

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
	)	
Nationwide Number Portability	)	WC Docket No. 17-244
	)	
Number Policies for Modern	)	WC Docket No. 13-97
Communications	)	

**REPLY COMMENTS OF IOWA NETWORK SERVICES, INC.  
D/B/A AUREON NETWORK SERVICES**

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Pursuant to the Federal Communications Commission’s (“FCC” or “Commission”) October 26, 2017 Notice of Proposed Rulemaking and Notice of Inquiry<sup>1</sup> issued in the above-captioned proceeding, Iowa Network Services, Inc. d/b/a Aureon Network Services (“Aureon”) hereby files its reply comments thereto.

**I. INTRODUCTION AND SUMMARY**

As the Commission is aware, Aureon is a provider of centralized equal access (“CEA”) service in Iowa. CEA service is a unique service established by the FCC<sup>2</sup> that enables small interexchange carriers (“IXCs”) to compete with large, entrenched IXCs, such as AT&T, in rural areas. CEA service levels the competitive playing field by providing a centralized tandem switch for connecting calls between IXCs, on one hand, and rural local exchange carriers

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<sup>1</sup> *Nationwide Number Portability; Numbering Policies for Modern Communications*, WC Docket Nos. 17-244, 13-97, 32 FCC Rcd. 8034 (rel. Oct. 26 2017) (“NPRM” or “NOI”).

<sup>2</sup> *Application of Iowa Network Access Division for Authority Pursuant to Section 214 of the Communications Act of 1934 and Section 63.01 of the Commission’s rules and Regulations to Lease Transmission Facilities to Provide Access Service to Interexchange Carriers in the State of Iowa*, Memorandum Opinion, Order and Certificate, 3 FCC Rcd 1468, 1471 ¶¶ 20-21 (1988) (“*FCC 214 Order*”), *aff’d on recon.*, 4 FCC Rcd 2201 (1989) (“*FCC 214 Recon. Order*”) (holding that CEA service serves the public interest, convenience and necessity); *Nw. Bell Tel. Co. v. Iowa Utils. Bd.*, 477 N.W.2d 678, 681 (Iowa 1991) (distinguishing CEA service from other services and upholding the approval of Aureon’s CEA network).

(“LECs”), on the other, at an affordable rate made possible by concentrating the rural traffic of all IXCs, both large and small. The service thus eliminates the need for each individual IXC to build its own expensive infrastructure to connect calls to and from rural LECs. CEA service is not directly provided to individual consumers or end users.

Prior to Aureon’s creation, long distance consumers in rural Iowa were forced to route their calls through AT&T (for interLATA calls) and Northwestern Bell Telephone Company (“NWB,” now CenturyLink) (for intraLATA calls) because only AT&T and NWB had their own networks connecting their customers’ calls to each rural LEC in Iowa.<sup>3</sup> Only AT&T offered interLATA long distance service,<sup>4</sup> and only NWB offered intraLATA long distance service<sup>5</sup> due to their monopoly over long distance facilities serving rural Iowa exchanges. Rural LECs in Iowa could not offer their end users a competitive choice of long distance carriers due to the substantial expense of upgrading hundreds of rural end office switches with equal access capabilities, the disparate types of equipment used among the LECs, and the lack of a comparable network from a competing IXC for connecting end users’ calls. Furthermore, small rural communities in Iowa have low population densities, and it was simply too expensive for small IXCs to build their own facilities to each rural LEC end office due to the high cost of construction and the insufficient return on investment in low-population communities. As a result, AT&T was the default monopoly provider of interLATA long distance service in rural Iowa.

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<sup>3</sup> *FCC 214 Order* at 1471 ¶ 19.

<sup>4</sup> *Id.* at 1468 ¶ 3.

<sup>5</sup> *Nw. Bell*, 477 N.W.2d at 681.

