Performance Standards
Key To
Interconnection

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The Telecommunications Act of 1996 is intended to open all telecommunications markets to full competition so that regulation of the telecommunications industry can be minimized and perhaps eliminated entirely. Accordingly, the Act calls for removal of all barriers to entry imposed by government and by the incumbent local exchange carriers (ILECs). It requires all telecommunications carriers to interconnect with each other. And it requires incumbent local telephone companies, which are presently monopolies, to reciprocally exchange local telecommunications traffic with competitive local telecommunications service providers, to make available essential elements of their networks on cost-based, nondiscriminatory terms, and to provide number portability so that customers can choose a new local exchange service provider without changing their telephone numbers. Finally, in order to implement these requirements in a manner that will lead to efficient prices, the Act sets forth certain guidelines for pricing unbundled network elements and for pricing the exchange of local traffic.\footnote{Sections 251 and 252 of the Act also have other requirements and other pricing standards which are not addressed in this White Paper.}

The Act provides for several pathways to reach the desired end. Most important of these are: It requires ILECs to negotiate interconnection arrangements with CLECs, on request. It allows State regulatory agencies to arbitrate any differences between the negotiating parties, on request. It requires the FCC to promulgate rules regarding the obligations of ILECs and other carriers. And, it provides that aggrieved parties take their grievances to federal district court.

For the Bell Operating Companies (BOCs), the Act combines the "sticks" of the ILEC obligations with the "carrot" of entry into now-restricted lines of business. The prospect of entry into the long distance market, previously barred by the Modification of Final Judgment, which depends
among other things on BOCs having met 14 specific obligations, is expected to encourage voluntary interconnection agreements at prices that permit significant competition to develop.\textsuperscript{2}

Pro-Competitive Incentives Must Be Permanent

If the overall objectives of the Act are to be permanently realized, it is clear that the incentives for efficient interconnection also must be permanent. There must also be strong disincentives for BOC failure to meet the 14-point "Checklist" of specific obligations on a continuous basis.\textsuperscript{3} The BOCs' desire to maximize their local revenues must be restrained until competitors are no longer so fully dependent on BOC network elements. As the Act clearly recognizes, the local exchange bottleneck will endure until competitive carriers provide service to both residential and business customers using predominantly their own facilities -- that is, until competitors are not dependent on any BOC network element.\textsuperscript{4} Without such restraint the BOCs can be expected to use any possible means to remain strongly dominant in the local exchange market, once they have gained entry into the long distance market. The temptation for BOCs to maximize revenues from both interLATA and intraLATA service will inevitably lead them to use their control of bottleneck facilities provided to their competitors in a manner that makes competitors' service unattractive to customers.

\textsuperscript{2} 47 U.S.C. 271(c)(2)(B). The "Competitive Checklist," in addition to other conditions, must be met by an RBOC before receiving interLATA relief.

\textsuperscript{3} The BOCs now have monopolies serving 129 million subscriber lines, giving them 80% percent of all local telecommunications revenues. FCC Statistics of Communications - Common Carriers, Tables 2.9 and 2.10 (December 31, 1994). They have 100% of the customers in their service territory. They will be dominant LECs into the foreseeable future.

\textsuperscript{4} 47 U.S.C. 271(c)(1)(A) (As a condition of interLATA entry, RBOCs are required to "enter into one or more binding agreements ... under which the Bell Operating Company [provides] access and interconnection to its network facilities" to a competing provider serving "residential and business subscribers ... either exclusively over their own telephone exchange service facilities or predominantly over their own telephone exchange service facilities in combination with resale of the telecommunications services of another carrier.")
One has only to look at the brief history of ILEC-CLEC interconnection to see how widespread such anti-competitive behavior is. BOCs have failed to turn up circuits ordered by CLECs; have failed to meet Service Availability standards or Mean Time to Repair standards agreed to with CLECs; have failed to provide CLECs access to poles on the schedule called for in their own guidelines; and have failed to assign NXXs in a timely manner. These are but some of the uncooperative behaviors that TCG and other CLECs have been subject to, notwithstanding any legal requirements to interconnect.

