On the other hand, as noted in the Order, tandem interconnection for calls terminating to the VoIP provider is more efficient. Then too, VoIP providers may avoid charges LEC for DID number blocks by acquiring their own numbers. Also, by virtue of the fact that the VoIP provider is shown directly in the LERG Routing Guide and NPAC, IP interconnection of VoIP providers is facilitated as is the identification of VoIP originated traffic.

Section 6.0 Comparison Analysis

The FoN reviewed current FCC numbering rules and industry guideline requirements along with state specific regulatory needs to determine if and how numbering rules should be modified to allow IP-enabled service providers access to numbering resources in a manner consistent with mandated numbering optimization policies.

6.1 Registration

Historically applicants for numbering resource have been required to provide evidence "The applicant is authorized to provide service in the area for which the numbering resources are being requested."[2] One method for this authorization has been in the form of a Certificate of Public Convenience and Necessity issued by a state agency after a review of information

2 47CFRCh.1 ¶¶52.15(g)(2)(i)

submitted by the service provider. Included in the submitted information was contact information to facilitate dialog and information exchange between the service provider and the state agency for various topics.

In Order FCC 05-20 (CC Docket No. 99-200) released February 1, 2005 the FCC granted ". . . SBCIS a waiver of section 52.15(g)(2)(i) of the Commission's rules until the Commission adopts numbering rules regarding IP-enabled services."[3]

This action removes the primary method for state agencies, and other interested parties, to obtain specific contact information for VoIP Service Provider.

To make the gathering of the important information as simple as possible a registration system similar to that in use by some states to gather information about wireless service providers and interexchange carriers could be used for VoIP service providers.

Most VoIP service providers will be required to register with the Secretary of State in a state in which they will be conducting business. This would be the trigger for the service provider to also register with the state agency that oversees voice communications in the state. The VoIP provider would send a letter to the relevant state agency that oversees voice communications that includes the information indicated below. No further action by that state agency or the VoIP provider would be required.

Information provided in the registration process is recommended to include, as applicable:

- ✓ Registrants legal name
- ✓ Registrants dba's
- ✓ Registrants principle business address and telephone number
- ✓ Contact information for the person responsible for state Universal Service Fund
- ✓ Contact information for the person responsible for Telecommunications Relay Systems
- ✓ Contact information for the person responsible for numbering resources
- ✓ Contact information for the person responsible for E911
- ✓ Contact information for the person for responsible Consumer issues

When information changes it should be updated in a timely.

As for FCC CFR 52.15 (g)(2)(i), the FoN does not believe that a change is warranted to the text of the rule. However, it is recommended that the FCC should provide an explanation that non-carrier applicants for numbering resources need not be certificated by a state commission in order to be considered "authorized" to provide service in the area for which the numbering resources are requested. However states may require that a VoIP provider comply with its registration requirements identified above.

These recommendations will require existing numbering application forms be modified to reflect the changes should they be adopted.

3 FCC 05-20, CC Docket 99-200, ¶¶4

6.2 Facilities Readiness

The FCC, the industry, with input from state regulators, developed the facilities readiness criteria years ago to ensure efficient use of numbering resources in an environment where only carriers received direct access to those resources. In light of the ensuing technological, regulatory and marketplace developments, including the deployment of VoIP and other IP-enabled services, the FoN determined that there may be more effective ways to achieve the goals of the facilities readiness test -- not just for carriers, but for all of the service providers that are likely to have direct access to numbering resources in the future.

Existing Facilities Readiness criteria from the central office code and thousand block number pooling guidelines may not require any changes since a VoIP service provider should be able to qualify under at least one of the stated elements listed in the guidelines excerpted below. This is based on the underlying principle that NANP numbers are assigned to all providers, including VoIP providers, so that calls to a NANP number from the PSTN are completed. Note in particular that the interconnection agreement (ICA) criterion (1) does not require that the ICA be with the incumbent LEC so an agreement with any other certified LEC would suffice. Moreover, item (5) also supports interconnection through any service provider documented simply by a letter of intent rather than a full ICA.

