

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

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INVESTIGATION INTO THE DEVELOPMENT )  
OF RULES CONCERNING COLLOCATION )  
AND INTERCONNECTION BETWEEN )  
LOCAL EXCHANGE CARRIERS AND )  
COMPETITIVE ACCESS PROVIDERS, IN ) DOCKET NO. 92R-050T  
THE RULES PRESCRIBING THE PROVISION )  
OF CERTAIN PRODUCTS AND SERVICES )  
WITHIN OPEN NETWORK ARCHITECTURE, )  
4 CODE OF COLORADO REGULATIONS )  
723-12. )

**ADVANCE NOTICE OF PROPOSED RULEMAKING**  
**HEARINGS SET FOR AUGUST 10 THROUGH AUGUST 13 1992**

**CHANGES TO THE OPEN NETWORK ARCHITECTURE RULES  
TO EXPAND ACCESS FOR COMPETITORS TO LOCAL EXCHANGE  
CARRIERS IN THE PUBLIC SWITCHED NETWORK, INCLUDING  
ALLOWING COMPETITORS TO PLACE EQUIPMENT IN OR A NEAR A  
LOCAL EXCHANGE CARRIERS CENTRAL OFFICE.**

The Colorado Public Utilities Commission ("Commission") hereby gives Advance Notice of Proposed Rulemaking concerning allowing competition in the basic local exchange telecommunications network. The proposed rules would allow: (1) telecommunications providers, other than local exchange carriers, to place equipment in, or near, local exchange carriers' central offices ("collocation"); and (2) to allow other telecommunications providers to interconnect with the local exchange carriers' facilities.

The Commission, at this time, will not propose any specific rules. Instead, we will alert all interested parties as to the nature of this rulemaking, and will present, for

discussion and comment only, a version of Collocation and Interconnection rules proposed by Teleport Denver Ltd.

On January 14, 1992, Teleport Denver Ltd. filed a "Petition for Rulemaking in Accordance with Section 24-4-103(7), Colorado Revised Statutes."<sup>1</sup> Teleport Denver Ltd. describes itself as a provider of "private line" [dedicated access line] telecommunications services in Colorado; a "competitive access provider" under the Federal Communications Commission's terminology; or also what the telecommunications industry refers to as an "alternative access service provider" or "fiber optic carrier." See Teleport Denver Ltd. Petition at 5, ¶ 13.

In the Petition, Teleport Denver Ltd. relates various problems it claims to have had with its local exchange carrier, U S West Communications, Inc. (the largest local exchange carrier in Colorado, with over 98% of all access lines, the remaining 2% are provided by 26 independent telephone companies). Teleport Denver Ltd. states that it is both "a customer and competitor" of U S West Communications, Inc. See Teleport Denver Ltd. Petition at 6-8, ¶¶ 15 & 16. Teleport Denver Ltd. concludes that rulemaking is necessary because its local exchange carrier, U S West Communications, Inc., has adopted "a policy of not allowing collocation and interconnection for TDL [Teleport Denver Ltd.], a competitor[.]" Teleport Denver Ltd. Petition at 16, ¶ 34. Therefore, Teleport Denver Ltd. urges the Colorado Public Utilities Commission to adopt rules governing collocation and interconnection, so that competitive access

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<sup>1</sup>. The applicable provision of the State Administrative Procedure Act, Colorado Revised Statutes § 24-4-103(7) (1988 Repl. Vol.10A), provides:

Any interested person shall have the right to petition for the issuance, amendment, or repeal of a rule. Such petition shall be open to public inspection. Action on such petition shall be within the discretion of the agency; but when an agency undertakes rule-making on any matter, all related petitions for the issuance, amendment, or repeal of rules on such matter shall be considered and acted in the same proceeding.

providers, such as Teleport Denver Ltd., "can effectively compete with local exchange carriers from whom they must also obtain services." Id.

Warren Wendling, Supervising Professional Engineer on the Staff of the Colorado Public Utilities Commission, has examined the proposed rules submitted by Teleport Denver Ltd.. Without taking a position as to wisdom or need for the proposed collocation and interconnection rules, Mr. Wendling has modified the rules to conform to the Commission's open network architecture rules, 4 Code of Colorado Regulations 723-12. The modified rules are attached as Appendix "1" to this Advance Notice of Proposed Rulemaking.

In order to give further meaningful notice as to the content of the rules, and the possible changes which might occur if collocation and interconnection were ordered as requested by Teleport Denver Ltd., the Commission will attach an article from the New York Times, entitled "The Local Call Goes Up for Grabs", published Sunday December 29, 1991. (Attached as Appendix "2" to this Advance Notice of Proposed Rulemaking).<sup>2</sup> Many of the same issues described in the New York Times article may arise in Colorado.

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2. In the article, the New York Times discusses the experience in New York State with the Teleport Communications Group, Inc., and other companies challenging the local Regional Bell Operating Company (Nynex), after the New York Public Service Commission adopted rules allowing rivals to the existing local exchange carrier to connect optic lines and switches to the public telecommunications network, giving rivals access to the entire telephone system. The article describes the problem that new collocation and interconnection can cause for existing service, including the possibility that Teleport and the other rival companies may pick the most profitable and easiest-to-serve customers, leaving remote and low-volume users to the traditional phone providers. Nevertheless, the New York state regulators concluded that the benefits of competition, and the threat of competition, were already proven, and that competition provides the best incentive to increase the quality and decrease the cost of basic local exchange service. See New York Times December 29, 1991, Section 3 at 1 & 6 (Appendix "2") (see especially remarks of Richard Stannard; director of the New York State Public Service Commission's communications division).

