

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

In the Matter of)	
)	
Technology Transitions)	GN Docket No. 13-5
)	
AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition)	GN Docket No. 12-353
)	

**COMMENTS OF AT&T SERVICES, INC.
ON PROPOSAL OF IOWA NETWORK SERVICES, INC.
FOR SERVICE-BASED TECHNOLOGY TRANSITIONS EXPERIMENT**

Pursuant to the Public Notice of February 21, 2014,¹ AT&T Services, Inc., on behalf of itself and its operating affiliates (“AT&T”), submits these comments on the proposal submitted by Iowa Network Services, Inc. (“INS”) to conduct a service-based experiment concerning the TDM-to-IP transition for centralized equal access (“CEA”) service.² As described further below, the Commission should require INS to provide additional detail and clarification concerning its proposal before authorizing the experiment to proceed.

DISCUSSION

AT&T welcomes the efforts of all stakeholders to conduct trials aimed at providing meaningful data that will allow the Commission and the public to evaluate how customers are affected by the historic transition to an all-IP ecosystem. For its part, AT&T has submitted a detailed proposal for trials involving the transition of two wire centers—one rural and one

¹ See *Commission Seeks Comment on Proposal of Iowa Network Services, Inc. for Service-Based Technology Transitions Experiment*, GN Docket Nos. 12-353, 13-5, DA 14-238 (rel. Feb. 21, 2014).

² See *Application of Iowa Network Services, Inc. for Authority to Conduct a Service-based Experiment Concerning the TDM-to-IP Transition for Centralized Equal Access Service*, GN Docket No. 13-5 (filed Feb. 20, 2014) (“INS Trial Proposal”).

suburban—to all IP services.³ AT&T’s hope and expectation is that these proposed trials will provide the Commission, AT&T and other stakeholders with valuable information to ensure that the historic transition from 20th Century TDM technology to next-generation IP networks and services proceeds as smoothly as possible, and in a way that is faithful to the enduring social values—ensuring universal connectivity, consumer protection, public safety, reliability and competition—that must continue to provide the foundation for communications policies in the 21st Century. And in its own role as a customer of other carriers’ TDM-based services, AT&T looks forward to the opportunity to participate in trials proposed by other providers that are appropriately designed and conducted to meet these same objectives.

Prudential Concerns. Unfortunately, AT&T is unable to determine at this time whether INS’s proposed experiment meets those requirements and will indeed provide the Commission with useful information concerning the IP transition. Before describing the questions raised by INS’s proposal, however, it is necessary to highlight a predicate concern with its experiment. Specifically, although the Commission indicated in the *Technology Transition Trials Order* that it was not intending to resolve the legal and policy issues that attend the transition in the context of the trials it was authorizing, INS’ proposal appears to do just that, in that it assumes the resolution of a number of significant policy issues that either already are before the Commission for consideration or that will need to be addressed as the transition moves forward.

One example is the concept that ostensibly is at the heart of the INS experiment: centralized equal access. Indeed, it is far from clear how the proposed trial of centralized access will inform the transition given the questionable relevance centralized equal access would appear to have in the post-TDM world. As AT&T noted in its detailed plan for the proposed wire center

³ See Letter to Marlene H. Dortch, Secretary, FCC, from Christopher M. Heimann, AT&T Services, Inc. (filed Feb. 27, 2014) (“AT&T Transition Plan”).

trial, it is not clear whether the concept of equal access itself, to the extent it is even relevant in today's world, will survive the transition.⁴ As a legal matter, it is at best questionable whether any equal access obligations that are now captured in the provisions of the Telecommunications Act of 1996 ("1996 Act") will apply in an all-IP environment. For example, the dialing parity requirement established in section 251(b)(3) is imposed on "local exchange carriers."⁵ Thus, insofar as a VoIP provider would not be providing that service as a common carrier and no longer will provide telephone exchange service or exchange access, it no longer would be subject to that obligation. The provision also would be inapplicable to VoIP service, which is by its nature distance-agnostic, because it is not properly classified as "telephone exchange service" or "telephone toll service."⁶

More to the point, assuming it is even technically feasible, imposing an equal access requirement on IP-based services would be prohibitively expensive and fundamentally at odds with the "any distance" nature of IP services themselves.⁷ The *Technology Transition Trial Order*, in recounting the history of transformative technology transitions, suggests that these trials are about testing effects of deploying network infrastructure "that can conquer space and time. . . ."⁸ Constraining those tests—and, indeed, the transition itself—with anachronistic

⁴ See AT&T Transition Plan, Attach. (Wire Center Trial Operating Plan) at 50 n.111; see also AT&T Comments, WC Docket No. 10-90 *et al.*, at 72-73 (filed Feb. 24, 2012).