While such behaviors are clearly contrary to the intent of the Act, the Act itself is weak with respect to prevention of, or remedies for, such anti-competitive behavior. The Act does authorize the FCC to penalize a BOC which is found to be noncompliant with the Checklist following its entry into the interLATA market, or to revoke its interLATA authority. But the Act does not require such penalties. Nor does the Act establish a tight schedule for resolving complaints. Of course, should the FCC fail to resolve complaints in a timely fashion, antitrust action is always a possibility. But the litigation option is at least as time-consuming as the regulatory option. Either option is expensive and, during the pendency of a decision, consumers will not have the real choices of innovative services, excellent service quality, and efficient pricing that they are entitled to expect with robust competition. The public interest will not be served.

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7 47 U.S.C. 271(d)(6)(B)("Unless parties otherwise agree, the Commission shall act on such complaints within 90 days."
"The Commission is not required to resolve such complaints in any specified time frame, however.")
A simple way exists to perpetuate the cooperative practices needed to implement the Checklist. Any interconnection agreement entered into by a BOC (or any other ILEC, for that matter) should include performance standards. The agreements should provide that if either party fails to meet a particular standard, no matter the reason, a specified penalty will take effect. The longer the failure lasts, the greater the cumulative penalty should be. Exceptions should be allowed only for force majeure.

Performance Standards are Increasingly Common in the Telecommunications Industry

Performance standards are not new to the telecommunications industry. TCG, for example, has agreements with three major carrier customers that include detailed service quality measures, and specific penalties for TCG’s failure to live up to them. Detailed quality management conditions are inevitable and essential in a competitive marketplace. When only one supplier exists, general customer assurances are established in tariffs. Large carrier customers often indicate more specific expectations of the monopoly ILEC vendor, but these do not usually take the form of a contractual obligation. But as soon as more than one supplier exists, performance standards become the operational basis for service differentiation because new suppliers will willingly supply and warrant quality levels in excess of those offered by the incumbent.

Performance Standards are in the Mutual Interest of Interconnecting LECs

Interconnection agreements between peer local exchange carriers must include performance standards so that customers of either carrier can be protected from poor service provided by the other carrier. During the transition period to full competition in the local exchange marketplace, these protections are most important for customers of the CLECs. Because all CLECs must still use some of the monopoly elements of the ILECs, CLEC service quality is only as good as the
service quality provided by the ILECs with whom they are interconnected. The weakest link in
the chain measures the strength of the entire chain. If the weak link is an ILEC network element,
a CLEC cannot meet its own contractual service quality goals for its customer. By the same
token, an ILEC wishing to use CLEC services -- for local exchange access for its long distance
subsidiary, for example -- will not want to be hostage to poor CLEC performance. It is in the
interest of both interconnecting peer local carriers to adopt performance standards, so that each
may be confident that its service quality will not be degraded owing to the failure or deliberate
actions of the other carrier. The principle of “total quality management” must be incorporated
in interconnection agreements between ILECs and CLECs.

The Public Interest in Performance Standards is Compelling

The public interest in performance standards is compelling. In the first place, consumers are
assured of a common level of minimum performance by all carriers so that no consumer is faced
with service that is below threshold quality. In the second place, consumers may be given a
wider range of choices as to service levels and associated prices. This is particularly appropriate
for large customers purchasing wholesale services in bulk. Thus a bank can get reliability at the
99.99999 level -- and pay for it -- while a residential customer who would be satisfied with 99%
reliability would not have to pay for a higher standard. Even at the retail level, product
differentiation that includes technical performance, such as dial tone delay, signal clarity, or time
to repair, will be a characteristic of fully competitive local exchange service, just as it is a selling
point in the long distance market that is already competitive.

Consumers do not know or need to know what the peer carrier performance measures are; but the
fact that they exist protects end users.
Regulation Alone Cannot Guarantee Service Quality

In the past, State regulators have tried to force ILECs to provide a higher level of retail service quality using the clumsy regulatory tools at their disposal: investigation, allegation, hearings, determinations and -- occasionally -- penalties. If an ILEC was found not to have met its engineering objectives or consumer satisfaction goals, it might be given a fine. The fines, however, were trivial in comparison to the savings realized by the ILEC by not installing the equipment necessary to meet the regulators' standard, or by not dedicating the personnel necessary to achieve the standard.\(^8\) Service quality regulatory proceedings often take years. The fact that service quality problems are so frequent and widespread confirms that regulation is not an effective means of assuring performance, at the retail level.

