EX PARTE OR LATE FILED

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

In the Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers	)	CC Docket No. 95-185

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MOTION TO FILE REPLY COMMENTS ONE DAY LATE

Pursuant to Section 1.46(b) of the Commission's rules, 47 C.F.R. § 1.46(b), Low Tech Designs, Inc. (LTD), by its attorneys, respectfully submits this motion to file reply comments in this docket one day late. Although logistical difficulties in transporting the comments between LTD's business offices, in Georgetown, SC, and its attorneys prevented timely filing of these printed comments, the comments were electronically filed with the Secretary well prior to the deadline of 12:00 midnight on June 10, 1999. All interested parties, therefore, had electronic access to LTD's comments in a timely manner. The Commission's inclusion of these comments is in the public interest, will not prejudice interested parties, and will provide input that will allow the Commission to more completely examine the issues raised in its Notice of Proposed Rulemaking.

Respectfully submitted,

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Dated: June 11, 1999

Counsel for Low Tech Designs, Inc.

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REPLY COMMENTS OF LOW TECH DESIGNS, INC.

Low Tech Designs, Inc. (LTD), by its attorney, respectfully submits these comments in response to the Commission's Second Further Notice of Proposed Rulemaking (Notice) in the captioned proceeding.[1] For the reasons discussed below, LTD urges the Commission to mandate access to the Advanced Intelligent Networks (AIN) functionalities of incumbent LEC (ILEC) switches on an unbundled, nationwide basis, whether or not switching remains an unbundled network element (UNE) under Section 251.

INTRODUCTION AND SUMMARY

LTD and other new telecommunications start-ups want to compete with the ILECs in the software-driven "logical network" or "intelligent telecommunications routing" space, in addition to the physical network world of switches, ports and loops. LTD, for instance, has for several years been seeking access to AIN functionalities at the state PUC level in order to provide a least cost-routing (LCR) service, on a non-presubscribed basis, using a *XX abbreviated dialing ar-

[1] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996,* Second Further Notice of Proposed Rulemaking, CC Docket No. 96-98, FCC 99-70 (rel. March 18, 1999).

rangement (ADA).[2] LTD believes that consumer access to AIN-based applications through abbreviated dialing arrangements offers the best method of rapidly introducing choice in this area. By combining ADAs with immediate activation of central office based AIN triggers, consumers can be offered new and innovative services that can be accessed, without presubscription, on an as-needed basis.

Although the Commission's *Local Competition Order* required unbundling of the AIN platform, the ILECs have subsequently refused to make available AIN functionalities as UNEs. Since these AIN functionalities are unavailable from any other source unless a new entrant purchases a switch — and because the 1996 Act expressly permits new services to be offered by switchless CLECs — AIN platform features clearly must be unbundled. Indeed, LTD agrees with Ameritech that CLECs do not need access to AIN *services* "if they are given access to the ILEC's AIN capability." Ameritech Comments at 127. Yet as a practical matter, ILECs have subverted this principle and have used their control over industry standards bodies to delay and obstruct the conclusion of standards for ADA arrangements and AIN platform access. The Commission should rectify that situation in this proceeding by clarifying that the AIN platform, including all AIN "triggers", must be made available as UNEs to all requesting CLECs.

BACKGROUND

In many ways, the current review of unbundled network elements stands on the shoulders of previous FCC work dedicated to unbundling ILEC networks, including the *Intelligent Net-*

[2] AIN is signaling-based network technology, already deployed by all ILECs, capable of supporting a broad variety of innovative, competitive and feature-rich end user services. LTD Comments at 1-2.

works[3] and *Computer II* proceedings.[4] In *Intelligent Networks*, the FCC consistently promoted access to ILEC networks in order to encourage innovation in the creation and design of telecommunications services. The Commission recognized that mandating competitor access to AIN (then termed "IN") functionalities was necessary because "LECs have been resistant to open network policies" and "existing market incentives may not alone be sufficient to induce LECs to open their networks to potential competitors."[5]

> [The access requirement] is aimed at ensuring that the potential of IN is realized in such a way that IN competition is enhanced, and the broadest possible range of consumer choices for which there is demand are brought to the American public. If third parties are given the means to access IN capabilities, we believe that competition in IN services would follow, and would result in benefits for consumers including the development of innovative services and lower prices.

