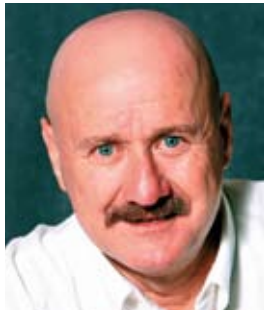


pANI: It's Not a Grilled Sandwich

JOHN McHUGH



OPASTCO Technical Director John McHugh receives a steady stream of calls and e-mails from OPASTCO members looking for answers to their technical questions. McHugh & A shares some of these questions and answers with the OPASTCO Roundtable readership.

What's a pANI?

Interestingly enough, the term pANI has been around for quite awhile, but wasn't publicized widely until the FCC ordered voice over Internet protocol (VoIP) service providers to be E 9-1-1 compliant.


pANI stands for Pseudo Automatic Number Identification (pANI) and has been utilized by the wireless industry ever since it became a requirement to provide for E 9-1-1 callback capability and caller location information. The pANI assigned was a numbering resource in 10-digit (NPA-NXX-XXXX) format that the wireless carrier assigned from its North America Numbering Plan (NANP) resource to a wireless customer. The pANI would be a non-dialable number associated with a cell site or base station, and used to locate the calling party. The wireless industry uses a process that requires the use of an Emergency Services Routing Key (ESRK) and an Emergency Services Query Key (ESQK) to perform the pANI function to associate roaming customers and their location utilizing databases to reference the customer's directory number with the cell site or base station. This information is passed to the local public safety access point (PSAP) on a wireless 9-1-1 call.

VoIP service providers are now required to provide the same capability to their customers so that if the VoIP customer is nomadic and dials 911 for an emergency, the PSAP will be able to locate and call back the customer. In the FCC First Order and Report on E911 Requirements for IP Enabled Service Providers (FCC 05-116, released June 3, 2005), the commission required the use of pANIs by VoIP providers for this purpose.

Since this requirement was ordered, it has become apparent that numbering resources (NPA-NXX-XXXX) assigned to the provider would be consumed to provide for non-dialable pANIs. This issue was brought to the North American Numbering Council (NANC) for the purpose of researching the impact on resource availability and possible alternative solutions.

A report filed with the FCC by the NANC stated that numbering resources assigned for the purpose of creating a pANI should not be assigned from the number assignment provided to the service provider but from a block of numbers assigned by the pANI number administrator. These blocks will be the NPA (area code), the 211 or 511 code, and an xxxx block. For example, a block assigned to a VoIP provider in Florida to be used exclusively for pANIs could be 904-211-1000-1999.

The NANC also recommended that wireless carriers that are currently using their assigned numbering resources to provision pANIs (or ESRKs and ESRQs) should undertake a program to convert these to NPA-211 or 511-XXXX assignments.

Any provider that will require the assignment of pANI or ESQK resources should check out www.esqk.biz; pull down the documents list and download the ESQK Users Guide to familiarize yourself with the process. 

Have a technical question about any aspect of your telco business? Your name will not be revealed, but please include it in your e-mail. Questions may be edited in order to provide more relevance to a larger audience. Send your question to roundtable@opastco.org.