

# **Joint Comments On the NANC Telcordia Dispute Resolution Interim Report**

**Sprint  
T-Mobile  
Verizon  
Qwest Communications  
AT&T  
CTIA  
XO Communications**

**July 30, 2010**

On behalf of Sprint, T-Mobile, Verizon, Qwest Communications, AT&T, CTIA, and XO Communications we are filing these comments to emphasize the overwhelming opposition to Telcordia's Petition objecting to URI Change Orders that were properly approved and adopted in accordance with long-standing LNP change management procedures.

## **Introduction**

On May 26, 2009, Telcordia Technologies ("Telcordia") asked the North American Numbering Council ("NANC") to determine that North American Portability Management LLC ("NAPM LLC") had inappropriately adopted and executed Amendment 72 to the Number Portability Administration Center ("NPAC") contracts, which added Uniform Resource Identifier ("URI") parameters for Voice, Multimedia Messaging Service ("MMS") and Short Messaging Service ("SMS") to the NPAC database.<sup>1</sup> In July 2009, then-NANC Chairman Koutsky appointed a Dispute Resolution Team and sought comment on this dispute. On May 21, 2010, the Dispute Resolution Team provided the NANC members with an Interim Report.<sup>2</sup> Sprint, T-Mobile, Verizon, Qwest Communications, AT&T, CTIA, and XO Communications ("Joint Commenters") hereby file these comments in response to the Interim Report and to NANC Chairman Kane's verbal request for additional comments at the May 21 NANC meeting.

The Interim Report states that the Dispute Resolution Team, relying heavily on a 2005 NANC Future of Numbering Working Group ("FoN WG") report, has "concluded that (1) the Federal Communications Commission has clearly placed this matter before the NANC to

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<sup>1</sup> *Letter from John T. Nakahata, Counsel to Telcordia Technologies, Inc. to Thomas M. Koutsky, Chair, North American Numbering Council, Re: Request that NANC Resolve Dispute Concerning Necessity of Adding Certain URI Codes for the Competition of Telephone Calls, (May 26, 2009). ("Telcordia Dispute Resolution Request")*

<sup>2</sup> *Memo from Betty Ann Kane, Chairman to the North American Numbering Council re: Update on Telcordia Technologies, Inc. Request for Dispute Resolution (May 21, 2010). ("Interim Report")*

address, and (2) there is a real question as to whether 47 C.F.R. § 52.25<sup>3</sup> allows URI elements to be included in the NPAC database.” Joint Commenters respectfully disagree with the Dispute Resolution Team on both points. While the NANC is properly situated to lay this dispute to rest once and for all, the Joint Commenters submit that there is no substantive matter for the NANC to address. Rather, this dispute is largely a competitive issue regarding NPAC administration. Specifically, there is no reasonable dispute or question whether NANC change management procedures were properly followed or whether 47 C.F.R. § 52.25 allows the parameters in question to be added to the NPAC database. Much has transpired in the telecommunications industry since the FoN WG report was drafted. Given the intervening events and growth in technology, it is clear that the Voice, MMS and SMS URIs are necessary for the routing of telephone calls to the appropriate telecommunications carrier. Because the URI parameters are necessary for routing, they should remain in the NPAC database, and NANC should dismiss this dispute.

## **Background**

When the NAPM LLC adopted and executed Amendment 72 in May 2009, it did not do so in a vacuum. In fact, the subject of adding URIs to the NPAC database had been under consideration by the industry for some time. In 2004, the NANC Local Number Portability Administration Working Group (“LNPA WG”) began examining whether to include IP parameters in the NPAC database. In January 2005, the LNPA WG accepted and began considering the technical requirements of Change Order 400, which proposed adding four IP parameters to an already existing field in the NPAC database, including those enabling Voice, Push-to-Talk over Cellular (“PoC”), Presence and MMS data. At its April 12, 2005 meeting, the LNPA WG reached consensus to recommend to the NAPM LLC that Change Order 400 should be included in the NPAC database in an “inactive state.”<sup>4</sup>