Significantly, the Commission anticipated in the *Intelligent Networks* proceeding the same LCR service that LTD, six years later, is seeking to deploy. According to the Commission:

> As one example, if Least Cost Routing (LCR) were offered through an IN architecture, third parties might be able through an SMS to tell the switch how to route calls so that the lowest cost route is chosen to the called destination. While this service is presently based on algorithms and equations programmed into a private branch exchange (PBX), it is possible that in a database implementation, third parties could exert greater control over the kind of LCR service that they receive than they can today. For example, LCR service provided through the IN could be customized initially for the specific user, and then more easily updated to accommodate the customer's changing circumstances over time.[6]

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[3] *Intelligent Networks,* Notice of Proposed Rulemaking, 8 FCC Rcd 6813 (1993) *("Intelligent Networks Notice").*

[4] *Amendment of Section 64.702 of the Commission's Rules and Regulations,* Computer II Final Decision, Report and Order, 77 F.C.C.2d 384 (1980).

[5] *Intelligent Networks Notice* ¶18.

[6] *Id.*¶ 32 n.38. It should be noted that ILEC central-office-based Centrex software also provides a sophisticated least cost routing function for business customers, but no comparable functionality exists for residential and small business customers. These are precisely the customers LTD wishes to serve.

Unfortunately, LTD and other competitive carriers continue to be denied access to this market as a result of regulatory inertia and delay tactics on the part of ILECs. Indeed, the Commission's forward-looking discussion of the potential of AIN to provide LCR services alerted ILECs to its value and led them to use the industry standards process to foreclose open and competitive access to this promising technology. Thus, only direct intervention by the Commission will overcome inaction by the relevant standards organizations and provide consumers with a competitive choice in AIN-based services.

DISCUSSION

I. AIN TRIGGERS ARE NETWORK ELEMENTS THAT MUST BE UNBUNDLED WHETHER OR NOT ILEC SWITCHING IS ALSO AVAILABLE AS AN UNBUNDLED NETWORK ELEMENT

As Ameritech describes, AIN "is a network architecture that separates logic from switching equipment, allowing new services to be added without having to reprogram individual switches."[7] This definition demonstrates that ILEC switching hardware and services are separate from the AIN software-based capabilities resident in the switch. As such, AIN functionalities should be available as a UNE, to any CLEC, whether or not that CLEC also purchases a switching UNE. Only in this way can the full capabilities of the Commission's *Intelligent Networks* vision be realized.[8]

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[7] Ameritech Comments at 125.

[8] One illustrative example of the stand-alone nature of AIN is "single number service", a common ILEC service offering. This service uses an AIN 0.1 "3/6/10 Public Office Dialing Plan Trigger" and an associated "virtual" seven or ten digit telephone number. Users specify real wireline or wireless telephone numbers for call completion using time of day or other flexible routing options. The service itself resides completely in software, without requiring association with a central office switching port. The AIN 0.1 "3/6/10 Public Office Dialing Plan Trigger" verifies that this trigger is "office based" and that the trigger "may or may not have facilities associated with it." Bellcore TR-NWT-001284, Issue 1, August 1992, Sec. 2.44. This confirms that the 3/6/10 trigger and associated telephone number may stand alone without having unbundled ports or other subscriber retail or wholesale services associated with it.

Ameritech, however, argues that "[i]n the *Local Competition Order*, the Commission required ILECs to provide unbundled access, not only to the AIN platform itself, but to the services ILECs create over that platform. Since that time, no CLEC has sought unbundled access either to Ameritech's AIN platform or its services."[9] Even if demand for a network element were relevant to whether it should be unbundled (and it is not), this contention is incorrect. In 1996, LTD initiated interconnection negotiations with Ameritech and requested access to Ameritech's AIN platform in Illinois for the purpose of providing LCR using a *XX code and AIN service creation capabilities. Although LTD's arbitration was ultimately dismissed on technical grounds, the fact is that at least one CLEC has affirmatively sought access to Ameritech's AIN platform.[10]

LTD does agree with Ameritech that competitors can "develop their own AIN services if they are given access to the ILEC's AIN capability." Ameritech Comments at 127. Ameritech's useful distinction between AIN "services" and the AIN "platform" reveals that what a CLEC needs in order to compete "is access to the AIN platform itself." *Id.* at 128. This is entirely consistent with LTD's opening comments, in which we urged the Commission to unbundle AIN "triggers" as UNEs. AIN triggers are capabilities of the AIN platform that are necessary for implementation of individual and office-wide AIN based telecommunications services using competitor-provided and interconnected AIN-capable network equipment. By unbundling AIN triggers, the Commission would avoid the need for CLECs to rely on ILEC AIN services and

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[9] Ameritech Comments at 126.