⁵ 47 U.S.C. § 251(b)(3).

⁶ See 47 U.S.C. § 153(54), (55) (defining "telephone exchange service" and "telephone toll service").

⁷ Cf. *Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, Memorandum Opinion and Order, 19 FCC Rcd 22404, para. 14 (2004) (finding that the characteristics of Vonage's VoIP service "preclude any practical identification of, and separation into, interstate and intrastate communications for purposes of effectuating a dual federal/state regulatory scheme. . . .").

⁸ *Technology Transitions, et al.*, GN Docket No. 13-5, *et al.*, Order, Report and Order and Further Notice of Proposed Rulemaking, FCC 14-5, at para. 11 (rel. Jan. 31, 2014) (*Technology Transition Trials Order*).

concepts rooted in discrete markets for local, intraLATA, interLATA, and interstate traffic that no longer reflect customer preferences and marketplace conditions would be counterproductive.

The same holds true for the notion of “centralized” equal access. Presumably, the carriers subtending CEA providers like INS will be building out—if they have not already done so—IP-based networks through which they will be providing their customers VoIP and other IP-based services. Again, given the “any distance” nature of those services, it is highly unlikely that those customers will have the option of selecting a separate interexchange carrier to carry long distance calls. Accordingly, it is hard to perceive the current role for a CEA provider when the concept of equal access itself has gone the way of the dinosaur.⁹

Similarly, insofar as INS’s proposal is in fact an effort to test the concept of IP-to-IP interconnection, the Commission should be cautious in proceeding with such an experiment. As AT&T explained in its comments last year concerning a similar proposal by the Technology Transitions Task Force, there is no need to conduct a trial for “VoIP interconnection” to gather real-world data on the *need* and *scope* for technical or industry standards for the exchange of voice traffic in Internet Protocol formats.¹⁰ Indeed, the *need* for industry and technical standards

⁹ AT&T has already urged the Commission to promptly reexamine the role of CEA carriers in the modern marketplace. See AT&T Reply, WC Docket No. 13-39 (filed June 11, 2013). One remnant of regulation that has long outlived its usefulness and marketplace realities is the remaining obligation to connect to rural carriers in certain states *exclusively* through CEA rings. See *Application of Iowa Network Access Division*, 3 FCC Rcd 1468, para. 21 (1991) (*INS Order*). The section 214 authorization granted to INS provided that it would be the exclusive access point to reach these rural LECs in Iowa. Even where traffic volumes justify direct connects to many of these carriers, AT&T’s requests for more-efficient direct connects have been denied by both rural ILECs and CLECs that cite INS’s exclusivity (and implementing tariff provisions). These denials come despite the fact that over 90% of the traffic AT&T sent to INS from October 2013 through January 2014 went to traffic pumping carriers. It is questionable at best whether such a government-granted monopoly is even lawful under the pro-competitive, market-opening provisions of the 1996 Act, but, regardless of its legality, it can no longer be justified on policy grounds in today’s marketplace. Having said that, given the breadth and depth of the networks deployed under CEA arrangements, there may in fact be a place for these carriers in the IP ecosystem, although it is one that should evolve away from the centralized equal access role. As it provides the additional detail concerning its experiment that AT&T has identified below, INS should also describe its vision for the role it anticipates CEA providers will play in a world in which the legacy rules and obligations that currently are implicated by such arrangements no longer exist.

¹⁰ See AT&T Comments, GN Docket No. 13-5 at 20-27 (filed July 8, 2013).

to address longer term structural issues associated with IP interconnection already is well-recognized. More to the point, the important work of establishing those standards is still underway in *fora* in which stakeholders from across the industry, including AT&T, are actively participating.

In short, even if the fundamental legal and policy issues that attend IP interconnection could be satisfactorily resolved now, a limited trial of such interconnection would still be premature. As just one example, until certain technical issues common to the industry (such as the development of the ENUM numbering database) are resolved, there will be no destination architecture for IP-to-IP interconnection that could be tested, and thus it is questionable whether a proposed trial would yield useful or relevant information regarding the transition. Moreover, because interconnection arrangements in an all-IP world will not be based around LATA (or even state) boundaries and will not respect artificial distinctions between “local” and “long-distance” services, and are highly unlikely to be limited to “voice,” running geographically limited trials of IP-based interconnection makes little sense. Accordingly, as with the trial that had been envisioned by the Task Force, INS’s even more limited proposal would serve no apparent useful purpose.¹¹