In 2005, the Federal Communications Commission directed that Change Order 400 be held in abeyance while it considered the issue. In November 2007, the Commission extended local number portability (“LNP”) obligations to interconnected Voice over Internet Protocol (“VoIP”) providers.<sup>5</sup> Citing the interconnected VoIP LNP order, the Chief of the Wireline Competition Bureau in February 2008 informed then-NANC Chairman Koutsky that the “industry could reconsider Change Order 400 rather than continue to hold in abeyance its

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<sup>3</sup> 47 C.F.R. § 52.25(f) provides that the “information contained in the [NPAC database] shall be limited to the information necessary to route telephone calls to the appropriate telecommunications carriers. The NANC shall determine what specific information is necessary.”

<sup>4</sup> LNPA WG, April 2005 Meeting, Final Minutes at 14.

<sup>5</sup> Telephone Number Requirements for IP\_Enabled Services Providers; Local Number Portability Porting Interval and Validation Requirements; IP-Enabled Services; Telephone Number Portability; Numbering Resource Optimization, WC Docket Nos. 07-243, 07-244, 04-36, CC Docket Nos. 95-116, 99-200, Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, 22 FCC Rcd 19531 (2007) (VoIP LNP Order).

consideration.”<sup>6</sup> In doing so, the Wireline Bureau Chief therefore allowed the industry to include the new IP routing information in the NPAC database if it deemed such action appropriate.

After receipt of the letter from the Wireline Bureau Chief, the LNPA WG began considering Change Order 400 again. In May 2008, the LNPA WG separated Change Order 400 into four separate orders, one for each IP data parameter. Change Order 429 addresses Voice URI, Change Order 430 addresses MMS URI, Change Order 431 addresses PoC URI, and Change Order 432 addresses Presence URI. A month later, the LNPA WG also added Change Order 435 to address SMS URI. In July 2008, the LNPA WG agreed that Change Orders 429, 430, and 435 (collectively referred to as the “Change Orders”) should be forwarded to the NAPM LLC for possible inclusion in the NPAC. In doing so, the LNPA WG made express findings of the need for each of the approved Change Orders, as discussed in more detail below.

Shortly after the LNPA WG’s endorsement of the Change Orders, the NAPM LLC began negotiating Amendment 72 with Neustar, Inc. (“Neustar”) to include the URI parameters in the NPAC. In May 2009, Amendment 72 was adopted by the NAPM LLC and executed by the parties. Shortly thereafter, Neustar began implementing the Change Orders.

Almost simultaneously, Telcordia submitted the instant dispute to the NANC arguing that: 1) the URIs are not necessary to route telephone calls to the appropriate telecommunications carrier as required by 47 C.F.R. § 52.25, and 2) the LNPA WG and the NAPM LLC lack the authority to approve the URI parameters because, pursuant to the rule, only the NANC can determine what information is necessary. As will be amply demonstrated below, Telcordia is wrong on both points. The Voice, MMS and SMS URIs are necessary for the routing of telephone calls, and LNPA WG and NAPM LLC appropriately followed long standing LNP change management procedures in adopting the URI Change Orders.

### **The Voice, MMS, and SMS URIs Are Necessary for the Routing of Telephone Calls**

Telcordia makes two arguments as to why the URI parameters are not necessary for the routing of telephone calls to the appropriate telecommunications carriers. First, it argues that MMS and SMS – and possibly VoIP – are information services and therefore outside the definition of telephone calls. Second, Telcordia asserts that URIs in the NPAC database are not necessary for the routing of VoIP, MMS or SMS because there are alternative ways for the providers to route such services today, such as relying on the Public Switched Telephone Network (“PSTN”) or using alternative database providers. Neither of these arguments has merit.

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<sup>6</sup> Letter from Dana R. Shaffer, Chief, Wireline Competition Bureau, to Thomas M. Koutsky, Chair, North American Numbering Council at 1 (Feb. 4, 2008) (*Shaffer Letter*).