The Commission will file this Advance Notice of Proposed Rulemaking with the Office of Regulatory Reform during January 1992, because the proposed rulemaking may affect small businesses. The Commission will send the Advance Notice of Proposed Rulemaking to the Secretary of State during January 1992, in order that the Secretary of State can publish the notice in the Colorado Register on or about February 10, 1992. See Colorado Revised Statutes § 24-4-103.5 (1988 Repl. Vol.10A) (requiring 10-days advance notice to the office of regulatory reform); Colorado Revised Statutes § 24-4-103(3)(a) (1988 Repl. Vol.10A) (requiring a minimum of 20-days notice of hearing after publication by the secretary of state).

The Commission, sitting en banc, will conduct public hearings on the collocation and interconnection rules issues, from August 10 through August 13, 1992 at the Commission's offices, 1580 Logan Street, Office Level 2, Hearing Room "A", Denver, Colorado 80203.

All interested entities who wish to participate in this rulemaking shall file their entry of appearance and notice of intervention by Monday March 2, 1992. This matter is remanded to an administrative law judge, who shall hold hearings and issue subsequent procedural orders concerning dates and formats for filing written comments in advance of the evidentiary hearings. The Commission expects all issues to be thoroughly briefed in advance of the hearings, in order to expedite the hearings.

ADOPTED IN OPEN MEETING ON January 29, 1992.

(S E A L)



ATTEST: A TRUE COPY

*Robert E. Temmer*  
Robert E. Temmer  
Acting Director

Dated: January 31, 1992.

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

ARNOLD H. COOK

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GARY L. NAKARADO

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CHRISTINE E. M. ALVAREZ

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Commissioners

4 CCR 723-12

AMENDMENTS TO THE  
RULES PRESCRIBING THE PROVISION OF CERTAIN  
PRODUCTS AND SERVICES WITHIN OPEN NETWORK ARCHITECTURE

BASIS, PURPOSE, AND STATUTORY AUTHORITY

THE PURPOSE FOR THESE AMENDMENTS TO THE RULES IS TO PRESCRIBE REQUIREMENTS FOR INTRASTATE COLLOCATION AND INTERCONNECTION ARRANGEMENTS BETWEEN LOCAL EXCHANGE CARRIERS AND ENHANCED SERVICE PROVIDERS PROVIDING INTRASTATE SERVICES IN COLORADO.

THE AMENDMENTS TO THE RULES ARE CLEAR AND SIMPLE AND CAN BE UNDERSTOOD BY PERSONS EXPECTED TO COMPLY WITH THEM. THEY DO NOT CONFLICT WITH ANY OTHER PROVISION OF LAW AND THERE ARE NO DUPLICATING OR OVERLAPPING RULES.

The statutory authority for these rules is §§40-2-108, 40-15-201 AND 40-15-302(1), C.R.S.

RULE 2 - GENERAL

2.4 THE RATES, TERMS AND CONDITIONS FOR each individual product or service ESTABLISHED BY LECs will be ~~reviewed~~ STATED IN TARIFFS FILED WITH AND SUBJECT TO APPROVAL by the Commission on a case-by-case basis IN ACCORDANCE WITH ARTICLES 1 THROUGH 7 AND ARTICLE 15, OF TITLE 40, C.R.S. WHEN FILING RATES, TERMS AND CONDITIONS FOR SUCH PRODUCT OR SERVICE the LEC SHALL FILE APPROPRIATE COST DATA AND will have the burden of proving that any prices of present or proposed Basic Service Elements (BSEs) or Complementary Network Services (CNSs) are consistent with the following general pricing guidelines:

- 2.4.1 All prices for regulated ONA products and services must be just and reasonable in accordance with §40-3-101, C.R.S. AND SHALL NOT BE UNDULY DISCRIMINATORY.
- 2.4.2 THE ~~All prices~~, RATES, TERMS AND CONDITIONS for ONA products and services must be set to promote a competitive telecommunications marketplace while protecting and maintaining the wide availability of high quality telecommunications service in accordance with §40-15-101, C.R.S.

RULE 3 - DEFINITIONS

3.1 ACCESS MEANS EITHER SPECIAL ACCESS AS DEFINED IN §40-15-102(25), C.R.S., OR SWITCHED ACCESS AS DEFINED IN §40-15-102(28), C.R.S.

3.2 BASIC LOCAL EXCHANGE SERVICE MEANS TELECOMMUNICATIONS SERVICE WHICH PROVIDES A LOCAL DIAL TONE LINE AND LOCAL USAGE NECESSARY TO PLACE OR RECEIVE A CALL WITHIN AN EXCHANGE AREA REGULATED IN ACCORDANCE WITH PART 2, ARTICLE 15, TITLE 40, C.R.S.

~~3.1~~ 3.3 Basic Service Element (BSE) - Optional unbundled products or services (such as Calling Number Identification) provided by a local exchange telecommunications provider that an ESP may require or find useful in configuring an enhanced service on a Basic Serving Arrangement.

~~3.2~~ 3.4 Basic Serving Arrangement (BSA) - The fundamental tariffed switching and transport services that allow an ESP to communicate with its customers through the local exchange provider's network. Examples would include basic local exchange service, private line service and switched access. Special access is a form of BSA, but is currently deregulated.

~~3.3~~ 3.5 Collocation - ~~Placement of ESP equipment within the local exchange provider's central office.~~ THE SEGREGATED, PHYSICAL PLACEMENT IN A LEC FACILITY, WHICH SHALL INCLUDE BUT IS NOT LIMITED TO A CENTRAL OFFICE, HUB SITE, WIRE CENTER OR OTHER LOCATIONS WHERE TELECOMMUNICATIONS FACILITIES TERMINATE, OR WHERE A LEC MAKES CONNECTION TO ITS OWN FACILITIES, AND IN AN APPROPRIATELY MAINTAINED ENVIRONMENT (i.e., A DUST FREE, AIR-COOLED ENVIRONMENT CONDUCTIVE TO THE OPERATIONS OF COMPUTERS AND ELECTRONIC EQUIPMENT), OF ESP EQUIPMENT.