Thousands-Block Number (NXX-X) Pooling Administration Guidelines (TBPAG) (May 20, 2005)[4] *Section 4.3.1.2 Facilities Readiness*

> *Appropriate evidence that facilities are in place or will be in place to provide service within 60 days of the numbering resources activation date (LERG Routing Guide effective date). Evidence may be provided via a copy of any one of the following document(s)[5] the SP selects:*
>
> 1. *An executed interconnection agreement between a Local Exchange Carrier and the service provider requesting numbering resources. The relevant pages are the cover page, area covered and the signature page from the interconnection agreement.*
>
> 2. *Service Provider developed business plans to provide service in this area. Relevant excerpts from the Business Plan to include planned coverage area and in service dates.[6]*
>
> 3. *A letter from the SP indicating the scheduled switch installation complete date (month/day/year), including the address location, as well as Point of Interconnection or COMMON LANGUAGE® CLLI™.*
>
> 4. *The service order request, pre-planning checklist, or the equivalent to show that facilities for origination or termination for calls being used specifically for the*

4 Thousands-Block Number (NXX-X) Pooling Administration Guidelines (ATIS-0300073, May 20, 2005) available at www.atis.org/inc/cos.asp

5 There may be additional or different criteria requested by state regulators. See FCC 00-104 ¶ 98.

6 Provision of business plans may not be sufficient proof of facilities readiness in some serving areas.

requested block(s)/code(s) have been requested and are anticipated to be completed prior to the effective date of the block/block/code (See Appendix 6 for an example of a pre-planning checklist showing the identified fields which must be completed).

5. *A confirmation letter or letter of intent provided by the entity with which the requesting SP will interconnect. Interconnecting carriers are encouraged, but not required, to provide such letters.*

6. *The construction schedule including the following information: site identifier, latitude and longitude of the cell site, and its construction start or complete date. The numbers assigned to the facilities identified must serve subscribers in the geographic area corresponding with the rate center requested.*

7. *A letter from the requesting carrier identifying a block/code in service in another rate center that already uses the same facilities that will be used to serve the new rate center where the initial block/code is being requested.*

All documentation submitted will be held confidential pursuant to FCC confidentiality rules.[7]

Central Office Code (NXX) Assignment Guidelines (COCAG) (June 10, 2005)[8]
Section 4.2.2 Facilities Readiness

Appropriate evidence that facilities are in place or will be in place to provide service within 60 days of the numbering resources activation date (LERG Routing Guide effective date). Evidence may be provided via a copy of any one of the following document(s)[9] *the SP selects:*

1. *An executed interconnection agreement between a Local Exchange Carrier and the service provider requesting numbering resources. The relevant pages are the cover page, area covered and the signature page from the interconnection agreement.*

2. *Service Provider developed business plans to provide service in this area. Relevant excerpts from the Business Plan to include planned coverage area and in service dates.*[10]

3. *A letter from the SP indicating the scheduled switch installation complete date (month/day/year), including the address location, as well as Point of Interconnection or COMMON LANGUAGE® CLLI™.*

7 47 CFR, § 52.13 (c) (7)

8 Central Office Code (NXX) Assignment Guidelines (ATIS-0300051, June 10, 2005) available at www.atis.org/inc/docs.asp

9 There may be additional or different criteria requested by state regulators. See FCC 00-104 ¶ 98.

10 Provision of business plans may not be sufficient proof of facilities readiness in some serving areas.

4. *The service order request, pre-planning checklist, or the equivalent to show that facilities for origination or termination for calls being used specifically for the requested code(s) have been requested and are anticipated to be completed prior to the effective date of the code (See Appendix A for an example of a pre-planning checklist showing the identified fields which must be completed).*

5. *A confirmation letter or letter of intent provided by the entity with which the requesting SP will interconnect. Interconnecting carriers are encouraged, but not required, to provide such letters.*