Aureon was created to foster competition with AT&T. On February 29, 1988, the Commission granted section 214 authorization to Aureon to build a fiber optic network to provide CEA service.<sup>6</sup> The Commission found that the CEA network will “serve the public interest, convenience and necessity” by creating competition with AT&T in small rural communities, which is an important Commission goal.<sup>7</sup> Aureon’s network thus brought long distance competition to rural Iowa and made it economical for AT&T’s smaller IXC competitors to provide service to rural Iowa by aggregating traffic for hundreds of rural LECs at Aureon’s tandem switch in Des Moines and by centralizing the availability of expensive features and advanced functionalities.

Absent Aureon’s CEA service, AT&T’s smaller competitors would have to build or lease facilities to each of the rural LEC end offices connected to Aureon’s network (otherwise known as “subtending LECs”). In the Commission’s words, this would be “an expensive task.”<sup>8</sup> Aureon’s CEA service connects the IXCs’ facilities – at a single location in Des Moines<sup>9</sup> – to 200 subtending LECs’ networks, thereby enabling the IXCs’ end users located in these LECs’ service areas to dial 1 plus the area code to complete on an equal access basis their long distance telephone calls using the long distance carriers of their choice. CEA service also enables IXCs to connect at a single location in order to terminate their end users’ calls to all the service areas of 200 subtending LECs. As the Commission anticipated, Aureon’s network thus “speed[s] the

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<sup>6</sup> Aureon’s Access Division leases capacity from Aureon’s Network Division in order to provide CEA service to IXCs.

<sup>7</sup> *FCC 214 Order*, 3 FCC Rcd at 1468 ¶ 4, 1471 ¶¶ 21, 23.

<sup>8</sup> *Id.* at 1468 ¶ 3.

<sup>9</sup> CEA service also provides IXCs with the convenience of interconnecting with the CEA network at other locations specified in the CEA tariffs.

availability of high quality varied competitive services to small towns and rural areas.”<sup>10</sup> CEA service has succeeded in making it attractive for fifteen IXC’s to use the CEA network to originate traffic, and for seventeen IXC’s to use Aureon’s network to terminate traffic. Without Aureon’s CEA service, a competitive choice of long distance carriers may never have developed in rural areas of Iowa.

It is important to note, however, that while competition was the initial primary driver for the creation of CEA service, subscribers in rural areas have gained so much more from Aureon’s network than just a choice of competitive long distance carriers. Rural service providers exist to serve their local rural communities, and to ensure that rural customers have access to advanced communications and video services comparable to those that subscribers in urban areas receive. Aureon’s CEA service and ancillary offerings have enabled rural LECs and non-LEC broadband providers to provide advanced communications services to the rural LECs’ local communities by concentrating voice, broadband, and video feeds and back office operations at a central location for distribution to disparate rural locations. Absent Aureon’s network, rural LECs would struggle to keep up with modern service offerings and technologies as a result of their small subscriber and revenue bases.

In the NPRM, the FCC proposed to change the current dialing parity and N-1 query requirement as part of the process to implement nationwide number portability (“NNP”). The FCC also requested comments in the NOI on the four specific models of NNP outlined in the ATIS Report:<sup>11</sup> (1) nationwide implementation of local routing numbers (“LRNs”); (2) non-

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<sup>10</sup> *Id.* at 1468 ¶ 4 and 1474 ¶ 38.

<sup>11</sup> See Alliance for Telecommunications Industry Solutions (ATIS), Technical Report on a Nationwide Number Portability Study, [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-340865A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-340865A1.pdf) (“ATIS Report”).

Geographic LRNs (“NGLRNs”); (3) commercial agreements; and (4) iconectiv’s GR-2982-CORE specification. As discussed in further detail below, Aureon agrees that changes may need to be made regarding the current number portability process in order to transition to NNP. However, the Commission should preserve CEA service in rural areas so that subscribers can continue to receive service from the long distance carriers of their choice, and to ensure competition remains robust for long distance service in rural areas. The rural traffic concentration and economies of scale made possible by the CEA network are also critical to making NNP available to rural consumers residing in the service areas of the 200 LECs subtending the CEA network. Furthermore, Aureon agrees with other parties that the FCC should wait until the industry is ready to fully implement NNP to avoid disrupting operations, and imposing expensive and burdensome costs on small, rural carriers that may ultimately be unnecessary as the public switched telephone network (“PSTN”) transitions to an all IP-enabled network architecture.