3.6 Commission MEANS THE COLORADO PUBLIC UTILITIES COMMISSION.

~~3.4~~ 3.7 Common Channel Signaling System #7 (SS7) - A technology that is compatible with, but not dependent upon, Integrated Services Digital Network (ISDN) for conveying call set-up and related information through data channels that are separate from the channels that customarily carry voice signals or comparable information content.

~~3.5~~ 3.8 Common ONA Model - Model devised by the BOCs and Bellcore that represents the functional means through which an ESP would interconnect with the BOCs network.

~~3-6~~ 3.9 Comparably Efficient Interconnection (CEI) - Plan established through Computer Inquiry III (CI-3) at the FCC for (BOCs) to provide enhanced deregulated services as long as they offered similar interconnections to other providers. This plan was instituted as a forerunner of ONA.

~~3-7~~ 3.10 Complementary Network Services (CNS) - Optional unbundled basic products and services (such as stutter dial tone) that an end user or an ESP may obtain from an LEC for provision on an end user's line in order to access or receive an enhanced service.

~~3-8~~ 3.11 Customer Proprietary Network Information (CPNI) - Customer information accumulated by the local exchange provider as a result of providing basic network services.

~~3-8-1~~ 3.11.1 Customer-specific CPNI - Information which is customer specific and includes billing name and address, quantities of services subscribed to by the customer, access arrangements, calling patterns, usage data and customer billing records. Listed name, address and telephone number are not subject to this definition.

~~3-8-2~~ 3.11.2 Aggregate CPNI - Aggregated or summarized customer-specific CPNI from which information identifying specific customers has been deleted.

~~3-9~~ 3.12 Enhanced Service - A service offered over common carrier transmission facilities which employs computer processing applications that act on the format, content, code, protocol or similar aspects of the customer's transmitted information; provide the customer with additional, different, or restructured information; or involve customer interaction with stored information.

~~3-10~~ 3.13 Enhanced Service Provider (ESP) - Providers of enhanced services that utilize ONA products or services of regulated telecommunications providers, including interexchange carriers (IXCs) and resellers acting as ESPs. IT ALSO MEANS A PROVIDER OF INTRASTATE ACCESS BETWEEN A LOCAL EXCHANGE CARRIER, AN END USER, AN INTEREXCHANGE CARRIER OR ANY OTHER PERSON, OR ANY COMBINATION OF SUCH PERSONS WHICH PROVIDER HOLDS A VALIDLY ISSUED CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (CPCN) FROM THE COMMISSION. AN ESP MAY ALSO BE CALLED BY WAY OF EXAMPLE, BUT NOT AS A LIMITATION, AN ALTERNATE ACCESS PROVIDER, AN ALTERNATE ACCESS TRANSPORT PROVIDER OR A FIBER OPTIC CARRIER.



~~3.11~~ 3.14 Information Industry Liaison Committee (IILC) - The forum designated by the FCC for future input and further development of ONA at the federal level.

3.15 Interconnection - THE POINT WHERE A LEC AND AN ESP ARE PHYSICALLY COLLOCATED. SUCH POINT SHALL BE ANY POINT WHERE A LEC CAN CONNECT ITS CUSTOMERS TO ITS OWN NETWORK TO PROVIDE ACCESS, INCLUDING, FOR EXAMPLE, CENTRAL OFFICES, HUB SITES, WIRE CENTERS OR ANY LOCATION WHERE TELECOMMUNICATIONS FACILITIES TERMINATE FOR THE PURPOSE OF PROVIDING ANY INTRASTATE TELECOMMUNICATIONS SERVICE. INTERCONNECTION TO A LEC IS GENERALLY PROVIDED THROUGH SWITCHED ACCESS, BUT MAY ALSO BE PROVIDED AS A PRIVATE LINE SERVICE OR SPECIAL ACCESS SERVICE.

~~3.12~~ 3.16 Joint Marketing - Means the offering, in the ordinary course of business, enhanced services and basic products or services to the same customer during the same telephone sales contact where the telephone contact has been initiated by the customer. It does not include sales activities where personal contacts are made with customers or their representatives, or to sales activities where the telephone contact is initiated by the LEC.

~~3.13~~ 3.17 ONA Products and Services - mean BSAs, BSEs and CNSs.

3.18 Telecommunications Facilities - ALL FACILITIES REASONABLY NECESSARY TO PROVIDE THE TELECOMMUNICATIONS SERVICES OFFERED BY ESPS PURSUANT TO A VALID CPCN ISSUED BY THE COMMISSION.

#### 4.3 UNBUNDLING OF LOCAL EXCHANGE PROVIDER SERVICES

4.3.1 LECs shall provide ESPs with the necessary services of the LEC to serve as building blocks to bring new enhanced, AND ACCESS services to consumers. The LECs shall UNBUNDLE THEIR TELECOMMUNICATION SERVICES ~~be responsive to ESP requests in unbundling their services~~ to the extent that is technically and economically feasible. SEPARATE UNBUNDLED RATES SHALL BE ESTABLISHED FOR CONNECTION AND FOR TRANSMISSION SERVICES.

4.3.2 A detailed record of all requests made by ESPs for the unbundling of specific LEC services shall be maintained BY EACH LEC and made available to the Commission. This information ~~should contain~~ SHALL INCLUDE the name of the requesting ESP, the date of the request, THE NATURE OF THE REQUEST INCLUDING the specific type of unbundling requested, OR THE LOCATION OF THE REQUESTED INTERCONNECTION OR COLLOCATION, the LEC's planned and actual response date, and

the response of the LEC TO THE REQUEST, AND IF DENIED, THE REASON FOR THE DENIAL OF THE REQUEST.