6. *The construction schedule including the following information: site identifier, latitude and longitude of the cell site, and its construction start or complete date. The numbers assigned to the facilities identified must serve subscribers in the geographic area corresponding with the rate center requested.*

7. *A letter from the requesting carrier identifying a code in service in another rate center that already uses the same facilities that will be used to serve the new rate center where the initial code is being requested.*

All documentation submitted will be held confidential pursuant to FCC confidentiality rules.[11]

6.3 Number Resource Application

This section contains proposed changes to Central Office Code (NXX) Assignment Guidelines (COCAG) Part 1 form and Thousands Block (NXX-X) Pooling Administration Guidelines (TBPAG) Part 1A form.

It is proposed that modifications to both the COCAG part 1 and TBPAG Part 1A be made for the items 1.4 a) and 1.5 to now include and recognize VoIP service providers who use these request forms for obtaining numbering resources directly form the NANPA or PA and are based on the changes noted in the FCC's waiver granting SBCIS exemption from 47 CFR 52.15(g)(2)(i) in order FCC 05-20.

It was assumed that VoIP providers will be able to provide the remaining necessary information required by the forms such as switch identification, tandem homing identification, LERG Routing Guide data and other specific informational items that are identified in the Part 1 or Part 1A in order to use numbering resources. If VoIP Providers are unable to provide this information other accommodations to the application form may need to be considered by the Industry Numbering Committee of the Alliance for Telecommunications Industry Solutions (ATIS INC) for maintenance of the industry guidelines.

11 47 CFR, § 52.13 (c) (7)

TBPAG Part 1A Modifications:

1. Modification to form Part 1A, section 1.4, paragraph a) of the application document itself (and in any notation made in any supporting document or training aid) should be changed to identify the VoIP provider as a type of service provider.

Following proposed language contains possible changes to the guidelines and is shown in italics:

Part 1A
1.4 Type of company/entity requesting the code:
a). _____ (LEC, IC, CMRS, *VoIP*, Other)

2. The other possible modification will need to be made in section 1.5. Currently it reads:

Type of Request (initial, growth, etc.):_____
If an initial code, attach (1) evidence of certification and (2) proof of ability to place code in service within 60 days. If a growth code, attach months to exhaust worksheet.

> One solution would be to change "(1) evidence of certification" to read allow for alternative verifiable forms of authority to provide service. Such forms could include FCC licenses, registration with state utility regulatory authority or applicable FCC waivers". The ATIS INC could make such changes to the form necessary to reflect these alternatives to certification.

No additional changes are needed for the Part 1A form or its contents as identified in the TBPAG that was effective on June 8, 2005.

COCAG Recommended Modifications:

The exact same modifications will need to be made to Part 1, Section 1.4, paragraph a) and Section 1.5 of the COCAG application form/document in the Part 1 form for the same reasons as those noted in the TBPAG above. Note that these changes may require modifications to job aids or other tools or guides used by the industry.

Other than as noted above, no other changes were recognized as being needed at this time for the COCAG Part 1 form or its contents as identified in the COCAG that was effective on June 8, 2005.

6.4 Number Portability

Although the FoN has not done a detailed analysis of the LNP requirements as they apply to VoIP service providers, it is assumed for purposes of this evaluation that VoIP providers will also be required to comply with all LNP requirements.

It is assumed for purposes of this evaluation that VoIP providers will also be in compliance with all existing Number Portability requirements established by the FCC and pursuant to the appropriate LNP guidelines and standards as developed and adopted by the industry for all other carriers who utilize PSTN numbering resources.

In addition, it is assumed that VoIP service providers will be required to port and should therefore will be allocated a portion of the industry "shared costs" of LNP. This may require modification to Section 52.32 of the FCC rules.

6.5 Number Pooling

Although the FoN has not done a detailed analysis of the LNP requirements as they apply to VoIP service providers, it is assumed for purposes of this evaluation that VoIP providers will also be required to comply with all thousand block pooling requirements.