[10] LTD's request for arbitration before the Illinois Commerce Commission related to issues involving AIN access was denied on the grounds that LTD was not yet offering telecommunications services in any jurisdiction and was therefore not a "telecommunications carrier". *See Petition for Commission Assumption of Jurisdiction of Low Tech Designs, Inc.'s Petition for Arbitration with Ameritech Illinois Before the Illinois Commerce Commission*, CC Docket No. 97-163, *Memorandum Opinion and Order*, 13 FCC Rcd. 1755 (1997), *recon. denied,*, FCC 99-71 (rel. Apr. 13, 1999). LTD has since received CLEC certification from the Georgia PSC.

open up innovation in the design and marketing of new, innovative advanced services, such as the LCR service LTD has been seeking to deploy. Indeed, if Ameritech were to allow nondiscriminatory interconnection of LTD or other third-party provided AIN Service Control Points (SCPs) and Intelligent Peripherals (IPs), along with access to AIN 0.1, 0.2, 0.x and switch manufacturer-specific AIN triggers, LTD would have no need for any of Ameritech's AIN services.

Several of the ILECs argue that switching should no longer be a mandatory UNE because the commercial availability of sophisticated electronic switching systems provides a viable alternative to ILEC switching services.[11] Yet whether or not switching is unbundled is irrelevant to unbundling of the AIN platform. There can be no legitimate argument that in order to provide a software-based "virtual" service, one that does not involve any switching functions, a CLEC must buy its own switch merely to gain access to features available from the switch. That would be the equivalent of a rule that in order to compete in the local exchange market, every CLEC must buy a switch whether or not the service it seeks to offer requires local switching. That cannot be the case because in Section 251, Congress obviously anticipated that non-facilities and other switchless carriers would be able to use, and combine, ILEC UNEs to provide their own telecommunications services.

Some ILECs have suggested that AIN triggers are not appropriately available as UNEs because the definition of switching in the *Local Competition Order* includes "all other features" of the switch.[12] Of course, this ignores the Commission's rule (47 C.F.R. § 51.307(d)) providing

[11] GTE Comments at 39-48; Bell Atlantic Comments at 20-25; BellSouth Comments at 57-60; US West Comments at 43-45; SBC Comments at 34-36, 39-42.

[12] "The local switching capability network element is defined as: .. (C) all features, functions, and capabilities of the switch, which include, but are not limited to: .. (2) all other features that the switch is capable of providing, including but not limited to custom calling, custom local area signaling service features, and Centrex, as well

that a CLEC can have access to any one UNE "separate from access to the facility or functionality of other network elements." In this proceeding, therefore, the Commission should reaffirm that AIN triggers. like other UNE functionalities, are available without reference to unbundled switch ports or other switching features. In other words, the Commission should take this opportunity to sever AIN triggers from switching hardware in its definitions of unbundled network elements. Switching hardware is superfluous to the effective functioning of an AIN service network, so long as the AIN network obtains and maintains access to essential trigger functions. The current definition of switching inadvertently forces AIN "software" providers to obtain access to unnecessary "hardware" facilities.

II. THE COMMISSION MUST REALIZE ITS PREVIOUS COMMITMENT TO AIN COMPETITION BY USING ITS SECTION 251 AUTHORITY TO END ILEC INTRANSIGENCE IN AIN STANDARDIZATION

The Network Interconnection & Interoperability Forum (NIIF, formerly the Information Industry Liaison Committee), sponsored by the Alliance for Telecommunications Industry Solutions (ATIS), has been studying the issue of multiple-provider AIN trigger usage since June 1995. Despite the Commission's *Intelligent Networks* conclusion that AIN functionalities should be available to third-parties, there has been no resolution of this issue. Accordingly, absent a clear directive from the Commission, the goal of a competitive AIN environment will never be achieved.

Incumbent LECs have no incentive to see open access to AIN triggers. Not surprisingly, therefore, the ILEC-dominated NIIF has found the technical solution to this issue elusive. After

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as any technically feasible customized routing functions provided by the switch." *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, FCC 96-325, 11 FCC

four years of discussion, NIIF has not been able to achieve consensus; instead, it is still considering four different methods of prospectively creating a multiple provider environment.[13] This lack of consensus is symptomatic of the industry's major standards body's continued inability to resolve critical AIN open access issues.