4.3.3 Any ESP that has been denied a REQUEST FOR UNBUNDLING OF specific TELECOMMUNICATIONS services OR FACILITIES, OR FOR INTERCONNECTION OR COLLOCATION ~~unbundling by a LEC~~ may, IN ADDITION TO ANY OTHER REMEDIES AVAILABLE TO IT, file a complaint WITH THE COMMISSION in accordance with §40-6-108, C.R.S.

4.4 COLLOCATION OF ESP EQUIPMENT IN LOCAL EXCHANGE PROVIDER PREMISES

4.4.1 ~~The collocation of ESP facilities or equipment within LEC's facilities is optional to the LEC.~~ ESPs SHALL BE PERMITTED TO COLLOCATE WITH A LEC IN ORDER TO PROVIDE ACCESS FOR THE ESP'S CUSTOMERS TO THE LEC'S NETWORK AND ASSOCIATED SERVICES AT ANY POINT WHERE A LEC CAN CONNECT ITS CUSTOMERS TO ITS OWN NETWORK TO PROVIDE ACCESS, INCLUDING CENTRAL OFFICES, HUB SITES, WIRE CENTERS OR ANY LOCATION WHERE TELECOMMUNICATIONS FACILITIES TERMINATE FOR THE PURPOSE OF PROVIDING ANY INTRASTATE TELECOMMUNICATIONS SERVICES. THE RENTAL RATES FOR SUCH SPACE OCCUPIED AN ESP SHALL BE SUBJECT TO THE COMMISSION'S JURISDICTION.

4.4.2 ~~If a LEC allows collocation of ESP facilities or equipment that are not those of its own ESP, then it must allow collocation by other ESPs under the same terms and conditions. This rule is subject to the provisions of Rule 4.4.3 following.~~ THE ONLY LIMITATIONS UPON COLLOCATION SHALL BE AVAILABILITY OF SPACE. IN THE EVENT A LEC STATES IT DOES NOT HAVE SUFFICIENT SPACE TO ALLOW FOR COLLOCATION, A DISINTERESTED BUT QUALIFIED THIRD PARTY(IES) SHALL BE PERMITTED TO INSPECT THE PROPOSED POINT OF COLLOCATION TO VERIFY THAT THERE IS A LACK OF SPACE.

4.4.3 ~~If security or safety issues arise, the LEC may at its option disallow collocation of an ESP's facilities or equipment. The facts surrounding the disallowance of collocation for security or safety issues must be made available to the Commission and to the ESP denied collocation.~~ SPACE FOR COLLOCATION SHALL BE ALLOCATED ON A FIRST-COME, FIRST-SERVED BASIS. THIS PRIORITY SHALL BE DOCUMENTED WITH WRITTEN REQUESTS TO OCCUPY SPACE. THE NEEDS OF A LEC FOR ITS CUSTOMERS, EXCEPT THE NEEDS OF A LEC TO PROVIDE BASIC LOCAL EXCHANGE SERVICE, SHALL NOT TAKE PRIORITY OVER EXISTING WRITTEN REQUESTS FOR COLLOCATION. IN THE EVENT A LEC

REQUIRES COLLOCATION SPACE ALREADY OCCUPIED BY AN ESP, IT SHALL GIVE THE ESP 18 MONTHS WRITTEN NOTICE OF THIS DETERMINATION AND SHALL DURING THE 18-MONTH PERIOD PROVIDE THE ESP WITH REPLACEMENT SPACE FOR COLLOCATION.

- 4.4.4 If the LEC's ESP is physically collocated within the facilities of the LEC and at least one ESP is not allowed collocation in that same facility, then the LEC must price its ONA products and services to its own ESP as if it were physically located two miles from that local exchange provider facility.
- 4.4.5 LECs must ensure that the basic services used by its enhanced service operations are available to other ESPs in an equally efficient manner. Factors for evaluating this standard will include the absence of systematic differences between the basic service access given to the LEC and to others, end-user perception of quality, and utility to other ESPs.
- 4.4.6 THE RIGHT TO COLLOCATE UNDER THESE RULES SHALL NOT BE AFFECTED BY THE TYPE OF TECHNOLOGY EMPLOYED BY AN ESP FOR INTERCONNECTION.
- 4.4.7 IN THE EVENT IT IS NECESSARY FOR A LEC TO CONSTRUCT OR MODIFY EXISTING SPACE IN ORDER TO PERMIT AN ESP TO COLLOCATE, THE LEC MAY REQUIRE THE ESP TO PAY REASONABLE CONSTRUCTION COSTS FOR THE CONSTRUCTION OF SEGREGATED SPACE IN A LEC FACILITY. THEREAFTER, THE LEC MAY CHARGE A MONTHLY SERVICE CHARGE FOR THE USE OF THE SEGREGATED SPACE.
- 4.4.8 DISPUTES CONCERNING COLLOCATION, SPACE AVAILABILITY OR TECHNICAL INCOMPATIBILITY MAY BE SUBJECT TO THE MEDIATION AND ARBITRATION PROCESS DESCRIBED IN THESE RULES, OR MAY BE THE SUBJECT OF A COMPLAINT FILED WITH THIS COMMISSION AS PERMITTED BY LAW.
- 4.4.9 LECs SHALL BE REQUIRED TO MAKE AVAILABLE ON A FAIR AND EQUITABLE BASIS AT THE OPTION OF THE ESP, CENTRAL OFFICE ELECTRONIC EQUIPMENT, DESIGNATED BY AN INTERCONNECTING ESP FOR PURPOSES OF MONITORING AND CONTROL OF A ESP'S OWN TELECOMMUNICATIONS FACILITIES.
- 4.4.10 IF A LEC CONTENDS IT DOES NOT HAVE SUFFICIENT MONITORING EQUIPMENT OR THE ESP ELECTS NOT TO UTILIZE LEC CENTRAL OFFICE MONITORING EQUIPMENT, THEN THE LEC SHALL MAKE SUCH ADDITIONAL PHYSICAL SPACE AVAILABLE AS NECESSARY TO ALLOW AN ESP TO

INSTALL ITS OWN MONITORING AND CONTROL EQUIPMENT AT THE CENTRAL OFFICE. THE LEC SHALL PERMIT THE INTERCONNECTING ESP TO MONITOR AND CONTROL EITHER ON SITE OR REMOTELY THE ESP'S TELECOMMUNICATIONS FACILITIES THAT ARE INTERCONNECTED. DISPUTES CONCERNING MONITORING EQUIPMENT MAY BE SUBJECT TO THE MEDIATION AND ARBITRATION PROCESS DESCRIBED IN THESE RULES, OR MAY BE THE SUBJECT OF A COMPLAINT FILED WITH THIS COMMISSION AS PERMITTED BY LAW.