Section 7.0 Recommendation

In the wake of the SBCIS waiver, other IP-Enabled SP's have requested "me-too" waivers and one carrier has petitioned the FCC for clarification. Therefore the FoN recommends that NANP resources be directly assigned to providers whose intent is to ensure calls from the PSTN will or can complete to the telephone numbers assigned the provider's end-users.

FoN based its analysis on the underlying principle that NANP telephone numbers are assigned to all providers, including VoIP providers, and that calls to a NANP telephone number from the PSTN are expected to be completed.

FoN based its recommendations on the following principles:

1. The underlying principle that calls to NANP telephone numbers from the PSTN are expected to be completed;
2. That NANP telephone numbers should be assignable to all providers, including VoIP providers if their intent is to assign NANP numbers in a manner that promotes communication with the PSTN;
3. That all providers should have access to numbering resources in a fair and equitable manner, irrespective of industry segment or group, or technology;
4. With respect to item 3 above: All providers should share and bear the same "numbering-related" responsibilities, including cost obligations.

For an IP Service Provider to obtain numbering resources directly from the NANPA and/or the PA for use in deploying IP-enabled services, including Voice over Internet Protocol (VoIP) services, the IP Service Provider must offer services on a "commercial basis" to residential and/or business customers. Upon application for NANP resources the VoIP provider must demonstrate facilities readiness and that calls from the PSTN will be able to complete to those NANP numbers.

Therefore, the FoN makes the following recommendation as "the criteria and conditions" to which a provider, including providers of VoIP (IP-Enabled Service Providers), must commit to in order to be eligible for directly assigned NANP numbering resources.

Providers requesting direct assignment of numbering resources shall:

1. Take the necessary steps to ensure calls from the PSTN can complete to the telephone numbers assigned to the provider's end-users on or after the activation date
2. Comply with ATIS Industry Guidelines enumerated in the INC COCAG or the TBPAG documents (except as and when amended by the FCC or other authorized regulatory body) to obtain number resources
3. Comply with FCC Numbering Resource Optimization (NRO) measures and directives, as referenced in Appendix A.
4. Participate in Local Number Portability (LNP) FCC mandated port-in and port out requirements and be treated just as any other provider who is porting customers numbers
5. Participate in Thousands-Block Pooling using LNP-capable requirements and be treated as any other Service Provider participating in pooling, where it is applicable
6. Be responsible for state registration
7. Adhere to all resource utilization threshold requirements sequential numbering, and reclamation requirements
8. Contribute to number administration, number pooling and local number portability industry cost obligations

It is recommended that the FCC consider clarifying that non-carrier applicants (VoIP Providers) for numbering resources need not be certificated by a state commission in order to be considered "authorized" to provide service in the area for which the numbering resources are requested.

Finally, the recommendations contained within this document will require existing numbering application forms to be modified to reflect the changes recommended, should these recommendations be adopted. It is therefore recommended that the ATIS INC be sent a copy of the NANC's VoIP Report for consideration in making future guideline modifications.

In addition to the suggested FCC rule modifications contained in this document and in Appendix A, and the corresponding industry guideline changes that may be required, the FoN also suggests that the FCC consider a new obligation such as shown below:

> To ensure telecommunication numbers are allocated effectively and assigned efficiently to promote communications with the PSTN, the administration of telecommunications numbers shall:
>
> > (1) Directly assign telecommunications numbers to providers that support commercially available business or residential telecommunications or information services requiring connectivity with the PSTN.

