



North American Numbering Council

Summary: Nationwide Number Portability NPRM/NOI



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Nationwide Number Portability - Overview

- NPRM proposed:
 - Elimination of N-1 query requirement
 - Elimination of remaining interexchange dialing parity requirements
- NOI sought comment on best way to develop/deploy/ensure nationwide number portability (NNP)
- FCC seeks NANC recommendations on:
 - Which of 4 proposed models lead to timely, effective deployment of NNP
 - The costs, benefits, and barriers to implementation for these proposals
 - Likely consequences of proposals for routing, interconnection, and public safety
 - Next steps to ensure NNP advances

Nationwide Number Portability - Background

- Local number portability required
 - *De facto* NNP for some wireless-to-wireless customers
 - As yet, no true NNP
- Longstanding interest in NNP
 - From Congress
 - From Commission
 - From industry stakeholders
- Past work:
 - NANC report May 2016
 - ATIS Technical Report June 2016
 - Describing several potential models for NNP solution
 - NANC LNP WG White Paper August 2016
 - Emphasized need for collaboration, Commission action

Nationwide Number Portability NPRM and NOI

- Released October 24, 2017
- Recognizes benefits to competition and consumers of full NNP
- Seeks to advance deployment / implementation of NNP by:
 - Eliminating barriers to deployment
 - Seeking comment on 4 of the existing models for deploying NNP

Nationwide Number Portability - NPRM

- Proposes **elimination of N-1 query requirement**
 - Current requirement adopted by reference from NANC architecture recommendations
 - Requires second-to-last (N-1) carrier to perform NPDB query
 - E.g., if routing to a portable number requires IXC, IXC performs query
 - If no IXC, originating carrier performs query
 - N-1 relies upon originating carrier knowing whether or not a dialed number requires an IXC
 - If all numbers are potentially ported to anywhere in country, number could have been ported back locally, resulting in inefficient routing just to perform query

Nationwide Number Portability - NPRM

- Proposes removing remaining interexchange **dialing parity requirements**
 - MFJ and Act required LECs to provide same access to pre-subscribed stand-alone interexchange carriers as to affiliated IXC
 - *2015 USTelecom Forbearance Order* forbore from this requirement for ILECs
 - Exception: “grandfathered” customers with existing stand-alone IXC service
 - NPRM proposes forbearing from this requirement for CLECs
 - Requirement may interfere with originating LEC’s ability to efficiently route calls in NNP environment
 - Same rationales as for ILEC forbearance may apply
 - Potentially few affected carriers

Nationwide Number Portability - NOI

- Continue and advance work by past NANC WGs and ATIS
- 4 proposed NNP solutions:
 1. Nationwide implementation of Location Routing Numbers (LRN)
 2. Non-geographic LRNs (NGLRNs)
 3. Commercial agreements
 4. GR-2982-CORE (specification developed by iconectiv)

1: Nationwide Implementation of LRN

- Allows a ported number to be associated with any LRN
- Allows use of many existing systems and processes
- May require changes to NPAC rules
- May complicate other routing and critical processes
- May require many carriers to upgrade existing equipment / perform more functions
- Impacts upon handling of call detail records, billing, caller ID
- Further impacts on e911, toll free database processing, tariffs, etc.

2: Non-Geographic LRN

- Create new non-geographic area code; new non-geographic LRNs housed within this area code
 - Ported numbers associated with NGLRN
 - Service provider querying NPAC receives NGLRN
 - Call then routed to a "non-geographic gateway" (NGGW) that associates NGLRN with proper routing
- Supports wireline and wireless NNP
 - Allows many existing systems and processes to remain in use
 - Requires setup of NG area code, NGLRNs, NGGW
 - Requires likely rules changes
 - May require additional agreements for carriers without ability to route to NGGW

3: Commercial Agreements

- 3d-party entity can install its own points of interconnection in various LATAs
- 3d party thus uses its own network for routing between ported numbers
- Does not require significant changes to NPAC or service provider systems
- Questions about applicability across modes, who would provide services, etc.

4: GR-2982-CORE (Portability Outside Rate Center: "PORC")

- Relies upon creating new geographic subdivisions, Geographic Unit Building Blocks (GUBBS)
 - Each GUBB represented by a TN-style number, recipient switch uses this number to locate call recipient
 - Would use LRNs for routing, but GUBBs for carrier selection and rating
- Requires setup of GUBB system
 - Requires changes in billing
 - May require changes to porting data, NPAC policies and procedures
 - All carriers must have compatible switches

Nationwide Number Portability – Public Comments

- Seeking Public Comment:
 - Comments due by **December 27, 2017**
 - Reply comments due by **January 26, 2018**

Nationwide Number Portability – Working Group

- Commission asks NANC to evaluate 4 proposals for NNP, and then:
 - Determine whether any of the four models discussed in the NOI are preferable to others in terms of feasibility, cost, and adaptability to changing markets and technologies
 - Specify in detail the potential costs, benefits, and barriers to implementing each of these proposals
 - Identify any likely consequences of these proposals for routing, interconnection, or public safety
 - Recommend next steps to advance full nationwide number portability and
 - Make any other recommendations they deem necessary to achieve this goal

Nationwide Number Portability - Working Group

• **Questions / Contacts:**

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