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November 30, 2017   **VIA ECFS**

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Telephone Number Portability, et al.*
        CC Docket No. 95-116; WC Docket Nos. 09-109 and 07-149

Dear Secretary Dortch:

The North American Portability Management LLC (the "NAPM LLC"), by its attorneys, hereby files a written summary of the NAPM LLC's status updates to the Federal Communications Commission ("FCC" or "Commission") regarding the transition from the current local number portability administrator ("LNPA"), Neustar, to the new LNPA, Telcordia d/b/a iconectiv (the "Report").[1] This Report updates the FCC, the public, and all interested stakeholders regarding transition activities to date in accordance with requirements of the LNPA Selection Order[2] and guidance received from the FCC on June 24, 2015.[3] The NAPM LLC will continue to file written updates of this Report with the FCC at the end of each month until transition is complete.

Transition Oversight Plan

The Transition Oversight Plan ("TOP"), dated August 31, 2015 was edited and refiled December 5, 2016, and the TOP is published on the public portion of the NAPM LLC's website at www.NAPMLLC.org.[4] Although one or more transition milestone dates may be adjusted as appropriate to mitigate risk, the previously published dates remain accurate, and the transition is currently on track to meet the Final Acceptance Date of May 25, 2018.

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[1]   This Report is intended to provide an update with respect to events that occurred during the prior month. Although the monthly Reports may, at times, reflect certain developments that occurred between the end of the month for which the Report is filed and the date upon which the draft Report received final approval by the NAPM LLC for filing with the Commission, the Reports generally do not reflect all developments that occur during the month in which the Report is filed, which will be reflected in the Report for the following month. Please review previous Reports for information about previous developments.

[2]   *Telcordia Technologies, Inc. Petition to Reform Amendment 57 and to Order a Competitive Bidding Process for Number Portability Administration et al.*, Order, WC Docket Nos. 07-149, 09-109, CC Docket No. 95-116, ¶¶ 158-59 (rel. Mar. 27, 2015) (*LNPA Selection Order*).

[3]   This summary reflects information relevant to the transition as managed by the NAPM LLC with the assistance of the TOM and the oversight of the Commission.

[4]   *See* https://www.napmllc.org/Docs/npac/ref_docs/08%2031%2015%20-%20Updated%20Transition%20Oversight%20Plan.pdf.

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Stakeholder Outreach and Education

Since the last Report, the Transition Oversight Manager (the "TOM") completed the following outreach and education activities:

- Hosted the October TOEP webcast on October 11, 2017 which was attended by 162 participants; and
- Distributed reminders to register for the November TOEP webcast scheduled for November 7, 2017 at 3PM EST.

TOM Transition Activities

The TOM continued to advance the objectives of the LNPA transition program in October.[5] The accomplishments in October include:

- Monitored industry testing of the new Number Portability Administration Center (NPAC) against the test criteria established in the 12 Acceptance Test Plans that were reviewed and approved by the NAPM LLC in coordination with the FCC, and the summary results include:
  - Vendor Certification Testing
    - 13 systems under test (SUTs) are being certified;
    - 5 SUTs have completed certification as of October 27, 2017; and
    - 1 vendor testing incident was resolved, 7 were eliminated due to consolidation and 20 remain open as of October 27, 2017.
  - Mechanized User Testing
    - 24 SUTs have started testing as of October 27, 2017;
    - 17 SUTs have completed mandatory testing as of October 27, 2017; and
    - 15 mechanized user testing incidents were resolved, 13 remain open and 14 new incidents were identified as of October 27, 2017.
  - Low-Tech Interface (LTI) Testing
    - 13 LTI users have started testing.

- Confirmed progress on the 14 Problem Identification & Management forms (PIMs) arising from the vendor testing process. These PIMs and accompanying change orders address all the non-conformities and ambiguous requirements identified in Release A vendor testing, and, once fully implemented, will ensure compliance to the Functional Requirements Specifications (FRS):
  - 4 have been completed by iconectiv and are ready for testing;
  - 8 are being worked by iconectiv and are on track for Release B testing; and
  - 2 are being worked by a vendor and are on track for vendor certification.

- Verified that 57 of 58 Industry Methods and Procedures (M&P) were approved and 1 is pending submission;

- Secured NAPM LLC approval in coordination with the FCC for the Disaster Recovery and Pooling Administrator System (PAS) Acceptance Test Plans (ATPs);

- Hosted weekly stakeholder discussions to refine the rollback plan and obtain alignment on key technical topics, including options for rollback testing; and

- Facilitated the mechanized-user-focused rollback session on October 3, 2017, which was attended by 66 participants and covered additional details including Rollback Work Flow, Transaction Report Specifications and next steps. This session is part of a series of interactive, industry working sessions that the TOM is conducting to communicate and socialize the rollback

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[5] Please see Appendix B for supplemental information from the TOM regarding transition testing, readiness, reporting, and rollback.