When the FCC decides that NNP should be implemented, the Commission should adopt the NGLRN model for NNP as that is the only solution that will enable NNP to be deployed while accommodating the TDM infrastructure currently deployed in rural areas. Although commercial agreements could be used as a temporary stop-gap measure for those carriers that want to start making NNP available to their customers while the industry develops standards and deploys infrastructure to bring NNP ubiquitously throughout the nation, Aureon only supports the use of commercial agreements if Aureon and its subtending LECs are not required to incur substantial costs to implement NNP at this time.

## **II. DISCUSSION**

### **A. Notice of Proposed Rulemaking**

#### **1. CEA Service Should be Retained and can Coexist with NNP.**

As discussed above, Aureon's network provides critical services to rural areas in Iowa, and has brought long distance competition to rural Iowa subscribers that would otherwise have had no choice of local distance providers other than AT&T. Rural LECs are focused on providing service to their local constituents, and those LECs do not have the ability to offer service outside of their operating areas. It is important for the Commission to recognize that many rural LEC customers in Iowa purchase stand-alone long distance service from other carriers. As a result of Aureon's CEA service, rural Iowa customers now have a choice of stand-alone long distance providers, and enjoy the benefits of advanced communications services.

In the NPRM, the FCC requested comments on whether there was a continuing need to preserve the choices of existing customers who are presubscribed to stand-alone long-distance services, and whose choices were grandfathered in the *2015 USTelecom Forbearance Order*.<sup>12</sup> General Communications, Inc. ("GCI") filed comments urging the Commission to maintain grandfathering for current customers of stand-alone IXCs.<sup>13</sup> GCI stated that the small providers serving customers in Alaska "do not have a ubiquitous facilities-based presence, and they do not have the same ability to port in the numbers of potential new customers who wish to keep their number if that number is associated with a geographic area in which the carrier does not have a

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<sup>12</sup> NPRM/NOI, ¶ 33 (citing *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) from Enforcement of Obsolete ILEC Legacy Regulations That Inhibit Deployment of Next-Generation Networks et al.*, Memorandum Opinion and Order, 31 FCC Rcd 6157, 6182-89, paras. 49-54 (2015) ("*2015 USTelecom Forbearance Order*").

<sup>13</sup> Comments of GCI at 5.



facilities-based presence.”<sup>14</sup> GCI further stated that grandfathering of equal access and dialing parity for existing customers was necessary to ensure that customers who have chosen a separate long distance provider would not be forced to abandon their preferred long distance service.<sup>15</sup> Aureon supports GCI’s comments, and the situation in Alaska described by GCI is similar to that faced by rural LECs in Iowa.

Although nationwide, stand-alone long distance service is becoming less common in urban areas, it is very common for rural Iowa customers to obtain long distance service from an IXC that is not their local telephone service company. Aureon’s CEA service has made this choice of competitive IXC providers to rural Iowa subscribers possible. GCI commented that “consumers who subscribe to stand-alone IXCs in Alaska either have a choice of IXCs and have opted to use their chosen provider, or they have no choice and are using the only currently available provider.”<sup>16</sup> The latter scenario in Alaska described by GCI would likely have been the result in Iowa were it not for Aureon’s CEA service, which enables smaller IXCs competing against AT&T to afford to connect to rural LEC networks through Aureon’s CEA service. Any rules adopted by the Commission implementing NNP must ensure that CEA service is preserved. Otherwise, the long distance market in Iowa could revert to the pre-CEA status of customers only having AT&T to provide interLATA and CenturyLink to provide intraLATA toll services.

