



ATIS-1000083

Technical Report on Assessment of
Nationwide Number Portability

TECHNICAL REPORT



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ATIS-1000083, *Technical Report on Assessment of Nationwide Number Portability*

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Technical Report on Assessment of Nationwide Number Portability

Alliance for Telecommunications Industry Solutions

Approved June 4, 2018

Abstract

This Technical Report provides further technical assessment of the potential approaches to Nationwide Number Portability (NNP) identified in ATIS-1000071, *Technical Report on a Nationwide Number Portability Study*.

Foreword

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between providers, customers, and manufacturers. The Packet Technologies and Systems Committee (PTSC) develops and recommends standards and technical reports related to services, architectures, and signaling, in addition to related subjects under consideration in other North American and international standards bodies. PTSC coordinates and develops standards and technical reports relevant to telecommunications networks in the U.S., reviews and prepares contributions on such matters for submission to U.S. ITU-T and U.S. ITU-R Study Groups or other standards organizations, and reviews for acceptability or per contra the positions of other countries in related standards development and takes or recommends appropriate actions.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, PTSC, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, PTSC, which was responsible for its development, had the following leadership:

- M. Dolly, PTSC Chair (AT&T)
- V. Shaikh, PTSC Vice-Chair (Vencore)
- G. Richenaker, Technical Editor (iconectiv)

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ATIS Technical Report on –

Assessment of Nationwide Number Portability

1 Scope & Background

1.1 Scope

This Technical Report provides further technical assessment of the potential approaches to Nationwide Number Portability (NNP) identified in ATIS-1000071, *Technical Report on a Nationwide Number Portability Study*. This Report includes an analysis of these potential NNP solutions with the goal of providing additional information on the technical and systems-related impacts needed to support NNP. This Report does not modify or amend any of the technical characteristics in any of the approaches that had been detailed in ATIS-1000071.

This Report also identifies any new standards or changes to existing standards/solutions that would be necessary to implement NNP, as well as implications for existing networks, in particular circuit-switched networks. This Report also considers whether criteria/metrics could be developed to assess the feasibility of deploying each of the identified NNP approaches within service provider networks.

1.2 Background

The Federal Communications Commission (FCC) asked the industry¹ and the North American Numbering Council (NANC)² to determine what changes to existing infrastructure and procedures would be required to permit users to port an E.164 geographic telephone number beyond current limits (essentially the rate center to which the NPA-NXX of the number is assigned) to any area of the nation. In July of 2016, PTSC issued ATIS-1000071.

In November 2017, the FCC released a Notice of Proposed Rulemaking (Notice) and Notice of Inquiry (NOI)³ to seek comment on how best to move toward complete NNP to promote competition between all service providers and to encourage efficient call routing. The Notice and NOI sought comments on:

- Removing the Commission's "N-1" requirement, which requires the second-to-last carrier to perform the number portability database query, to allow carriers flexibility in conducting number portability database queries to promote NNP and efficient network routing.
- Eliminating the Commission's dialing parity requirement, as it applies to interexchange service, to remove barriers to NNP and better reflect the competitive realities of today's marketplace.

In December 2017, the FCC Commissioner announced the re-chartered NANC, and in February of 2018, they issued the Working Groups Membership⁴, leading to the establishment of the Nationwide Number Portability Issues Working Group. The FCC seeks NANC recommendations on:

- Which of four (4) proposed models leads to timely and effective deployment of NNP.
- Costs, benefits, and barriers to implementation for each of the models.
- Consequences of the proposals for routing, interconnection, and public safety.
- Next steps to ensure NNP progresses.
- Any other recommendations deemed necessary to achieve the NNP goal.

¹ Letter from FCC Chair to President of CTIA, July 27, 2015.

² Letter from Chief of FCC Wireline Competition Bureau to NANC Chair, November 16, 2015.

³ In the Matter of National Number Portability, WC Docket No 17-244

⁴ FCC Public Notice – February 5, 2018 - FCC ANNOUNCES NORTH AMERICAN NUMBERING COUNCIL ISSUE-SPECIFIC WORKING GROUPS MEMBERSHIP. CC Docket No. 92-237