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approach, supporting mechanisms, and testing plans within the service provider community, as well as to collect industry input.

The TOM conducts weekly meetings with the NAPM LLC Transition Team, iconectiv and Neustar to coordinate activities and communication across the parties and address ad hoc issues as they arise. These working meetings are used to identify, discuss and close tasks (A.K.A. action items) required to advance the project objectives. The graph below depicts the progress achieved in addressing these action items since the last monthly report.

Transition Action Item Progress (10/1/17 through 10/31/17)
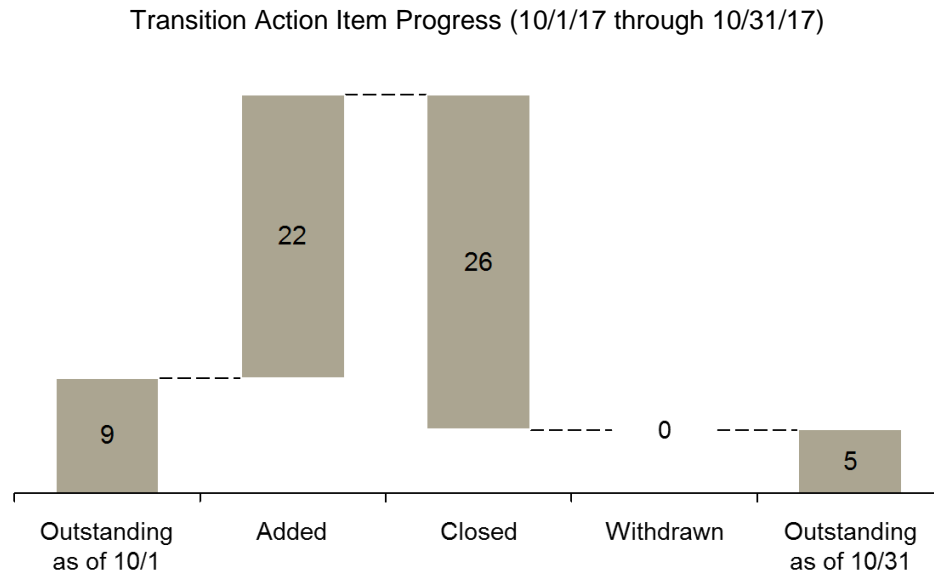
The TOM continues to track the status of the development of the new NPAC and, generally development is on track. That is, there have been no changes to critical milestone dates such as platform readiness or migration dates. The following primary categories of LNPA transition risks are noted and being tracked:

- Lack of agreement on the contractual obligations to govern parallel operations. In particular, the lack of agreement by the current LNPA to resume NPAC operations in the event of an industry-led rollback remains a point of particular concern;

- The delayed onboarding of the final mechanized service bureau, which was completed in October, threatens the on-time completion of Release A mechanized user testing;

- The Release B schedule contains little remaining buffer against additional delays and/or development activities arising from testing issues or additional future discoveries of ambiguously or undocumented NPAC features; and

- Issues discovered with one vendor during industry testing require remediation and regression testing that stress already tight development and testing schedules.

iconectiv

On July 25, 2016, the FCC released a final decision approving the recommendation of the NANC that iconectiv serve as the next LNPA and the terms and conditions of the draft Master Services

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Agreement ("MSA") that the NAPM LLC and iconectiv had previously submitted to the FCC.[6] On August 8, 2016, the NAPM LLC and iconectiv executed the MSA. On September 21, 2016, iconectiv held the first of several planned LNPA Transition onboarding webcasts for Service Providers, Service Bureaus and Providers of Telecom Related Services. In addition, iconectiv is moving forward with meeting the requirements and deadlines set forth in the Master Services Agreement.

iconectiv continued to on-board users to its new NPAC platform. Current on-boarding status as of October 27, 2017 shows:

- ~87% of SP/SB/PTRS users have started on-boarding and 1,259 NPAC users have completed registration;

- The final mechanized Service Bureau completed registration in October;

- 227 WDNC entities have started registration and 46 have completed registration;

- 88% of ELEP entities have responded to outreach and 15% have fully registered; and

- Public Safety / IVR registration was launched in 41 states and 746 have completed registration.