CEA service can not only coexist with NNP, but is necessary to facilitate NNP service in rural Iowa. Rural Iowa LECs do not have the ability to port in numbers from other carriers when the LECs do not have a presence in the geographic areas served by those other carriers. The

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<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 8

<sup>16</sup> *Id.*

CEA network offers a solution to that problem. Aureon's CEA tandem could act as a gateway in the implementation of NNP through the use of non-Geographic LRNs, which would obviate the need for rural LECs to have a nationwide presence. Aureon's gateway would also solve the problem faced by rural LECs, which lack the resources or capital budgets necessary to implement NNP as quickly as larger carriers. Furthermore, CEA provides the concentration of rural traffic that non-geographic transport providers will require for affordable NNP in rural LEC exchanges. Aureon's CEA network, coupled with NNP implemented through an Aureon gateway for non-Geographic LRNs, is the solution that provides the greatest benefit for rural consumers.

**2. The FCC Should Not Eliminate the N-1 Query Requirement Until NNP is Fully Implemented.**

In the NPRM, the Commission recognized that existing technical constraints prevent customers from porting their numbers for wireless-to-wireline customers unless the wireline service provider happens to have a presence in the same rate center as the wireless customer's number.<sup>17</sup> That requirement limits the ability of LECs to port in numbers from wireless carriers,<sup>18</sup> and places rural LECs at a disadvantage. Wireless carriers do not have the same limitations due to their more expansive areas of operation. The same concept applies in the wireline-to-wireline context where wireline carriers have larger territories than the rural LEC counterparts. Although the FCC believes "that NNP will level the playing field for many rural and regional carriers, who are disadvantaged by the difficulty or outright inability of consumers to port in to their networks", the Commission also acknowledges that achieving NNP "without

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<sup>17</sup> *NPRM/NOI*, ¶ 5.

<sup>18</sup> *Id.*

[small carriers] incurring significant practical harms or prohibitive costs” will be difficult.<sup>19</sup>

However, the Commission’s proposed “incremental approach towards achieving NNP”, beginning with the removal of the N-1 query requirement, would result in the precise harm to rural carriers that the Commission wants to avoid. Rules terminating N-1 queries should not be implemented until NNP standards have been fully developed, and necessary upgrades have been deployed by all carriers to carry out NNP.

The N-1 query process for LNP currently being used works well, and does not impose burdensome and unnecessary costs on rural LECs because they are not required to perform the database queries to determine how the call should be routed. Those queries have been generally performed by large IXC as the N-1 carrier. Aureon agrees with the comments of WTA that the current N-1 query requirement should not be prematurely eliminated before deciding how NNP should be implemented for wireline numbers because the Commission’s proposal could require all carriers to make database queries for most calls that they currently carry.<sup>20</sup> Although the Commission stated that “eliminating the N-1 query requirement does not require supplanting it with a new requirement that originating carriers query the” Number Portability Administration Center (“NPAC”) database, jettisoning that requirement would, as a practical matter, require database querying to disproportionately fall on originating carriers.<sup>21</sup>

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<sup>19</sup> *NPRM/NOI* ¶ 19.

<sup>20</sup> Comments of WTA – Advocates for Rural Broadband at 5-7.

<sup>21</sup> Comments of Cincinnati Bell Telephone Company, LLC at 3 (elimination of the N-1 query requirement will result in the originating carrier having to query all calls); Comments of AT&T at 3 (same), 4 (NNP is best achieved if the FCC makes the originating carrier responsible for performing the query); Comments of ATIS at 3 (need to evaluate impact of moving N-1 query to the originating switch); Comments of CenturyLink at 3 (altering the current system stands to shift more costs to originating carriers of legacy TDM networks).

Many of the rural LECs that subtend Aureon's CEA tandem rely on Aureon to provide advanced features that are part of today's telecommunications network. Should the Commission decide to eliminate the N-1 query requirement before NNP is implemented, rural subtending LECs would be required to perform the NPAC database dip, and could turn to Aureon to provide that service. As such, the rural LECs could lean heavily on Aureon to assist them with any new obligations required as a result of the elimination of the N-1 query requirement, as well as any other obligations resulting from NNP implementation.