APPENDIX A

Comparison Chart

Current Service Provider Number Allocation/Assignment Requirements to Proposed Allocation/Assignment Requirements for VoIP Providers
Source = G (Guideline), F (FCC), S (State)

	Current PSTN SP Allocation Requirement	Source	Reference	Recommended VoIP Requirement	Modification(s) required
1*a*	Certification/Licensing	F/S	47CFRCh.1 ¶¶52.15(g)(2)(i) *Certification & Licensing temporarily waived by FCC in FCC 05-20 ¶¶4 and 12*	No	No
1*b*	Registration		FoN – July 15, 2005 "VoIP Service Providers' Access Requirements for NANP Resource Assignments NANC Report and Recommendation"	Yes	Yes
2	Facility Readiness	F/G	FCC NRO Orders and Industry Guidelines	Yes	Yes
3	NRUF Reporting	F/G	FCC NRO Orders and Industry Guidelines	Yes	Yes
4	Utilization Threshold	F	47CFRCh.1 ¶¶52.15(h) National Utilization Threshold *Condition of waiver by FCC in FCC 05-20 ¶¶4 and 9*	Yes	No
5	Thousand Block Pooling	F/G	Thousands-Block Number (NXX-X) Pooling Administration Guidelines *(ATIS-0300073, May 20, 2005)*	Yes	Yes
6	Local Number Portability	F		Yes	Yes

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Source = G (Guideline), F (FCC), S (State)

	Current PSTN SP Allocation Requirement	Source	Reference	Recommended VoIP Requirement	Modification(s) required
7	Rate Center Identification for Number Assignment Maintained	G		Yes	Yes
8	Part 1 Application – COCAG	G	Central Office Code (NXX) Assignment Guidelines *(ATIS-0300051, June 10, 2005)*	Yes	Yes
9	Part 1 Application - TBPAG	G	Thousands-Block Number (NXX-X) Pooling Administration Guidelines *(ATIS-0300073, May 20, 2005)*	Yes	Yes
10	Reclamation of Numbering Resource	F	FCC 00-104 released March 31, 2000 ¶¶ 237-241	Yes	Yes
11	LRN	G	Location Routing Number Assignment Practices (ATIS INC 98-0713-021, January 2004)	Yes	Yes
12	Sequential Number Assignment by Thousands Block	F	47CFRCh.1 ¶¶52.15(j) Sequential numbering FCC 00-104 released March 31, 2000 ¶¶ 244-245	Yes *Condition of waiver by FCC in FCC 05-20 ¶¶4 and 9*	Yes
13	Uniform Definition - Assigned, Aging, Available, Intermediate, Administrative, & Reserved	F	FCC 00-104 released March 31, 2000 ¶¶ 11-36	Yes	Yes
14	One LRN Per Switch Per POI	F	FCC 96-286 Appendix E 1.1, and	Yes	Yes

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	Per LATA		CC Docket No. 01-92, Notice of Proposed Rulemaking, 16 FCC Rcd 9610, 9634, 9650-51, ¶¶. 72, 112		
15	Activation of resources	F	47CFRCh.1 ¶¶52.15(g)(2)(ii)	Yes *Condition of waiver by FCC in FCC 05-20 ¶¶4, 9 and 10*	Yes
16	Interconnection or Tariff Requirements to obtain numbers	F	47CFRCh.1 ¶¶52.15(g)(2)(ii)	Yes *Condition of waiver by FCC in FCC 05-20 ¶¶10*	Yes
17	Reporting Requirements	F	47CFRCh.1 ¶¶52.15 (f)(3)(ii) Reporting data shall be by separate legal entity and must include . . . , OCN, . .	Yes	Yes
18	Reporting Frequency	F	47CFRCh.1 ¶¶52.15(f)(6)(i) Reporting Frequency	Yes *Condition of waiver by FCC see footnote 21 of FCC 05-20*	Yes
19	Growth Inventory	F	47CFRCh.1 ¶¶52.15(g)(3) Growth numbering resources	Yes *Condition of waiver by FCC in FCC 05-20 ¶¶4 and 9*	Yes

