

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Telephone Number Requirements for IP-Enabled Services Providers)	WC Docket No. 07-243
)	
Local Number Portability Porting Interval and Validation Requirements)	WC Docket No. 07-244
)	
IP-Enabled Services)	WC Docket No. 04-36
)	
Telephone Number Portability)	CC Docket No. 95-116
)	
CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues)	
)	
Final Regulatory Flexibility Analysis)	
)	
Numbering Resource Optimization)	CC Docket No. 99-200

COMMENTS OF NENA

The National Emergency Number Association (“NENA”) hereby responds to the invitation to comment on the Notice of Proposed Rulemaking (“Notice”) in the captioned proceeding.¹ The Notice seeks comments on a number of issues, including (a) whether the Commission should require interconnected VoIP providers to comply with N11 code assignments and other numbering requirements, (b) any other considerations that the Commission should evaluate in the simple port validation process, notably the conclusion that carriers can require no more than four fields for

¹ FCC 07-188, released November 8, 2007, 73 Federal Register 9507, February 21, 2008.

validation of a simple port, and (c) whether there are any technical impediments or advances that affect the overall length of the porting interval.

Summary

NENA believes that access to N11 services, along with other similar services provided via 800-type² numbers nationally, all of which route to state, regional or local entities/call centers, are as important for VoIP customers as they are for customers who have traditional wireline or wireless service. However, just as with 9-1-1, in a VoIP environment, there are some significant routing issues that make it difficult for providers to determine the correct end destination for N11/800-type services that must be considered. It is important for the FCC, along with other federal agencies and departments having some responsibilities for N11 and similar 800-type services, to appropriately consider a generic routing solution for all of these services, rather than having each service develop, and subsequently fund, its own unique and separate solution.

In addition, organizations and agencies responsible for the coordination of N11/800-type services would be well served to ensure that information needed to properly route calls to the right entity/call center --

² While the NPRM only refers to other N11 services, NENA believes it is equally important to consider other national services that are provided using 800 numbers rather than an N11 code. VoIP providers face the same or similar routing challenges for these 800-type services (poison control centers and mental help hotlines for example) as they do for the routing of N11 calls.

such as routing tables -- is easily available, preferably in a single location, to those entities responsible for routing calls.

Regarding the simple port validation process and the four field requirement, NENA supports the inclusion of a field so that providers involved in the port clearly know what their 9-1-1 requirements are regarding the appropriate location/address databases which are essential to the correct routing of 9-1-1 calls. While we do not have a position regarding a change in the porting interval, it is important for all providers involved to be cognizant of the need to add or update 9-1-1 address/location databases as appropriate with the same timeliness. This will help ensure accuracy of those databases and correct routing of 9-1-1 calls for customers, both during and immediately following the porting process.

VoIP and N11 Code Assignments

The FCC's newest "Telephone Subscribership in the United States" report, released March 21, 2008, shows that there are approximately 118.2 million households in the country with about 112.2 million having some type of phone service. In a separate private industry report, research suggests that the 15.9 million U.S. residential VoIP subscribers today will exceed 27 million by 2009³, and 32 million by 2011.

Over the past several years, in addition to 9-1-1, numerous N11 services have been established nationally and formally recognized, including

³ IDC: <http://www.idc.com>.

211, 311, 511, 711 and 811. In addition, there are many 800-type services, with national numbers for access to such entities as poison control centers and suicide lifeline/hotline centers. All of these various numbers and services are provided, where available, to traditional wireline residential customers and to those residential customers who are wireless only. As there is a significant percentage of households with residential VoIP service now, customers of residential VoIP service should have the same access to these N11/800-type services as customers of traditional wireline and wireless service.

However, just as with 9-1-1, there is the technical issue of routing when the residential customer utilizes nomadic VoIP and/or a geographic phone number not associated with the area in which the customer resides. In traditional wireline, while 9-1-1 routing to the correct Public Safety Answering Point (“PSAP”) is based on the customer’s address, other N11’s routing has been based on the customer’s phone number and its association to a specific area, such as a rate center. For VoIP, because of its nomadic capability and also, the assignment to residential customers of numbers not associated with the rate center in which they reside, N11 routing (and the aforementioned 800-type services) can incorrectly deliver a call to the wrong entity/call center, which can be in an entirely different part of the country than where the caller is located. Just as with a misroute to the wrong PSAP, this may be to an entity/call center without easy connectivity to the right entity/call center to assist the caller.

NENA’s Next Generation 9-1-1 (“NG9-1-1”) planning and standards development, including related standards in the Internet Engineering Task Force (“IETF”), has consistently included the concept that all N11s (and the aforementioned 800-type services) could route to the correct entity/call center based on the caller’s location with all such calls delivered into the NG9-1-1 system.⁴ The solution envisioned will ensure that the same system developed for 9-1-1 call routing can also be used for N11/800-type call routing. This will

⁴ <http://www.nena.org/pages/ContentList.asp?CTID=65>

ultimately lead to improved call routing for these services and enable seamless hand-off between PSAPs and other non-emergency entities/call centers where appropriate.