For information from iconectiv about the NPAC transition, please send an email to **LNPA-ACCT-MGMT@iconectiv.numberportability.com**
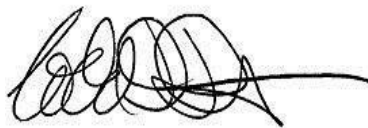
Neustar

Neustar began billing industry service providers on their December 2015 monthly Statement of Work ("SOW") invoices for transition service support billable since July 2015, consistent with the terms of SOW 97. In addition, the four-way non-disclosure agreement, which facilitates joint vendor meetings to discuss transition related issues, was signed by Neustar, the NAPM LLC, the TOM, and iconectiv on February 2, 2017. Lastly, Neustar has executed the User Agreement with iconectiv, and is taking steps to complete the vendor on-boarding process.

*   *   *

Please contact the undersigned if you have any questions or would like any additional information about the issues discussed herein.

Sincerely,

Todd D. Daubert
Counsel to the NAPM LLC

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[6]   *See Telcordia Technologies, Inc. Petition to Reform Amendment 57 and to Order a Competitive Bidding Process for Number Portability Administration et al.*, Order, WC Docket Nos. 07-149, 09-109, CC Docket No. 95-116 (rel. July 27, 2015) (*LNPA Approval Order*).

Appendix A: Overall Transition Status Dashboard

NPAC SMS Platform Build	🟡	• Data center construction and configuration is complete ahead of schedule • Release A development is complete • Release B development is code complete for planned functionality, but minimal buffer remains to accommodate new requirements
Outreach and On-boarding	🟢	• 87% of SP/SB/PTRS NPAC users representing 90% of SPIDs are engaged in on-boarding process • 1,259 users have completed registration • 46 WDNC entities have completed registration • 15% of ELEP entities have registered
Industry Testing	🟡	• 11 Acceptance Test Plans (ATP) have been approved in coordination with the FCC • Industry testing is in progress; CMIP vendor testing is nearly complete and service provider testing continues with 17 SUTs complete and 7 in progress • Vendor testing has surfaced issues, which are requiring longer than planned timeframe to resolve
Data Migration and Go-Live	🟢	• Finalizing parallel operations requirements • Conducting Phase 2 data migration testing

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Appendix B: Supplemental Information

The LNPA Transition Oversight Manager (TOM) provides the following supplementary information regarding transition testing, readiness, reporting, and rollback to ensure all stakeholders have an accurate view of transition status and plans as well as to ensure that all stakeholders are aware of the communications channels and reporting mechanisms that the TOM is employing as part of its transition outreach and education activities.

NPAC Testing

In preparation for transition, the readiness of the incoming vendor to assume the role of Local Number Portability Administrator (LNPA) is being verified through a multifaceted test and validation plan. This plan is comprised of three phases of testing: internal testing conducted by the incoming LNPA, external testing conducted by Number Portability Administration Center (NPAC) local systems vendors and users, and acceptance testing which is used to validate the performance of the NPAC prior to final acceptance. This final acceptance testing is comprised of a set of 12 Acceptance Test Plans (ATPs) that have been reviewed and approved by the NAPM LLC in coordination with the FCC. These 12 Acceptance Test Plans are NPAC/SMS, Low-Tech Interface, ELEP, WDNC, Pooling Administration System, Data Migration, IVR, Billing, Performance, Business Continuity, Disaster Recovery and Security.

The first ATP validates the performance of the NPAC/SMS by leveraging the industry test cases that have been defined and approved by the LNPA Working Group, a subcommittee of the North American Numbering Council (NANC). The NPAC/SMS ATP requires that vendors of the local systems software that interfaces with the NPAC certify their software for the NPAC features that are utilized by their systems in production operations. This is the same methodology the LNPA Working Group employs to validate new software releases. As an additional measure, the mechanized NPAC users that deploy these local systems are also being required to certify their specific implementations of that software to validate the deployed configurations. Finally, NPAC users of the Low-Tech (or web-based) interface are being afforded the opportunity to validate the performance of the new NPAC through discretionary testing. The summary results of this testing are being communicated to the public by the LNPA Transition Oversight Manager (TOM) through a series of Transition Outreach and Education Plan (TOEP) sessions that include monthly webcasts and reports, appearances at industry conferences and working groups such as the LNPA Working Group and North American Numbering Council meetings, as well as via materials posted on the North American Portability Management (NAPM) LLC website. These summary results are intended to strike a balance between the industry's need to monitor NPAC testing with the need to protect sensitive security information and the proprietary information of the testers.

External testing of the new NPAC began with vendor certification testing that started on May 15, 2017 for local systems using the CMIP NPAC interface. The first vendor system was certified with Release A (core CMIP and LTI functionality) in June 2017. This vendor certification will continue through early 2018 for vendors that use the XML NPAC interface.

As vendors became certified (or partially certified for certain features), mechanized NPAC users of those local systems began testing. The first user started testing on July 24, 2017. Mechanized NPAC users will continue testing until their local systems instances are certified. This testing is completed for most mechanized users of CMIP local systems. But, it will continue into early 2018 for users of XML local systems. Discretionary LTI user testing began on August 14, 2017 and will be available to continue into early 2018. Over a dozen LTI users are currently conducting tests.