Although Aureon has not performed a detailed analysis of the upgrade and network costs it would incur as a result of the elimination of N-1 queries, Aureon expects that those costs would be in the millions of dollars. Those expectations are consistent with the findings of Cincinnati Bell, which has received preliminary quotes for the upgrades necessary to implement NNP in the absence of the N-1 query requirement, and estimates that it would have to spend between \$4 million to \$8 million.<sup>22</sup> Cincinnati Bell further reports that those expenditures would provide no opportunity for a positive return on investment,<sup>23</sup> and Aureon does not expect that its outcome would be any different.

Rather than burdening rural carriers with the high costs that would result from the termination of the N-1 query requirement, Aureon urges the Commission to delay action on its proposal until such time as NNP standards are finalized, and a sufficient critical mass of carriers has migrated to IP-technology to enable NNP to be deployed. This would enable the Commission and rural carriers to determine how to best use limited capital resources to achieve NNP without having to waste time, effort, and expense in deploying short-lived solutions that

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<sup>22</sup> Comments of Cincinnati Bell at 4.

<sup>23</sup> *Id.*

would be rendered unnecessary and obsolete once the FCC finally adopts rules to implement one of the four NNP solutions under consideration in the NOI.

**B. Notice of Inquiry**

**1. NGLRN is the Only Solution that will Ensure that Rural LECs Can Implement NNP.**

Although some parts of the PSTN are moving towards IP-based technology, TDM is still the predominant communication technology in rural areas. The replacement and upgrade of rural LEC switches and other infrastructure to convert from TDM to IP-based communications is a massive and expensive undertaking for rural LECs. Large carriers that have filed comments in this proceeding have cautioned that the Commission must take into account the high costs of NNP implementation for legacy TDM networks to avoid saddling carriers with expensive stranded investments that will become useless or obsolete once NNP standards are ultimately adopted.<sup>24</sup> This is particular true for rural LECs that have small subscriber bases, and that do not have the capital resources available to large carriers to transition immediately to all-IP enabled networks.

In the NOI, the Commission requested comments on the four specific models of NNP outlined in the ATIS Report: (1) nationwide implementation of LRNs; (2) non-Geographic LRNs or NGLRNs; (3) commercial agreements; and (4) iconectiv's GR-2982-CORE specification. Of those solutions, the NGLRN solution is the only one that is viable because NNP can be accomplished through the use of Non-Geographic Gateways ("NGGW"), does not require rural carriers to convert their TDM networks to IP before NNP can be implemented, and is not impacted by current strictures in the LATA-based number portability scheme.

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<sup>24</sup> See Comments of CenturyLink at 4-5; Comments of AT&T at 4-5.

The heart of the NGLRN proposal is the establishment of a network of NGGWs to host the NGLRNs for call termination.<sup>25</sup> Service providers would route calls to an IP network to complete calls, which could be the provider's own IP network, or one they already have an agreement with for this purpose.<sup>26</sup> Furthermore, even existing TDM SS7 switches would be able to route to an IP network.<sup>27</sup> NGLRN appears to be an ideal, and in all likelihood, the only practical, long-term NNP solution for rural carriers and for the 200 rural LECs that subtend Aureon's CEA tandem.

Neustar noted in its comments that tandem service operators, such as Peerless, Inteliquent, and West Telecom offer intermediate switching services, and presumably could act as NGGWs for other carriers that need to connect their legacy TDM networks to next-generation IP networks.<sup>28</sup> Rural LECs would not need to immediately upgrade their TDM systems to IP to be able to implement NNP because calls to IP-enabled networks would be sent to an NGGW for routing. This is similar to the current CEA arrangement that IXC's and subtending LECs have with Aureon, where calls are routed to Aureon's tandem, and Aureon then routes those calls to the appropriate carriers for transport and/or termination. Rather than require non-geographic transport providers to construct facilities to each of the 200 subtending LECs, the CEA network would concentrate rural traffic at a single Aureon NGGW where non-geographic transport providers could interconnect. Aureon and other tandem providers could act as gateways for rural carriers that would not otherwise have the ability to offer NNP to their customers due to legacy TDM switches and infrastructure network.

