



**ATIS-0300056**

**INC REPORT ON NUMBER PORTABILITY**

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The Industry Numbering Committee (INC) provides an open forum to address and resolve industry-wide issues associated with planning, administration, allocation, assignment and use of North American Numbering Plan (NANP) numbering resources within the NANP area.

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## Executive Overview

The Number Portability Workshop of the Industry Numbering Committee (INC) was formed in October, 1993 with a mission to develop a set of definitions, identify and describe potential network architectures, and assess the technical feasibility and implementation requirements, impacts and attributes of number portability. The Industry Carriers Compatibility Forum (ICCF) and all its subtending committees, including INC, are open to all interested parties. Participants in the INC Workshop have included representatives from most segments of the industry. The Workshop's initial focus was on one form of portability (Service Provider Portability) that had received a lot of attention and interest from regulators and competing local exchange carriers. This INC report attempts to capture the key elements of the discussion and presentations that took place within this Workshop to address this form of number portability. Some of the issues and concerns with other forms of number portability (i.e., Service Portability and Location Portability) are raised as well.

The North American Numbering Plan (NANP) utilizes a standard, 10-digit format comprised of a 3-digit area code (NPA), 3-digit central office code (NXX) and 4-digit line number. This NANP number is used by the public switched network for both routing and rating of calls between parties. Because the first six digits are used to uniquely identify a specific central office or carrier Point-of-Presence (POP), NANP numbers do not easily lend themselves to porting between several different carriers or serving switches.

The Workshop identified a set of objectives (i.e., Portability Principles) that needs to be considered in the development and implementation of any solution for (long term) number portability, including flexibility in implementation, transparency to both ported and non-porting customers, efficiency in routing and avoidance of adverse service impacts. All of the long-term architectures that have subsequently been discussed within the Workshop thus far have a common set of network components that include the following:

- Switches equipped with the capability to launch database queries
- A signaling network capable of routing database queries and responses and forwarding routing instructions
- One or more databases containing routing and rating information for ported numbers
- A regional Service Management System (SMS) comprised of the necessary software and hardware needed to maintain records of ported numbers and for downloading information to individual, network databases.
- Access links to the SMS to allow responsible organizations to create and update records contained therein.

Administration and provisioning of numbers within the regional SMS and individual network databases were found to follow one of two different alternatives: 1) management limited to