¹¹ There is, of course, a foundational problem with the concept of a Commission-sponsored IP interconnection trial—specifically, the notion of conducting a trial in a subject area over which the Commission’s authority is, at best, uncertain. As AT&T previously has explained in detail in several proceedings, not only are there sound policy reasons for the Commission to refrain from extending the statutory and regulatory interconnection obligations applicable in the TDM world to IP-enabled services, it would be contrary to law. For example, because the “interconnection” provisions in the Communications Act apply only to “common carriers” (section 201) or “telecommunications carriers” (section 251), the Commission cannot regulate interconnection between two IP networks under any provision of Title II because retail providers of VoIP and other IP-based services are properly classified as “information service” providers and are therefore *not* “telecommunications carriers.” Similarly, a party requesting interconnection under Section 251(c)(2) must be doing so for the purpose of providing “telephone exchange service and exchange access.” 47 U.S.C. § 251(c)(2). But because VoIP is an indivisibly interstate, interexchange-type service, it does not fall within the statutory definitions of either “telephone exchange service” or “exchange access.” Accordingly, conducting a trial of IP interconnection under the Commission’s auspices may presume legal authority that simply does not exist. For a fuller treatment of these issues, see AT&T Comments, WC Docket Nos. 10-90 *et al.* (filed Feb. 24, 2012); AT&T Reply, WC Docket Nos. 10-90 *et al.* (filed Mar. 30, 2012); AT&T Reply, GN Docket No. 12-353 (filed Feb. 25, 2013).

Most significantly, INS's proposal makes a fundamental policy assumption concerning the nature of compensation for traffic exchange in an all-IP environment that AT&T, for one, certainly does not share.¹² Specifically, inherent in INS's proposal is the notion that its existing access rates for TDM traffic will continue to apply through the transition to IP, and indeed beyond that point.¹³ As AT&T has described previously to the Commission, however, unlike interconnection for TDM voice traffic VoIP interconnection will almost certainly not respect LATA (or even state) boundaries; instead, while the specific arrangements between individual IP networks may vary, VoIP interconnection will involve the exchange of traffic over broader regional, national, or global areas and at perhaps only a handful of geographic locations across the country (or the globe). Moreover, as with the exchange of Internet traffic today, these arrangements will be best established between parties through commercial negotiations.

¹² Moreover, INS has a fundamental misunderstanding about the requirements of the Commission's *Technology Transition Trials Order*. See *Technology Transition Trials Order* at para. 63, App. paras. 36-37. INS asserts that it will maintain the intercarrier compensation *status quo ante* during the trial. See INS Trial Proposal at 16. Yet its proposal does nothing of the sort. Rather, it tries to foist the TDM intercarrier compensation regime—most significantly access charges—onto IP-to-IP interconnection and next-generation IP networks in an attempt to perpetuate the flawed access regime that invites arbitrage schemes, including traffic and mileage pumping. To satisfy the Commission's presumption concerning intercarrier compensation, a carrier must ensure that its services will remain subject to the existing intercarrier compensation regime, as appropriate for the type of traffic. That means that any changes in intercarrier compensation revenues and obligations should only result from the *customers'* decision to shift between services that are subject to different intercarrier compensation regimes, rather than from the trial itself. For example, if an end user chooses a CMRS service instead of POTS, compensation for terminating calls to that customer would be the compensation regime applicable to CMRS rather than wireline compensation. That is a function of the intercarrier compensation regime itself and is the case anytime a customer switches, even outside a trial. But what INS proposes is actually a change to the existing intercarrier compensation regime. As the Commission acknowledges, questions about the appropriate compensation regime for IP-to-IP interconnection remain open. See *Technology Transitions Trial Order* at para. 64, App. para. 39. Today, IP-to-IP interconnection is subject to commercial negotiations. Any attempt to impose legacy tariffed, access charges in the course of a technology transition trial can in no way be considered maintaining the *status quo ante*.

¹³ We also note that at the same time that INS attempts to inappropriately extend the TDM intercarrier compensation regime to next-generation networks, it continues to violate the existing access reform rules adopted in the *USF/ICC Transformation Order*, evidently based on a groundless assertion that the order and rules do not apply to CEA carriers. See *Connect America Fund, et al.*, WC Docket No. 10-90, *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011) (*USF/ICC Transformation Order*), *pets. for review pending sub nom. In re: FCC 11-161*, No. 11-9900 (10th Cir. filed Dec. 8, 2011). In that order, the Commission undeniably left questions open about the ultimate transition to bill-and-keep for tandem switching and transport charges where the price-cap carrier does not own the tandem in the serving area (as is the case here), but it did not exempt these carriers from all rules including the requirement to reduce intrastate rates to parity with interstate rates in steps one and two, or the cap on originating and terminating interstate switched access rates. 47 C.F.R. § 51.909(a)-(c).