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<sup>25</sup> ATIS Report at 21.

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

<sup>28</sup> Comments of Neustar at 8, n.19.

WTA finds the NGLRN alternative to have some merit, though WTA notes that the proposal appears to require the scrapping of the N-1 query requirement, force substantial increases in database queries, and would be prospective only.<sup>29</sup> Aureon believes that WTA's concerns can be addressed by the Commission. As discussed above, the Commission should not terminate the N-1 query requirement until there is more certainty regarding the path to NNP, and the industry has adopted standards and has deployed the necessary infrastructure to implement NNP. The NGLRN solution holds the most promise for implementing NNP, while at the same time, ensuring that burdensome costs and upgrades are not imposed on rural carriers.

**2. Commercial Agreements may Serve as an Interim Solution for NNP, but Should Only be Implemented so as to not Burden Rural LECs and Aureon with Additional Costs.**

Commercial agreement may be able to serve as a temporary measure for NNP implementation for large, nationwide carriers that want to offer NNP to their customers while the FCC and industry groups work on standards and implementation issues. However, commercial agreements should not be the default NNP solution. Rather, they should only be a permissive interim option for carriers that want to participate in NNP because smaller carriers, and in particular rural carriers, would be at a severe bargaining disadvantage when negotiating commercial NNP agreements.

Other commenters, such as CenturyLink, Verizon, ITTA, and CTIA, have urged the Commission to adopt commercial agreements as the only NNP solution. However, as pointed out by CCA, commercial agreements do not work for all carriers.<sup>30</sup> Aureon agrees with CCA, and further states that commercial agreements are inappropriate as a solution for implementing

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<sup>29</sup> Comments of WTA at 13.

<sup>30</sup> Comments of Competitive Carriers Association ("CCA") at 4-5.

NNP for small providers. Rural carriers do not have the necessary market share or bargaining power in order to enter into agreements with larger carriers on reciprocal terms.

It has been the rural carriers' experience that if an agreement with a larger carrier is required for a rural carrier to receive a benefit from a larger carrier, and the larger carrier does not require such an agreement to obtain the same benefit, the larger carrier will refuse to enter into any agreement at all. This would be true in the case of the porting of numbers in a NNP commercial agreement regime because a larger carrier that has a presence in the rural carrier's service area would not need an agreement in order to port out numbers from the rural carrier. However, the reverse is not true, and rural carriers would find themselves unable to port in numbers from areas outside of the rural carriers' territory unless they gave into the demands of the large, nationwide carriers. Larger carriers could also refuse to enter into commercial agreements with rural carriers when there is no benefit to the larger carriers to enter into such agreements for NNP.

Aureron agrees with NTCA's comments that commercial arrangements can be used today to implement NNP,<sup>31</sup> but not for all carriers, and only in the appropriate circumstances. NTCA cautions that any rules adopted to enable carriers to offer NNP should ensure that smaller providers are not forced to incur uncompensated costs simply to enable other carriers to offer NNP functionality.<sup>32</sup> Aureon also agrees with NTCA's comments that costs created by rules adopted to enable carriers to offer NNP functionality should be borne by those carriers seeking to implement and benefit from NNP.<sup>33</sup> Costs should not be shifted to rural carriers that can ill-

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<sup>31</sup> Comments of NTCA at 8.

<sup>32</sup> *Id.* at 5.