- 4.4.11 WHEN AN ESP COLLOCATES IN AN LEC'S FACILITY, THE COLLOCATION SPACE AND ACCESS TO THE SPACE PROVIDED BY THE LEC SHALL NOT BE FOR THE USE OF THE GENERAL PUBLIC. THE ESP'S REPRESENTATIVES SHALL COMPLY WITH ALL SECURITY REQUIREMENTS OF THE LECs AND THE LEC SHALL MAINTAIN AND CONTROL ACCESS TO ITS FACILITIES. A LEC MAY PREVENT ACCESS TO ITS FACILITIES ONLY IN THE EXTREME CASE WHERE ENTRY WOULD COMPROMISE THE LEC'S SECURITY REQUIREMENTS.
- 4.4.12 THE ESP SHALL PERMIT LEC PERSONNEL TO ENTER UPON AND INSPECT THE SPACE PROVIDED TO AN ESP BY THE LEC FOR COLLOCATION UPON 24 HOUR'S NOTICE, AND ONLY IN THE PRESENCE OF AN ESP REPRESENTATIVE, EXCEPT IN THE EVENT OF AN EMERGENCY.
- 4.4.13 AN ESP WHICH COLLOCATES IN A LEC'S FACILITY SHALL BE RESPONSIBLE FOR THE INSTALLATION AND OPERATION OF ITS EQUIPMENT AND SHALL INSTALL AND OPERATE ITS EQUIPMENT IN COMPLIANCE WITH APPLICABLE TECHNICAL STANDARDS, RULES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO, FCC REQUIREMENTS, NATIONAL ELECTRIC CODES, AND STATE AND LOCAL GOVERNMENT REQUIREMENTS.
- 4.4.14 AN ESP WHICH COLLOCATES IN LEC FACILITIES SHALL BE REQUIRED TO INDEMNIFY THE LEC AND MAINTAIN COMPREHENSIVE GENERAL LIABILITY INSURANCE, INCLUDING PROTECTION AGAINST DEATH, PERSONAL INJURY AND PROPERTY DAMAGE, ISSUED BY A COMPANY QUALIFIED TO DO BUSINESS IN COLORADO, IN AN AMOUNT OF NOT LESS THAN \$1 MILLION IN THE EVENT THERE IS DAMAGE TO LEC EQUIPMENT OR SECURITY IS COMPROMISED, AS A RESULT OF AN ESP'S GROSS NEGLIGENCE OR WILLFUL OR INTENTIONAL CONDUCT ARISING OUT OF THE COLLOCATION. A LEC SHALL BE REQUIRED TO INDEMNIFY THE COLLOCATED ESP AGAINST DEATH, PERSONAL INJURY AND PROPERTY DAMAGE CAUSED BY OR AS A RESULT OF THE LEC'S GROSS NEGLIGENCE OR WILLFUL OR INTENTIONAL CONDUCT ARISING OUT OF THE COLLOCATION.

- 4.4.15 LECs SHALL MAINTAIN "ALL-RISK" PROPERTY INSURANCE WITH REPLACEMENT COST COVERAGE ON THE SHELL AND CORE OF BUILDINGS OR FACILITIES USED FOR COLLOCATION, AND ON THE EQUIPMENT AND FACILITIES USED TO MAINTAIN ENVIRONMENTAL CONDITIONS WHERE PHYSICAL COLLOCATION TAKES PLACE.

RULE 6 - WAIVERS FROM RULES

UPON APPLICATION, AND UPON A SHOWING OF GOOD CAUSE, ANY PROVIDER SUBJECT TO THESE RULES MAY SEEK A WAIVER IF IT IS DEMONSTRATED THAT COMPLIANCE WITH THE RULE IS IMPRACTICABLE, IMPOSSIBLE OR UNREASONABLE.

# The Local Call Goes Up for Grabs

Now, it's Baby Bells that are the focus of deregulation. And Teleport is ready.

By EDMUND L. ANDREWS

**T**HE downtown fiber-optic terminal of the Teleport Communications Group Inc. doesn't look like much. Located 250 feet below the ground in a basement of Manhattan's 2 World Trade Center, it has no wall-sized electronic maps, no banks of flashing lights, no massive control consoles. There are only aisles of metal racks, each one holding boxes of electronics that are connected to bundles of thin cables sheathed in yellow plastic. The entire operation, which controls a web of cables beneath the streets of New York and into New Jersey, is monitored by only two or three technicians.

Yet "B-6," named for the basement level on which it is located, is at the forefront of a sweeping movement in telecommunications: the breakup of the local telephone monopoly. Just 10 years after the American Telephone and Telegraph Company signed the historic antitrust settlement that spurred rampant competition in the long-distance telephone business, state and Federal regulators are preparing to open local markets to the same ferment — hoping that rates will fall and service will improve in the process.

A host of companies have responded to the call, with Staten Island-based Teleport the oldest and largest of them. Owned by Merrill Lynch & Company, and as of earlier this month by Cox Enterprises Inc., Teleport can relay tens of thousands of calls and billions of bits of information at a time over roughly 300 miles of high-speed fiber-optic wire. It now operates in 25 cities, counting New York, but plans to build networks in about 40 other cities over the next several years.