## **The Meaning of “Telephone Calls” Is Broader than Telecommunications Services**

Despite Telcordia’s repeated protestations to the contrary, Commission policy and precedent, as well as industry practice, have established that the term “telephone call” includes more than just traditional voice telephone calls. In interpreting the Telecommunications Consumer Protection Act of 1991 (“TCPA”), the Commission specifically stated that the TCPA’s prohibition on autodialed “calls” plainly “encompasses both voice calls and *text calls* to wireless numbers including, for example, short message service (SMS) calls.”<sup>7</sup> This interpretation of the statute has been upheld by both the Ninth Circuit and the Arizona Supreme Court.<sup>8</sup>

The interpretation that the term “telephone call” is broader than simply a voice PSTN call is also consistent with the industry’s practice. As pointed out by T-Mobile in comments filed last August:

The NAPM agreement defines ‘a call’ as the transmission of information (video, pictures, audio/music, messages, text data or a combination of these) by use of messages or transmission of provisioning data associated with information sessions, subscribers and network equipment and devices (e.g., discovery, connection, presence, location, authentication, billing usage, maintenance, and parameter negotiation). The term “routing” means transporting calls. For these purposes, Internet addresses and naming protocols (URLs, URIs, IP addresses, etc.) are considered call routing information {if} they are associated with a telephone number.<sup>9</sup>

A broad interpretation of “telephone call” is also supported by the fact that the NPAC database has included fields related to information services since its inception. NPAC “Software Release 1.0” included fields associated with Inter-Switch Voicing Messaging Message Waiting Indicating (“ISVM MWI”). “Software Release 2.0” added fields to permit the routing of Wireless Short Message Service (“SMS”) text messaging. ISVM<sup>10</sup> and SMS<sup>11</sup> are both clearly associated

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<sup>7</sup> *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, 18 FCC Rcd 14014, 14115 (2003) (emphasis added); see also *Rules and Regulations Implementing and Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003*; *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, 19 FCC Rcd 15927, 15934 (2004) (stating that the “prohibition on using automatic telephone dialing systems to make calls to wireless phone numbers applies to text messages (e.g., phone-to-phone SMS), as well as voice calls”).

<sup>8</sup> See, e.g., *Satterfield v. Simon & Schuster*, 2009 WL 1708081 (9th Cir. June 19, 2009); *Joffe v. Acacia Mortgage Corp.*, 211 Ariz. 325 (2006).

<sup>9</sup> *Letter from Anna Miller of T-Mobile to the Honorable Betty Ann Kane, Don Gray and Thomas M. Koutsky re: Telcordia Dispute Resolution (August 17, 2009) (T-Mobile Comments)*.

<sup>10</sup> ISVM, a voice mail service provided on a centralized basis, is an information service. Like plain voice mail, this service allows users to store information and interact with stored information unrelated to the placing of a telephone call. These characteristics place voice mail, as well as electronic mail, firmly in the enhanced (information) service category. See *Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, 84 FCC.2d 50, 54-55 (1980).

with information services, yet they have been included in the NPAC database since its earliest days.

### **Telcordia's Proposed Interpretation of "Necessary" is Unduly Narrow and Short-sighted**

Telcordia's assertion that URIs in the NPAC database are not necessary for the routing of VoIP, MMS or SMS because there are alternative ways for the providers to route such services today is unduly narrow and contrary to stated Commission policy. Just because other alternatives may exist to route certain calls does not negate a finding that these fields are necessary for routing. The use of the term "necessary" in the rule was never intended to exclude alternative routing information. Read in the context of the *First LNP Order*, where the Commission first adopted Section 52.25, it is clear that the rule was designed to ensure that the database only contained information related to routing, as opposed to E911 or CPNI information, not to exclude information otherwise necessary to route telephone calls effectively and efficiently.<sup>12</sup>

Section 52.25(i)<sup>13</sup> also supports this interpretation by specifying that although information that has nothing to do with routing generally – such as CPNI and E911 information – should not be included in the NPAC database, it still may be included in the downstream databases. The Commission's intent is further clarified by its statements that the NPAC should contain the "specific information necessary to provide number portability"<sup>14</sup> and that number portability should be provided "without impairment of quality, reliability, or convenience."<sup>15</sup> With this more reasonable view of the meaning of "necessary" in Section 52.25(f), there is no reasonable disagreement over whether the URI parameters are necessary for routing of VoIP, MMS and SMS using the NPAC.