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20	Numbering Audits	F	47CFRCh.1 ¶¶52.15(k) Numbering Audits	Yes *Condition of waiver by FCC in FCC 05-20 ¶¶4 and 9*	Yes
21	Notification	F	FCC 05-20, Administration of the North American Numbering Plan, released February 1, 2005, ¶¶4. "SBCIS to file any request for numbers with the Commission and the relevant state commission at least thirty days prior to requesting numbers from the NANPA or PA."	Yes *Condition of waiver by FCC in FCC 05-20 ¶¶4*	Yes
22	OCN	G	Operating Company Number (OCN) needed to obtain numbers from NANPA or the PA.	Yes	Yes
23	SPID	G	Service Provider ID (SPID) needed at NPAC for porting numbers.	Yes	Yes
24	Cost of Number Administration	F	47 CFR¶¶52.17	Yes	Yes

Appendix B - List of Future of Numbering Working Group Participants

Steve	Addicks	NeuStar
Phyllis	Anderson	SBC Labs
Jean	Anthony	Evolving Systems
Bob	Atkinson	NANC Chair
Cat	Baird	SureWest Comm.
Mike	Balch	Iowa PSC
Craig	Bartell	Sprint
Natalie	Billingsley	NASUCA California
Doug	Birdwise	Bell Canada
Jerome	Candelaria	NCTA
Jay	Carpenter	AFTA
Jim	Castagna	Verizon
Jeffrey	Citron	Vonage
David	Cochran	BellSouth
Pamela	Connell	NeuStar
Andrea	Cooper	Verizon Wireless
Cheryl	Cox	
Carrie	Cox	NCTA
Mark	Dallen	NeuStar
Bob	Delaney	Tekelec
Ron	DelSesto	Vonage
Jena M.	Downs	Verizon
Joanne	Edelman	Verizon Wireless
Jean-Paul	Emard	ATIS
Rosemary	Emmer	Nextel
Lolita	Forbes	Verizon Wireless
Dave	Garner	Qwest
Don	Gray	Nebraska PSC
George	Guerra	SBC
Michell	Gwaltney	Cingular
Jeff	Hartsel	
Ken	Havens	Sprint
Suzanne	Howard	Cox
Dawn	Howland	XO
Dena	Hunter	Level 3
Linda	Hymans	NeuStar
John	Jefferson	SBC
Rick	Jones	NENA
Paula	Jordan	T-Mobile
Christine	Kelly	New York PSC
Tom	Kershaw	Verisign
Dave	Kitchen	New York PSC
Hoke	Knox	Sprint
Paul F.	La Gattuta	NeuStar
Chipp	Nelson	Verisign
Maggie	Lee	Verisign
Jason	Lee	MCI
Kecia B.	Lewis	MCI
Christopher	Littlewood	Level 3
Louis	Mamakos	Vonage
John	Manning	NANPA
Lori	McGarry	CTIA
Tom	McGarry	NeuStar
Kimberly	Miller	NeuStar
Anna	Miller	T-Mobile
Karen	Mulberry	MCI
Chris	Murray	Vonage
Robert	Myers	ONSTAR
John	Nakamura	NeuStar
Julie	Neumann	Cingular
Adam	Newman	Telcordia
Karen	Norcross	Michigan PSC
Beth	O'Donnell	Cox Communications
Susan	Ortega	Nextel
Julie	Peterson	SBC
Penn	Pfautz	AT&T
Carrington	Phillip	Cox
Jason	Powell	Centennial Wireless
Amy	Putnam	NeuStar
Charles	Pyott	ATIS
Frank	Reed	T-Mobile
Mary	Retka	Qwest
Tony	Rutkowski	Verisign
Gary	Sacra	Verizon
Bob	Schaffer	MCI
Shannon	Sevigny	NeuStar
Bill	Shaughnessy	BellSouth
Elliott	Smith	Commissioner Iowa
Eric	Smith	SBC
Dana	Smith	Verizon Wireless
Tom	Soroka	USTA
Brent	Struthers	NeuStar
Doug	Sullivan	Verizon
Sue	Tiffany	Sprint
Deborah	Tucker	Verizon Wireless
Mike	Whaley	Qwest
Wendy	Wheller	AllTell
Mark	Lancaster	AT&T
Yun	Lee	Verizon