"The customers are demanding diversity," said Robert Annunziata, chief executive of Teleport. "They want service from someone who isn't the phone company."

Teleport's counterparts operate in cities ranging from Chicago to Los Angeles, Houston to Des Moines, Tampa to Grand Rapids and Charlotte, N.C. The biggest is Metropolitan Fiber Systems Inc., based in Oakbrook Terrace, Ill., with high-speed networks in about a dozen cities including Chicago, New York and Houston.

"This is the opening of the last great monopoly in the American telephone business," said Royce M. Holland, president of Metropolitan. The local service, he says, is a "cash cow that the Bell companies have been milking for years."

## The Pie: \$100 Billion

To date, these upstarts have garnered only 1.5 percent of the estimated \$100 billion local-telephone business, doing so by providing high-volume users with specialized services for which they need no regulatory approval. Teleport, for example, links the private networks of institutional customers like stock exchanges, money-center banks and large brokerages and gives them a cheaper way to reach long-distance telephone carriers than going through the local company.

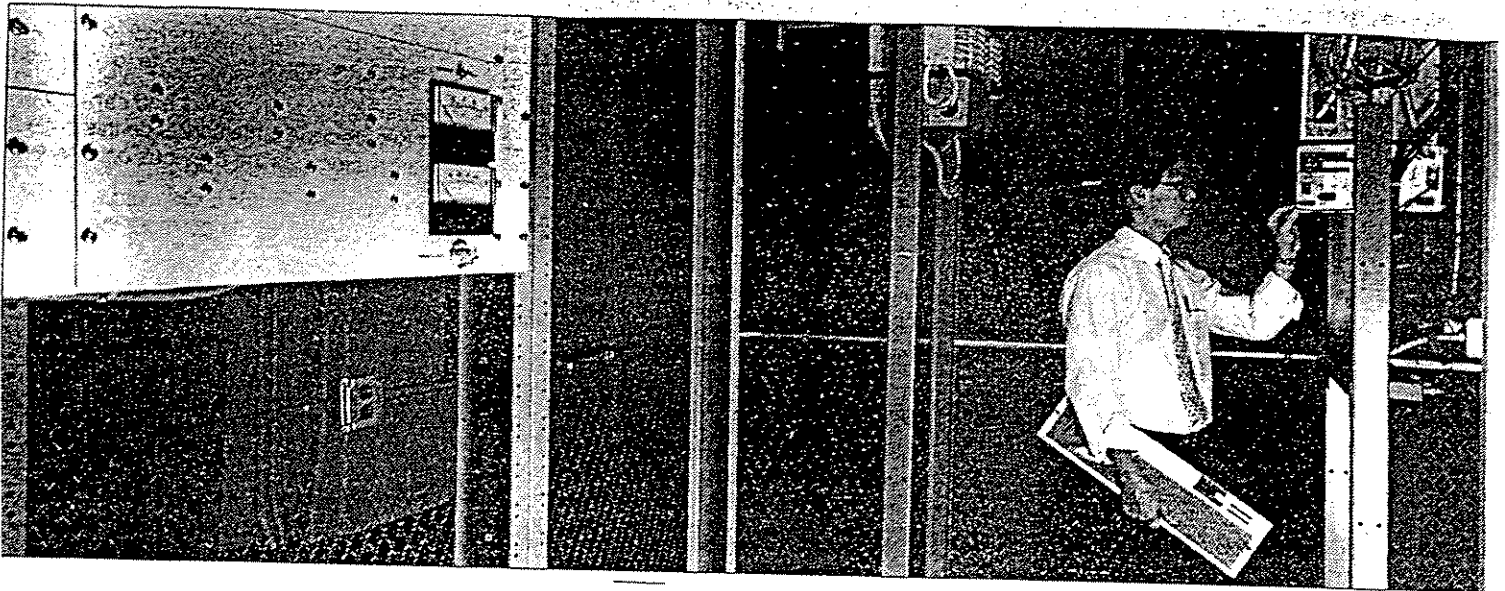
But that narrow mission is expanding rapidly. Led by the utility commissions of New York and Illinois, state officials are beginning to adopt rules that make it easier for aspiring rivals to connect their optic lines and switches to public networks, giving them access to the entire phone system — the coverage they need to carry calls the last mile or the last blocks to low-volume users that otherwise would be uneconomical for them to serve.

"They're getting a cheap, high-quality way of leapfrogging their way into the marketplace," said Joel D. Gross, a telecommunications analyst at Donaldson, Lufkin & Jenrette. "The cost of wiring a city is in the range of \$7 million to \$9 million. What makes it more expensive is getting the permits and the back-hoes to dig up the streets."

The public phone companies worry that the new rulings allow companies like Teleport to pick the most profitable and easiest-to-serve customers, leaving remote and low-volume users to the traditional phone providers. They also complain that they cannot compete with the newcomers

*Continued on Page 6*

# The Local Call Goes Up for Grabs



Fred R. Conrad/The New

Tong Chan, installation manager of Teleport, oldest of the new competitors and with a long way to grow.

*Continued from Page 1*

for desirable accounts because of a regulator-controlled system that keeps business rates high, in effect subsidizing residential rates.

Nevertheless, regulators seem intent on creating a market where various local providers interconnect to form a seamless phone network. They point to the improved efficiency such interconnectivity has brought to the long-distance business, where new entrants were allowed to fill out their nationwide networks by leasing and reselling capacity from A.T.& T. and each other. In some ways, the new approach is also an extension of the "equal access" requirements that forced local phone companies, after the A.T.& T. breakup, to provide customers with access to any long-distance company just by dialing 1.