Telcordia's narrow interpretation of "necessary to route telephone calls" would prohibit the inclusion of *any* new technologies for the routing of telephone calls in the NPAC database

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<sup>11</sup> SMS is a store-and-forward method of transmitting messages to and from wireless devices. Store-and-forward technology is generally considered a characteristic of an information service. See, e.g., *Policy and Rules Concerning the Interstate, Interexchange Marketplace*, Further Notice of Proposed Rulemaking, 13 FCC Rcd 21531, 21533 (1998).

<sup>12</sup> It is useful to note that it has always been recognized that the concept of number portability via the NPAC database encompasses more than the mere routing of telephone calls. Appendix D of the LNPA WG Report, which has been codified in the Commission's rules, provides that the NPAC users must be carriers or entities under contract with a carrier "to provide billing, routing, and/or rating" services for that carrier. LNPA WG Report, App. D, § 12.2.4, incorporated in by reference in 47 C.F.R. § 52.26(a).

<sup>13</sup> Section 52.25(i) provides, in part, that "[i]ndividual carriers may mix information needed to provide other services or functions with the information downloaded from the [NPAC] at their own downstream databases."

<sup>14</sup> *Telephone Number Portability*, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, 11 FCC Rcd 8352, 8403 (1996) ("*First LNP Order*").

<sup>15</sup> *Id.* at 8366-67.

because there will always exist the possibility of using the legacy circuit-switched network to facilitate routing.<sup>16</sup> This is plainly inconsistent with Commission’s belief that “Congress’s intent is that number portability be a ‘dynamic concept’ that accommodates [technological] changes.”<sup>17</sup>

Indeed, the NANC’s LNPA WG determined that there was a need for the three URI parameters to accommodate just such technological change, a conclusion that was then endorsed by the NAPM LLC. With respect to the Voice URI parameter, the LNPA WG found that:

No solution currently exists to address the issue of industry-wide distribution of IP end-point addressing information for IP-based Voice service. No solution addresses the portability of such service. A call originating from one provider’s IP service typically has no information as to whether the dialed TN’s service is IP-based or not, nor what its address is, forcing the use of the PSTN as an intermediary between IP networks. This need not be the case . . . The issue lies in the availability of a sharing and distribution mechanism for TN-level routing information between all interested service providers. *The provisioning and distributing of routing information is the precise charter of the NPAC for all ported and pooled TNs.*<sup>18</sup>

In a similar vein with respect to SMS, the LNPA WG found that:

SMS (texting) is a store and forward service that allows SMS-compatible subscribers to send and receive short text messages. SMS subscribers are addressed via their 10-digit telephone number and an e-mail address. SMS is transported via IP by the originating network using URIs to indicate the network address or gateway SMSC of the terminating user. Historically SMS has been a feature for wireless users only, but today it is growing into a broadband wireline feature as a result of the growth of IP-based broadband networks . . . SMS originating Carriers need to know that if a terminating 10 digit TN is SMS capable (wireless or broadband) and, if SMS capable, the address of the SMSC. This allows the message to be efficiently transported between the originating and terminating carrier networks. Having a standardized central source to locate the TN/SMS mapping will eliminate attempts to deliver messages to non-SMS capable TNs and reduce customer complaints over dropped or missed messages that have not, nor could not be delivered. The availability of the SMS URI will

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<sup>16</sup> See Telcordia Request at 13-14 (“All of these types of messages—IP-IP voice traffic, MMS and SMS—can be completed today using the NPAC only to identify the service provider ID associated with a ported number.”).

<sup>17</sup> *Telephone Number Portability Order*, 22 FCC Rcd at 19544 (citing *Intermodal Number Portability Order*, 18 FCC Rcd at 23708 (discussing the reasonableness of differences in porting obligations due to differences in the technological feasibility of different types of porting)).