After mechanized NPAC users certify their local systems instances, they are free to begin discretionary ad hoc testing, group testing between service providers and round robin end-to-end testing among two or more service providers that goes beyond the industry-defined test cases. This phase of discretionary testing began September 18, 2017 and the first set of round robin testing between service providers is scheduled to begin the week of December 4, 2017. Discretionary ad hoc, group and round robin testing

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will continue through February 28, 2018. The TOM has taken steps to ensure robust industry participation and test coverage, for example, by facilitating and tracking results of round robin testing.

Beyond the NPAC software, similar rigor is being applied to the other test and validation activities. In data migration, multiple rounds of test transfers from the incumbent to the incoming LNPA have been conducted. This testing was beneficial in identifying and resolving errors in the generation of the data transfer file, and as the TOM reported in recent TOEP communications, the latest data migration tests included successful, independent service provider verification of the transferred and loaded data across all seven regions.

The TOM will continue to share summary results of discretionary testing through the TOEP meeting series as is currently done for mandatory certification testing. As the NPAC software development completes in mid-December, this reporting will expand to also include coverage of performance and operational testing.

LNPA Transition Risk Status Reporting

The TOM reports the overall status of the LNPA Transition each month through public reports to the FCC as well as its monthly TOEP sessions. These reports indicated the Data Migration and Go-Live work stream in a yellow, or at risk status, beginning in March 2017. This status change was due to the timing of the availability of the Neustar Pooling Administration System (PAS) Application Programming Interface (API) which Neustar planned to complete in November 2017 – after its need-by date to support NPAC testing. This risk was subsequently mitigated by securing a commitment for the Pooling Administrator to provide a beta release of that interface on July 31, 2017 and the work stream status was marked back to green in April 2017.

The NPAC SMS Platform Build work stream status was reported as yellow status in May 2017 due to a re-plan of the NPAC software Release B schedule to accommodate plan changes such as the change in the timing of the availability of the PAS API. At this time, the TOM communicated that the reason for the change was because the available schedule buffer had been consumed by these changes, not because key transition dates had slipped. This work stream status has remained at risk in each monthly report since.

In August 2017, the industry testing work stream status was changed to at risk because Release A industry testing surfaced issues with one vendor that were taking longer than planned to resolve. In some cases, this required carriers to begin their certification testing with partially certified systems and to resume certification after these issues are resolved. Additionally, 14 of the issues with this vendor were brought to the LNPA Working Group of the NANC to review and endorse a resolution plan for each. The resulting delays put further pressure on an already tight testing schedule. The status of this work stream has been kept in an at risk status since August 2017 to reflect the absence of buffer to absorb additional unexpected testing or requirements issues discovered during industry testing.

Contingency Rollback

To ensure readiness in the event of a rollback, the TOM has sponsored a regular cadence of contingency rollback planning meetings since 2015. As part of these meetings, a wide variety of potential rollback approaches were identified and evaluated. The industry-led approach was selected by the NAPM LLC because, in the judgment of the TOM and the NAPM LLC, it best addresses technical, resource, schedule, and contractual constraints.

Contrary to some statements being circulated, in no case were proposed solutions ignored or not evaluated on a timely basis. In particular, a variety of automated rollback approaches were evaluated, including those proposed in part by the incumbent LNPA.

A number of factors led to the selection of the industry-led approach. First, industry led is the required, baseline approach. In the event of a catastrophic failure that would trigger a rollback, an automated solution cannot be guaranteed to function. An industry capability to resubmit transactions is required, even if an automated solution was also developed.

Second, the automated approach as proposed by the incumbent LNPA was not workable. Onerous demands for supplemental validation information were made that were not feasible from a technical and resource perspective. Similarly, onerous contractual demands were made that clearly indicated that an agreement to actually implement was unlikely.

Third, the proposed automated approach was extremely expensive – development was forecast to be a multimillion dollar effort – millions of dollars for a solution that cannot be guaranteed to work and is extremely unlikely to be required given the low probability of a rollback. And, even if developed, would not obviate the need to plan and prepare for industry-led rollback.

When fully considered, the industry-led approach is the best choice given technical, resource, schedule, and contractual factors.

The TOM is conducting a series of interactive, industry working sessions to communicate and socialize this approach, supporting mechanisms, and testing plans within the service provider community, as well as to collect industry input. The fourth working session is scheduled for November 29, with a particular emphasis on the needs of small service providers during a possible contingency rollback. At present, the incumbent LNPA has not agreed to resume NPAC operations in the event of an industry-led rollback and this remains a point of concern, as reported in the NAPM LLC's monthly FCC reports.