In fact, the benefits of competition are already beginning to show in New York, where Metropolitan, Teleport and the Nynex Corporation have faced off for several years. "The threat of competition has been a very powerful force in increasing the quality and decreasing the cost of [local] telephone service by the long-standing provider," said Richard Standard, director of the New York State Public Service Commission's communications division. "A regulatory agency can't micromanage, and try to be a policy maker on these things, and it can't say that's put a cut out there. But the most powerful incentive is opening up markets."

Five years ago, Wall Street companies wanting to order a high-speed digital line for a private network from New York Telephone were told they had to wait nine months. Then Teleport began offering installation in weeks. New York Telephone cut its waiting time to a month or less and cut its leasing rates on these lines to about \$500 a month, from \$900.

## Teleport's Genesis

Teleport did not set out to bust a monopoly. Rather, it was founded by Merrill Lynch in 1983 to create a satellite center with large earth stations to provide long-distance communications for Merrill's own use and for other banks and brokerage firms in downtown New York. Because the only available land with a clear view of the skies was in Staten Island, it had to lay high-speed lines to link downtown customers with its satellite dishes.

But the company soon concluded that there was not enough volume to sustain that business. To get mileage out of its investment, it decided to target the growing demand for local fiber-optic lines, particularly from companies trying to link their offices with regional offices.

Banks and trading companies, after all, had long chafed at their dependence on a single local telephone company because of the cost of even brief breakdowns. "Our whole thing is to build nonstop communications," said Joseph Kane, vice president of telecommunications at the First Boston Corporation in New York. "We have periodic outages with all our carriers. Given that, we have to have alternative routes."

So Teleport sold the earth stations and began offering an expanding array of local telecommunication services. Merrill Lynch is thought to have put \$50 million into the business. And although all the new fiber-optic carriers are private, and thus need not supply figures, analysts believe it is the only one making money, turning a profit for the first time last year. They peg Teleport's annual revenues at \$50 million to \$70 million, with 75 percent coming from New York.

## A 90-Day Deadline

Now, Teleport is preparing to offer what amounts to basic local telephone service to large and medium-sized businesses in New York City — a move made possible by the latest in a series of moves by the New York Public Service Commission to deregulate the market. On Nov. 25, the commission gave New York Telephone 90 days to offer almost any customer operating an office telephone network separate prices for what it calls "links" and "ports."

That unbundling allows customers for the first time to buy local service à la carte from the public telephone company and a rival carrier, and for rival carriers to provide a dial tone, the cornerstone of plain old telephone service, for local calls.

Within the next few years, residential customers may be given similar options. "We expect to get as big a share of that \$100 billion market as we can," said Mr. Annunziata. Can he get 5 percent to 10 percent? "Easily," said Mr. Annunziata, a Long Island native who skipped college and worked his way through the ranks of A.T.&T. before joining Teleport. "I don't think we'd be satisfied with that." Twenty percent? "It's possible," he said.

There is little doubt that business customers have resented telephone companies' sometimes slow responsiveness, high prices and uneven service. In a nationwide survey of 200 such customers last January by Andersen Consulting, a unit of Arthur Andersen & Company, 45 percent said they would switch local telephone companies given the chance.

In a smaller survey two months ago by Telestrategies Inc., a consulting firm in New York City, 60 percent of the telecommunications managers surveyed in the Washington area said they would shut at least half of their local telephone business to another company if they had a choice.

"Users feel the local exchange companies don't act like they're in a competitive industry," said Jerome Lucas, president of Telestrategies. "The telephone companies just don't want to put that emphasis on developing a failure-proof network. When competitors like Teleport and Metropolitan Fiber come along, they solve the problem."

But the public phone companies do see competition as inevitable. "We recognize that customers want choice. That's the reality," said Joseph Lucatorto, a product manager at New York Telephone. "We don't think it's realistic anymore to be the sole-source vendor. Our plan is to be the first-choice vendor."

That, they say, requires that regulators free them from a rate structure with built-in subsidies. The Public Service Commission says that rather than eliminate subsidies, which officials say amount to \$1 billion a year, the best strategy may be to require new competitors to pay part of that into a special fund to create a more level playing field.

Regardless, traditional phone companies will have little choice but to become more competitive over the next decade, analysts say. In addition to the fiber-optic companies, they will be assaulted by alternatives from wireless telephone services, microwave companies and cable television companies. Each has various strengths and weaknesses, each could capture a slice of the telephone market and each could be bundled with others to create formidable new services that would reach into every nook and cranny of the market.

Such possibilities make Teleport, with its ties to Cox, particularly interesting. In a deal closed earlier this month, Cox, the fifth-largest cable television operator, bought 12.5 percent of Teleport for an undisclosed sum. While Cox is reticent about its investment, industry sources speculate that it is thinking in terms of combining technologies and plunging into the telephone market. In addition to installing fiber-optic cables along the main trunk lines of its cable system, Cox has recently launched an experimental wireless telephone system in California that uses its existing cable network to relay signals among radio antennae.

## Forcing Change

In the meantime, traditional companies are being forced to change. Largely in response to Teleport and Metropolitan Fiber, which promise back-up lines to large customers, Nynex has introduced new "disaster avoidance" services that allow corporations to run separate lines to isolated central office switches.

"The service I've received from Nynex this year is much better than what I had before," remarked David Granoff, director of system planning for the Commodity Exchange. "It's like a whole new company."

Teleport has chosen to compete on the basis of service and flexibility rather than on price. In general, it has pegged its prices close to those of New York Telephone — sometimes higher. But that could change. Teleport has shown a striking ability to use state-of-the-art equipment to keep costs down, presumably giving it leeway to cut prices. While Nynex and the other regional Bell companies employ an average 42 workers for every 10,000 telephone lines, Teleport employs fewer than two.