Setting the conditions for peer-peer carrier service quality would be an even more daunting task for regulators. The technical requirements for smoothly interoperable local exchange networks are expressed in complex engineering terms and minute detail. Regulators do not have and should not acquire the technically expert personnel needed to understand such descriptions. Nor should regulators be involved in determining the appropriate level of peer-peer performance. Provided that the retail service performance standards are met, regulators may be neutral regarding carrier-carrier performance objectives.\(^9\)

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\(^8\) As recently as earlier this year, NYNEX was fined $50 Million for inadequate service quality by the New York Department of Public Service. Proceeding to Investigate Performance-Based Regulatory Plans for New York Telephone Company, Case No. 92-C-0685, Item 505, January 19, 1996. US West has faced smaller penalties for substandard service in Colorado; for example: $308,000 for third quarter 1995, $424,000 for second quarter 1995, and $288,000 for first quarter 1995.

\(^9\) The FCC has focused on the need for performance standards in its recent Notice of Proposed Rulemaking seeking comment on whether the Commission should adopt uniform national guidelines governing installation, maintenance, and repair of the incumbent LEC's portion of the interconnection facilities and making the ILECs subject to liquidated damages for failure to meet agreed on performance standards. In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996. Notice of Proposed Rulemaking, CC Docket No. 96-98, ¶ 61, April 19, 1996 (Citing to Implementing the Telecommunications Act of 1996: Encouraging Local Exchange Competition, TCG, Apr. 4, 1996). See also, ¶ 79 and ¶ 89.
But regulators should insist that such objective measures be set, and that if they are not met, the responsible party will suffer. This clearly is in the public interest, because consumers suffer when peer-peer interoperability is inadequate.

Commercial Arrangements that Include Performance Standards are Appropriate and Necessary in the Competitive Environment

In the new environment envisioned by the Act, commercial arrangements should replace regulatory oversight. The telephone industry should police itself to the benefit of all participants in the industry, and ultimately, to the benefit of all consumers. Specific, detailed performance standards and penalties for failure to meet them should be included in all interconnection agreements between LECs. This will ensure that a new sphere of regulatory oversight will not be necessary, thus furthering the deregulatory objectives of the Telecommunications Act of 1996.

To preclude the possibility that ILECs might refuse to make serious commitments or enforceable commitments on performance, the State commissions and the FCC should require performance standards and appropriate penalties in any agreement submitted to the commission for approval or submitted to the FCC as a basis for BOC entry into the interLATA market. The FCC and the State commissions need not and should not spell out the standards, but they should specify the list of topics to be covered by the agreement (see Attachment).

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Attachment
ATTACHMENT

PERFORMANCE STANDARDS- SWITCHED SERVICES

The following list illustrates the detailed requirements that would ensure ILEC performance and quality management for CLEC-ILEC interconnection.

1. Network Performance Standards
   a. Network Performance - Reliability
   b. Network Performance - Incidents
   c. Network Performance - NXX Isolation Duration
   d. Root Cause Analysis (RCA)

2. Circuit and Facility Maintenance
   a. Electronic Single Point of Contact for Circuits and Facilities
   b. Circuit / Facility Maintenance Priority 1 Referrals
   c. Circuit / Facility Maintenance Priority 2 Referrals
   d. Maintenance of 105 Test Lines
   e. Installation of 108 Test Lines
   f. Maintenance of 108 Test Lines

3. Supplier Initiated Activity

4. Regional Recording Integrity (RRIC))
   a. End Office Billing Number Failures
   b. Mis-routed Traffic
   c. Combined EO Billing Number Failures and Mis-routed Traffic Failures
   d. Cycle Time of Regional Recording Integrity Center Trouble Reports - Priority 1
   e. Cycle Time of Regional Recording Integrity Center Trouble Reports - Priority 2

5. CCS7 Switching and Signaling
   a. NI CCS7 Quad Maintenance - Single Link / Link-set Events Business Hours
   b. NI CCS7 Quad Maintenance - Multiple Link-set Events Business Hours
   c. NI CCS7 Quad Maintenance - Total Quad Failures Business Hours
   d. NI CCS7 Quad Maintenance - Single Link / Link-set Events Non-business Hours
   e. NI CCS7 Quad Maintenance - Multiple Link-set Events Non-business Hours
   f. NI CCS7 Quad Maintenance - Total Quad Failures Non-business Hours
   g. NI CCS7 Supplier Activity Notification
   h. CCS7 Network Performance

6. Interconnection Service
   a. Performance Requirements
   b. Outages
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