<sup>33</sup> *Id.*



afford to bear the costs of NNP implementation, and they should not be required to incur costs that enable other carriers to offer NNP to their customers. Similarly, Aureon agrees with WTA's comment that imposing additional costs on rural LECs resulting from NNP "would come at a very inopportune time when many are struggling to upgrade, maintain and operate their networks in the face of insufficient [USF] support . . . ."<sup>34</sup> If the Commission wants to enable carriers to offer NNP to their customers now, the FCC may allow carriers that are willing to bear the costs of NNP to enter into commercial agreements as an intermediate step while the FCC and industry groups continue their work to develop a permanent NNP solution. However, the Commission should also ensure that substantial NNP costs are not imposed on Aureon and its subtending LECs as a consequence of such commercial agreements.

### **3. The National LRN Approach is Unsuitable for Rural Areas.**

Although the National LRN approach would not require rural carriers to convert their TDM networks to IP prior to being implemented, there are numerous issues with this solution that make it unsuitable for rural areas. Under the National LRN proposal, if the porting-in service provider does not have a presence in the ported-out area, "appropriate business agreements[, i.e., commercial agreements,] may need to exist between the port-in and port-out service providers."<sup>35</sup> Rural LECs have very small service areas, and would likely not have a presence in the areas served by wireless or larger wireline carriers. This would put rural LECs at a competitive disadvantage to its larger competitors, and, as further discussed above, commercial agreements are not ideal solutions for rural carriers that lack bargaining power.

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<sup>34</sup> Comments of WTA at 6.

<sup>35</sup> ATIS Report at 13.

Other hurdles presented by the National LRN proposal include the need for service providers to upgrade their existing switches to be able to perform all queries at the point of origination, additional routing costs for numbers ported outside of their home LATAs; updates to customer and intercarrier billing and settlement practices due to call jurisdictional and LATA porting issues; and the negative impact on call completion, call block, and caller ID functionality. Aureon agrees with WTA that conversion to a National LRN system would require major and expensive changes to existing legacy TDM networks, which are unaffordable for small, rural carriers.

#### **4. The GR-2982-CORE Standard is too Complex and Unworkable.**

Comments submitted on the GR-2982-CORE standard have been overwhelmingly negative on this proposal because the “GR-2982-CORE model is exceedingly complex and very likely infeasible, and . . . would impact all switches and number portability databases, as well as service order administration and local service management systems across the country.”<sup>36</sup>

Indeed, the ATIS Report concedes that the GR-2982-CORE is infeasible:

Since implementation of NNP along the lines of GR-2982-CORE would require SS7 protocol, switch data model, and call processing development, it is unlikely that a GR-2982-based NNP implementation is feasible due to the number of manufacture[r] discontinued platforms on which such development is not available (or sensible).<sup>37</sup>

Given that the ATIS Report has expressed serious doubt that the GR-2982-CORE can even be implemented, the FCC should not consider that proposal for NNP implementation, and instead, adopt NGLRN when the transition to IP is sufficiently complete.

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<sup>36</sup> Comments of ITTA at 5.

<sup>37</sup> ATIS Report at 39.

### **III. CONCLUSION**

Aureon provides critical services that enable rural subscribers to enjoy the benefits of modern communications services by enabling rural LECs to connect their networks to those of other larger carriers. As such, Aureon is well-positioned to act as a centralized gateway implementing the NGLRN solution for rural carriers to connect their TDM networks to IP systems and offer NNP to their subscribers. The NGLRN proposal would not require all carriers to complete the migration to IP before NNP could be implemented, thus making it an ideal solution not only for rural carriers, but for all carriers that currently operate TDM-based networks.

The Commission should not require rural carriers to incur expensive upgrade costs to implement NNP, or impose NPAC database query requirements on rural carriers through the elimination of the N-1 querying requirement. Rather, the Commission should take measures to ensure that NNP implementation does not harm rural carriers, and that carriers that benefit from early adoption of NNP pay for those costs. To the extent the FCC decides that carriers eager to deploy NNP to their customers may be permitted to do so, the Commission could allow those carriers to offer NNP by entering into voluntary commercial agreements so long as only those carriers offering NNP bear the costs associated with early NNP deployment.

Respectfully submitted,

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