Increasingly, a company's marketing prowess may be as important as low prices or its ability to install fiber-optic lines. Mark Lowenstein, an analyst at the Yankee Group, a market research firm in Boston, noted that San Francisco, Boston, Chicago and New York all have two or more alternative carriers and that the local telephone companies have begun building their own fiber-optic networks. As a result, Mr. Lowenstein predicted, traditional phone companies and their rivals may be able to get a leg up only through cooperative arrangements — for instance, offering to hand off service to another carrier if their lines go down.

Still, for local competitors, the next few years could be marked by the same sort of volatility that once shook the long-distance business. One of the earliest entrants, the Institutional Communications Company of Virginia, ran into trouble by overestimating the demand for its services. After falling into the hands of its creditors, it was recently acquired by Metropolitan Fiber Systems. Similar troubles plagued Dallas-based DFW Metrolink, which sold its assets to Teleport.

The unforgiving climate has even Mr. Annunziata marshalling his resources with caution. "I don't believe in the idea that if you build it, they will come," he said. ■



ESPIE aggressive policies by some states to promote competition in the local phone market, Federal rules affect a key piece of the puzzle behind.

A recent ruling by New York's Public Service Commission allows many business customers to get their local phone service à la carte from New York Telephone's public network and private fiber-optic companies. Rival carriers like the Teleport Communications Group can now reach customers anywhere in the city by paying New York Telephone to link their fiber-optic highways to the backbones of the public network.

But these interconnections will mainly be limited to local calls because the Federal Communications Commission has only begun to consider policies to allow customers who buy their local service from a fiber-optics company link, via the local public phone company, to their long-distance carriers. That closes off at least

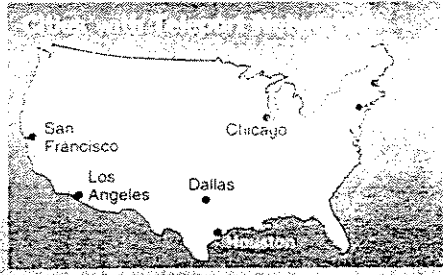
\$30 billion in business to these companies — maybe more if this discourages customers from switching to alternative services.

In May, the F.C.C. proposed requiring public telephone companies to offer rivals physical interconnections for the limited purpose of linking dedicated private lines of corporate telephone networks in more than one city. The rules would not, however, link the ordinary telephone lines of smaller business customers.

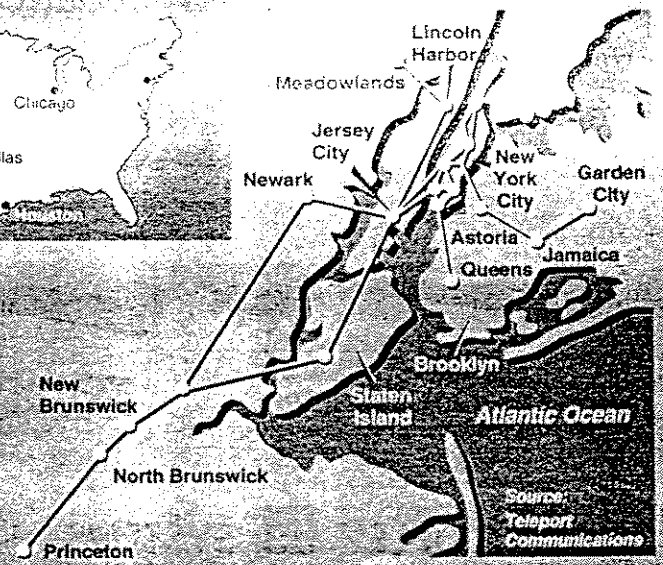
While New York and a few other states have been aggressive in relaxing regulations to spur local competition, the F.C.C. is reluctant to impose these new rules because it does not want to force states that have moved more slowly. But some regulators argue that, at a minimum, states that want to provide these expanded interstate calling capabilities should be given the option to do so. The commission is expected to issue its first rules on interconnections next spring.

### Going for the Local Markets

Cities around the nation currently served by a Teleport Communications local network and the range and growth of its key \$3.5 billion New York area network.

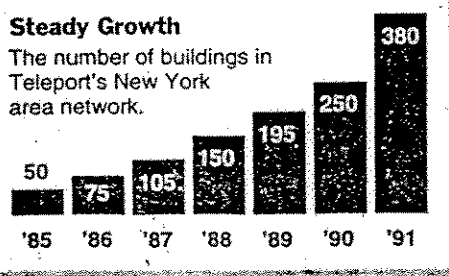


### Teleport's New York Area Network



### Steady Growth

The number of buildings in Teleport's New York area network.



Source: Teleport Communications

The New York Times

## Where Teleport Would Like to Buy In

TELEPHONE companies often contend that they make little or no profit from residential customers. But after the Nynex Corporation made that argument at a recent Congressional hearing, officials of the Teleport Communications Group offered a modest proposal: If Nynex didn't want to serve Brooklyn or Queens, Teleport would buy those exchanges for their net book value.

"What is an 'undesirable' subscriber to Nynex might be a valued customer to Teleport," Robert C. Atkinson, Teleport's senior vice president said in a letter to Nynex chairman William C. Ferguson.

The comment goes to the heart of a key debate in the local telephone business: whether companies like Teleport are "cream-skimming" the high-value corporate customers without taking responsibility for ordinary users.

Was Teleport serious about its offer? Yes and no. In a recent interview, Mr. Atkinson and Teleport's chief executive, Robert Annunziata, said they would certainly be interested in acquiring Nynex's monopoly-like dominance of Brooklyn and Queens.

But taking on Nynex in other parts of the market would require several

technical accommodations, they said. These include "number portability," the ability to let customers keep their telephone numbers when switching to a rival telephone carrier, and equal access to the New York Telephone computerized call routing, which figures out the quickest path to relay a call at any given moment.

Even supportive regulators worry about the technical and security merits of that idea — because giving more than one company access to the command and control center might lead to chaos. "We need the right signals from regulators," said Mr. Annunziata.