<sup>18</sup> Change Order 429, NANC LNPA WG. It should be noted that the transcoding required to use the PSTN as an intermediary network between two IP networks degrades call quality and uses more network resources. It is much more efficient to exchange traffic on an IP to IP basis.

allow originating carriers to recognize SMS capable TNs so that IP based carriers delivering service to traditionally “landline” numbers from wireless TNs can determine if the TN is SMS capable and *use the URI for terminating network routing information.*<sup>19</sup>

Finally, in a comment that applied to all three of the adopted URIs, the LNPA WG said:

The addition of these URI fields to the NPAC also benefits the industry in that it inherently coordinates and synchronizes the update of the SS7-based number portability look up databases with that of the IP-based look up databases. Should the updates not be synchronized, service could be affected for an indeterminate amount of time.

In sum, the LNPA WG found that the URI parameters at issue in this dispute will ensure that number portability for these services is provided “without impairment of quality, reliability, or convenience.” In addition, the analysis makes clear that the parameters are necessary for routing telephone calls to the appropriate telecommunications carrier.

#### **The LNPA WG and NAPM LLC Acted Appropriately In Approving the URI Parameters**

Telcordia alleges that neither the LNPA WG nor the NAPM LLC has the authority to approve the inclusion of URI parameters in the NPAC database because only the NANC can determine whether the URIs are necessary for the routing of telephone calls to the appropriate telecommunications carrier. Telcordia’s view is inconsistent with more than a decade of NPAC change order approvals.

The process for determining whether new fields, parameters, or data elements should be added to the database has remained the same since the inception of the NPAC database. First, the LNPA WG, on behalf of the NANC, considers the addition of new fields, parameters, elements and other changes to the database. Then, those changes that the LNPA WG approves are forwarded to the NAPM LLC for its consideration consistent with its procedures and the NPAC contracts. This same process has been implemented hundreds of times with respect to Change Orders since national LNP was implemented in the 1990s. This is the procedure that the NANC, through its LNPA WG, has used to determine the information that should be included in the database, as required under FCC rules. Nowhere do the FCC rules require a separate, explicit finding that information is “necessary to route telephone calls.” Rather, the NANC, through its LNPA WG, carries out its role under the rules and makes the requisite findings through LNPA WG approval of additions to the database.

After the Chief of the Wireline Competition Bureau released Change Order 400 from abeyance in February 2008, effectively giving the industry the green light to consider placing its URI parameters into the NPAC database, the LNPA WG appropriately resumed its examination

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<sup>19</sup> Change Order 435, NANC LNPA WG

of the Change Order.<sup>20</sup> As noted above, during its reexamination, the LNPA WG divided the parameters into separate change orders, one for voice and three for MMS, Push-to-Talk over Cellular, and Presence, and later added an additional change order for SMS. As described above, the NANC's LNPA WG reached consensus that there was a need for the Voice, MMS and SMS URI parameters for both the porting and routing of IP-based services, and forwarded the parameters to the NAPM LLC for consideration. By a simple majority vote of the NAPM LLC membership, it was agreed to add the three URI parameters to the NPAC database. This is exactly the same change management procedure that had been used for years to modify the NPAC database.

Joint Commenters believe that the LNPA WG was correct and acting within its authority when it approved the URI parameters at issue here, and that the NAPM LLC likewise acted appropriately when it added the URI parameters to the NPAC contract. Nevertheless, if the NANC finds it necessary to make an explicit determination regarding the appropriateness of including these parameters in the NPAC database, the NANC should confirm that the URI parameters included in Change Orders 429, 430 and 435 are necessary for the routing of telephone calls to telecommunications carriers.

### **Conclusion**

After more than six years of consideration, the NANC Change Orders were properly approved by the LNPA WG on behalf of the NANC and adopted by the NAPM LLC. The three Change Orders are undoubtedly necessary for routing of telephone calls to the appropriate telecommunications carriers. Removal of these Change Orders from the NPAC database would undermine the ability of providers to efficiently provision URI data for the routing of IP-based voice, MMS and SMS services. For the reasons described above, Joint Commenters urge the Dispute Resolution Team to reject Telcordia's request that approval of the Change Orders be revoked or overturned.

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<sup>20</sup> In 2005, prior to the abeyance, the LNPA WG had approved Change Order 400 for possible inclusion in the NPAC.