It was the same ATIS-sponsored group that studied Issue 036, called "Local Calling Area Abbreviated Dialing Access to Information and Enhanced Services." This issue was initiated by BellSouth and Cox Newspapers on April 23, 1992, after BellSouth and Cox successfully proposed to the FCC that telephone companies be allowed to use the small number of unassigned "N11" service codes for "abbreviated dialing" access to enhanced services. The FCC responded by requesting comments in the continuing *ADA Proceeding*.[14]

Although BellSouth and Cox continue to use the 511 code in the Atlanta area for joint venture information services, there has yet to be an industry resolution of the ATIS AIN/ADA issue. After studying the matter for two more years, the IILC Issue 036 Working Group recommended, in September 1994, that the Issue 036 documentation be used as input into the RBOC and Bellcore-driven future AIN Release 1.0 (subset 0.1 and 0.2) planning process so that AIN development would include the functionality necessary to provide the services defined in

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Rcd. 15,499, 15,706 (1996).

[13] This issue is in initial closure and can be found at <ftp://ftp.atis.org/pub/clc/niif/docs/ain429.doc> or <www.atis.org> under NIIF/Documents/AIN Trigger Usage in a Multi-provider Environment (Issue #0006 Document), Initial Closure 4/29/99. Four scenarios are presented. The document recommends that:

1. Industry testing, to the extent possible, of the four routing alternatives should be performed.
2. Companies desiring AIN/IN interconnection should begin a dialogue with appropriate network operators to evaluate the feasibility of implementing such interconnection.
3. The industry should initiate and work to resolve the issues identified in Section 10, Operational and Technical Issues to the appropriate standards bodies and industry forums.

[14] *See generally Use of N11 Codes and Other Abbreviated Dialing* Arrangements First Report and Order and Further Notice of Proposed Rulemaking, CC Docket 92-105, ¶1 (rel. Feb. 19, 1997).

the 036 proceeding. Yet, instead of incorporating the non-presubscribed abbreviated dialing arrangement recommendation of the 036 Working Group into the AIN 0.1 and 0.2 planning process, these recommendations were simply forgotten and ignored by the industry.[15]

Thus, the standards bodies continue to avoid opening the AIN network to CLEC and other third-party access. In protracted situations like this, the Commission has previously indicated a clear willingness to intervene into the standards setting process where necessary to effectuate its policies. After delegating the development of AIN standards to the industry in the *Intelligent Networks Notice*, the Commission cautioned that

> Historically, the Commission has avoided a dominant role in standards-setting as long as the activities of standards bodies do not frustrate the Commission's goals and policies. However, to the extent that such activities do not support public interest goals, it has reserved a role for itself and could play some part in standards development.[16]

In the interest of providing consumers competitive choice in the provision of AIN services, the FCC should expeditiously intervene in the NIIF standards development process. The optimal means of doing so is to (a) require the unbundling of AIN triggers under Section 251, and (b) direct NIIF to complete its Issue #0006 proceeding and report to the Commission, within six months, on the standards and procedures necessary for provisioning AIN services in a multi-provider environment. Without decisive action by the FCC now, however, the ILECs will continue to maintain a monopoly on all AIN-based advanced services, to the detriment of consumers, competition and the public interest.

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[15] It is not surprising that this failure occurred, particularly in light of the FCC's clearly threatening observations in its NPRM regarding AIN based least cost routing.

[16] *Intelligent Networks Notice*, ¶ 55 n.64. The Commission originally sent staff members to the IILC meetings on AIN unbundling. LTD believes that the Commission's decisive actions regarding local number port-

CONCLUSION

The Commission should use the present opportunity to enforce its prior *Intelligent Networks* commitment to "play some part in standards development" on AIN. Unless the Commission mandates the provision of AIN functionalities as UNEs, there will never be competition for intelligent network services. For all these reasons, along with those in LTD's opening comments, the Commission should (1) require that all AIN 0.1 and 0.2 triggers (and future AIN triggers and upgrades) must be made available to competitors on an unbundled basis; (2) mandate the interconnection of CLEC-provided and other third-party AIN/SS7 Service Control Points and Intelligent Peripherals; and (3) complete its deliberations in CC Docket No. 92-105 to require that all CLECs, in addition to ILECs, have access to previously agreed to (and industry standards body recommended) non-presubscribed AIN based ADAs (such as *XX dialing) for the provision of telecommunications services.

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ability, another AIN based capability, shows the positive role the Commission has played in opening telecommunications markets.

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Dated: June 10, 1999

CERTIFICATE OF SERVICE

I, James M. Tennant, do hereby certify that on this 11th day of June, 1999, I have served a copy of the foregoing document via U.S. Mail, postage pre-paid, to the following:

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