However, even today there is at least one potential solution for these N11/800-type services which could be utilized for proper routing of VoIP residential customer calls, particularly those with nomadic and/or non-local geographic numbers. We encourage the FCC to consider the use of the VoIP Positioning Center (“VPC”) solution in place today for VoIP customers for 9-1-1 routing. This would include the self-registration of phone service addresses, including the ability to re-register the location/address of the service whenever the customer relocates, either temporarily or permanently. This type of solution could help resolve the routing issue that all N11/800-type services face today.

These services are very valuable to residential customers and, when functioning correctly and in a coordinated fashion, help reduce inappropriate calls to 9-1-1 and/or help 9-1-1 calltakers more easily refer callers to other needed services, when appropriate. While N11/800-type services all have daily value, the importance of these services can escalate during major emergencies/events that impact large numbers of residential customers. It is important to all residential customers, regardless of whether their home phone service is traditional wireline, wireless or VoIP, that they receive equal service and that their calls route to the correct entity/call center.

Porting Process and Required Fields

While NENA does not comment on which are the appropriate customer-related fields for a simple porting request, we wish to comment on

one field that has been included on the Local Service Request (LSR) form exchanged as part of the porting process. The Number Portability Direction Indicator (“NPDI”) field is being used to assist providers in determining the correct action to take regarding the appropriate 9-1-1 address/location databases. NENA’s Local Number Portability (“LNP”) working group, formed under our Data Technical Committee (“DTC”), and made up of representatives from 9-1-1 system service providers along with wireline, wireless and VoIP providers, has reported:

The Number Portability Directional Indicator (NPDI) was created to manage wireless number portability, and most recently Voice over IP technologies in the 9-1-1 databases. The NPDI allows carriers to define the direction the end user is taking the telephone number (i.e. wireline to wireless, wireless to wireline). The direction of a telephone number port has impacts to how data in a traditional wireline 9-1-1 database is treated. Due to the importance of maintaining the integrity of the data in the 9-1-1 database the NENA DTC LNP WG recommends that the NPDI field be a required element as defined by ATIS Ordering & Billing Forum (OBF) Local Service Order Guidelines (LSOG) version 13.

The NPDI, as defined above and also in NENA data standard 02-011, section 22.D3,⁵ provides the needed indicator in the LSR from the recipient provider and sent to the donor provider, so that the appropriate action can be taken regarding the 9-1-1 address/location database. Absent the NPDI field and the appropriate provider action stemming from it, the 9-1-1 address/location databases can have incorrect information which may have negative impacts, including incorrect address displays to a 9-1-1 calltaker

⁵ 22D.3 NPDI Standard, Exhibit A hereto.

during an emergency call and incorrect billing to 9-1-1 entities which must pay for records in 9-1-1 address/location databases.

NENA asks that the FCC clarify that the NPDI field should still be included on LSRs submitted by recipient providers, in addition to the four required fields that were listed in the Order, to facilitate proper 9-1-1 emergency service delivery for ported customers.

Porting Time Interval

While NENA does not comment on the length of the appropriate porting time interval, we do wish to reiterate that it is important for the industry to also be cognizant of its responsibilities for timely additions, changes and deletions to the appropriate 9-1-1 address/location databases involved. It is very important that a customer changing providers have effective and correctly routed 9-1-1 service available as quickly as possible and that 9-1-1 calltakers receive, during any 9-1-1 emergency call, the correct address/location information for their workstation display.

With the inclusion of VoIP providers, and their utilization of certified providers for number acquisition and appropriate porting processes, there are additional complexities related to 9-1-1 address/location databases that must be accounted for. NENA has developed the appropriate data standards to ensure correct 9-1-1 call routing and correct address/location display at the

PSAP. It is essential that the providers take appropriate and timely action during porting process by following those standards.

Respectfully submitted,

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EXHIBIT A

In the interest of Public Safety, the National Emergency Number Association (NENA) standard requires that when service is ported to another service provider, the Number Portability Direction Indicator (NPDI) field on the Local Service Request (LSR) be populated with one of the following OBF-sanctioned values:

A = No record update to the 911 database

- Wireless to Wireless
- VoIP using VPC Database to Wireless
- Wireless to VoIP using VPC Database
- VoIP using VPC Database to VoIP using VPC Database

B = "Insert" Function Code adding wireline TN record to 911 database

- Wireless **TO** Wireline
- VoIP using VPC Database to Wireline
- VoIP using VPC Database to VoIP using ALI Database
- Wireless to VoIP using ALI Database

C = "Delete" Function Code eliminating wireline TN record from 911 database

- Wireline **TO** Wireless
- Wireline to VoIP using VPC Database

- VoIP using ALI Database to VoIP using VPC Database
- VoIP using ALI Database to Wireless

D = “Unlock” & “Migrate” Function Code to identify the new Service Provider (SP) NENA ID in the 911 database

- Wireline **TO** Wireline
- Wireline to VoIP using ALI Database
- VoIP using ALI Database to Wireline
- VoIP using ALI Database to VoIP using ALI Database

It is recommended that all Service Providers include this requirement in their Interconnection Agreements with other Service Providers.