Notwithstanding (or more likely because of) the lack of statutory or regulatory obligations and oversight, the Internet's constituent networks (large and small) have reached efficient interconnection agreements. Unregulated peering and transit arrangements (over which millions of over-the-top VoIP calls are exchanged every day) have succeeded for over twenty years in propelling the phenomenal growth of the Internet, and there is absolutely no reason to believe that this process will not continue as providers transition from TDM to IP. But one certain way to impede that development would be to carry over the artificialities and inefficiencies inherent in the legacy intercarrier compensation regime for TDM traffic.¹⁴

There are thus several predicate legal, policy and technical issues that counsel against the experiment INS appears to contemplate. INS's proposal appears to simply assume away these issues. But if the Commission does determine to permit INS to proceed with its proposed experiment, it should make it clear that the authorization of this trial in no way prejudices the outcome of the important legal and policy issues still to be addressed by the Commission.¹⁵

Clarifications. Moreover, even assuming that prudential concerns AT&T has identified above did not stand in the way of INS's proposed experiment, the Commission should not

¹⁴ Indeed, these inefficiencies, which ultimately hurt consumers, were the reason the Commission began the process of phasing intercarrier compensation down to the ultimate end state of bill-and-keep. As the Commission explained,

The [ICC] system is similarly outdated, designed for an era of separate long-distance companies and high per-minute charges, and established long before competition emerged among telephone companies, cable companies, and wireless providers for bundles of local and long distance phone service and other services. Over time, ICC has become riddled with inefficiencies and opportunities for wasteful arbitrage. And the system is eroding rapidly as consumers increasingly shift from traditional telephone service to substitutes including [VoIP], wireless, texting, and email. As a result, companies' ICC revenues have become dangerously unstable, impeding investment, while costly disputes and arbitrage schemes have proliferated. The existing system, based on minutes rather than megabytes, is also fundamentally in tension with and a deterrent to deployment of IP networks.

USF/ICC Transformation Order at para. 9.

¹⁵ See *Technology Transitions Trial Order* at para. 8 ("Nor are we seeking to resolve the legal and policy questions arising from the technology transitions in the context of an experiment."); *id.* at para. 25 ("We therefore emphasize that decisions about how to address or resolve a problem or dispute during an experiment will not constitute a determination by the Commission or service providers that such an approach represents binding legal or policy obligations outside the context of the experiment.").

authorize it until it obtains additional information and clarification on several critical issues: The first is the timing of and schedule for the proposed trial. In particular, INS's filing lacks sufficient detail about the timing of the three phases of the experiment INS appears to contemplate. Such a trial should not be open-ended. Providers participating in the trial should have some certainty about the terms of the trial, and the Commission and the public need a reasonable expectation about when data that purportedly will be gathered during the course of the trial will be available for analysis. Accordingly, the Commission should require further detail from INS on the timing and schedule of the experiment.

The second issue is the "voluntary" nature of the trial. INS claims in its filing that participation by interexchange carriers will be voluntary, at least in the early stages of the trial. But the language describing the later stages of the experiment is less than clear regarding whether the participation of interexchange carrier will in fact be voluntary.¹⁶ Thus, the Commission should require INS to clarify that participation by any provider is voluntary at all stages of the trial.¹⁷

¹⁶ See INS Trial Proposal at 8.

¹⁷ For example, if an interexchange carrier elects to participate in the INS trial, is the trial voluntary or non-voluntary for the LEC subtending the INS tandem switch and with which the interexchange carrier exchanges traffic? Similarly, if a LEC, subtending the INS tandem switch, elects to participate in the INS trial, is the trial voluntary or non-voluntary for the interexchange carriers with which the LEC exchanges traffic? INS needs to explain how the trial could be voluntary for both parties and achieve its trial objective.

CONCLUSION

For the foregoing reasons, the Commission should not authorize the proposed trial at this time, but instead should require INS to provide the additional detail and clarifications described above.

Respectfully Submitted,

/s/Christi Shewman

Christi Shewman

Robert C. Barber

Gary L. Phillips

Lori A. Fink

AT&T Services, Inc.

1120 20th Street, N.W.

Washington, D.C. 20036

(202) 457-3090

Attorneys for AT&T Services, Inc.

March 21, 2014