



CIRF

Converging Industries Research Foundation

Practical Solutions for Communications Policy

Loop Dreams: The Price of Connection for Local Service Competition

Executive Summary

July 21, 1995

*Presentation at the July 1995 NARUC Meeting
San Francisco, CA*

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Project Information

List of Participants in the Telecommunications Industries Analysis Project

June 27, 1995

State Regulators	NARUC representatives from: Illinois Commerce Commission Iowa Utilities Board Massachusetts Department of Public Utilities New York Public Service Commission Ohio Public Utilities Commission Washington Utilities and Transportation Commission
Regional Holding Companies	Ameritech Bell Atlantic BellSouth NYNEX Pacific Telesis SBC Communications Inc. US WEST
Independents	Anchorage Telephone Utility GTE Sprint Local Telecom Division
Interexchange Carriers	AT&T Sprint
Foreign Domestic	InfoCom Research, Inc. NTT America
Local, National, and International Services	BT France Telecom North America
Materials Manufacturers	Corning
Telecommunications Equipment Manufacturers	Nortel

Sponsors:

Corporation for Public Broadcasting

Assisting with *public* data:

Bellcore
Federal Communications Commission
National Exchange Carrier Association

Project Information, cont.

Background on the Telecommunications Industries Analysis Project

The goal of the Telecommunications Industries Analysis Project is to provide information to support the development of alternative communications policies to meet the needs of stakeholders in an environment that includes competitive and non-competitive markets, federal and state regulatory jurisdictions, and a proliferation of new services made possible by technological advances. The purpose of the project is to produce research and analysis which will assist policy makers in making informed decisions.

The project is a neutral forum of communications industry stakeholders exploring multiple viewpoints of selected issues. This forum incorporates the following elements:

- II **Broad representation:** The current forum includes foreign and domestic local exchange carriers (LECs), interexchange carriers (IXCs), materials and equipment manufacturers, and federal and state regulators. The project actively seeks expansion of this forum to include other communications industry representatives such as competitive access providers, cable television companies, computer companies, electric power utilities, or publishers.
- II **Multiple viewpoints:** Participants are required to play an active role in the research and analysis, to represent their own interests, to understand and to assist in developing others' perspectives, and to work toward the common goal of representing multiple views. Since papers reflect multiple viewpoints and ideas, authors and reviewers may not agree with particular views or approaches expressed in the papers. The objective is to lay out ideas and options to assist policy makers in their decisions.
- II **Analysis and results of alternative policies:** Research tools, including a jointly produced data base and computer software models, and data analysis developed by this forum create a common language for examining issues. The common language allows the participants to focus on underlying issues. Appropriate computer software tools, including modifications to existing tools, are developed.
- II **All data, analysis methods, and results are public:** Data used by this project must be publicly available on a nationwide basis. Research products become public domain information.
- II **Neutral setting:** The project resides in a neutral setting, free of partiality, thereby ensuring objective and independent research.

Project Information, cont.

What the Project has Done

The project has conducted public workshops at the national meetings of the telecommunications industry regulators. The project's research papers have been the basis for meetings with the Federal Communications Commission (FCC), Congressional staffs, the Congressional Research Service, and the National Telecommunications Information Administration.

The project has also produced a number of papers plus software modeling tools for the analysis of financial impacts of new technology deployment and of changes in the financial structures themselves

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Objective

This paper compares the current price of basic local service with the major cost component of basic service, the loop. The paper seeks to point out areas of current local service cost allocation and pricing policies that will conflict with the introduction of competition into the local service market. This is the first in a series of papers that will address the issues related to the interconnection of competing local exchange carriers (LECs).

Why are Loop Costs and Prices Important?

The introduction of competition into the local service market requires the incumbent LEC to develop charges for connections offered to the competing networks. There are two reasons why proper prices are important for the the loop-defined as the connection between the customer's premise and the central office:

- To ensure that there is no discrimination in the price charged to the competitor
- To ensure that subsidies do not exist that would foster uneconomic competition.

While parties involved can usually agree that access to the loop is essential for the development of local competition, disagreements generally include costs and prices for the loop.

Key Questions for Developing Connection Charges among Competing Networks

The paper sets the stage by discussing the need to unbundle/resale rates. The paper lays out the framework and issues related to the following questions:

- What is the cost of a loop?
- How are loop costs recovered today?
- What is an appropriate loop charge to a competitor?
- Should the loop charges to the competitor be imputed in the incumbent Local Exchange Company's (LEC) local service rates?
- Should there be price distinctions based upon how the service is used or who uses it?

Local Service Rates Compared to Loop Costs

To assist decision makers in answering these questions, this paper uses a variety of definitions for the cost of a local loop: embedded, embedded without overheads, current proxy costs (incremental costs), future costs (for fiber technology), and unbundled rates. **Figure 1** shows that on average the embedded loop costs¹ exceed the flat rate residential local service rate, including the Subscriber Line Charge (SLC).² Making the same comparison with the business rates shows that in most cases the business local service rate

¹ Costs for local service are understated in the comparison because local service has other cost components. Local service also includes the costs for switching, transport and operator service.

² The SLC is included to determine if a customer taking only local service is generating sufficient revenue to recover the revenue requirement of the loop.

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including the SLC is sufficient to cover average embedded cost. The difference between costs and rates may be much greater due to customer location and the density of customers in an area.

Policy Issues

The introduction of competition into the local service market conflicts with the following current cost pricing policies:

- Allocation of loop costs to various services.
- Pricing basic local service below cost.
- Recovery of fixed costs on a usage basis.

Results of Current Policies

- **Over and Under Recovery of Costs**

The allocation of loop costs to other than basic local service and the resulting pricing will mean that customers that take only local service will not cover the cost of their service. The recovery of fixed loop costs from usage sensitive rates results in over recovery of costs from some customers and under recovery from others.

- **Markets without Competition**

The current policies are consistent with markets that have no competition since in total a company recovers its costs. In fact, these policies have been used to promote universal service by keeping basic service rates affordable.

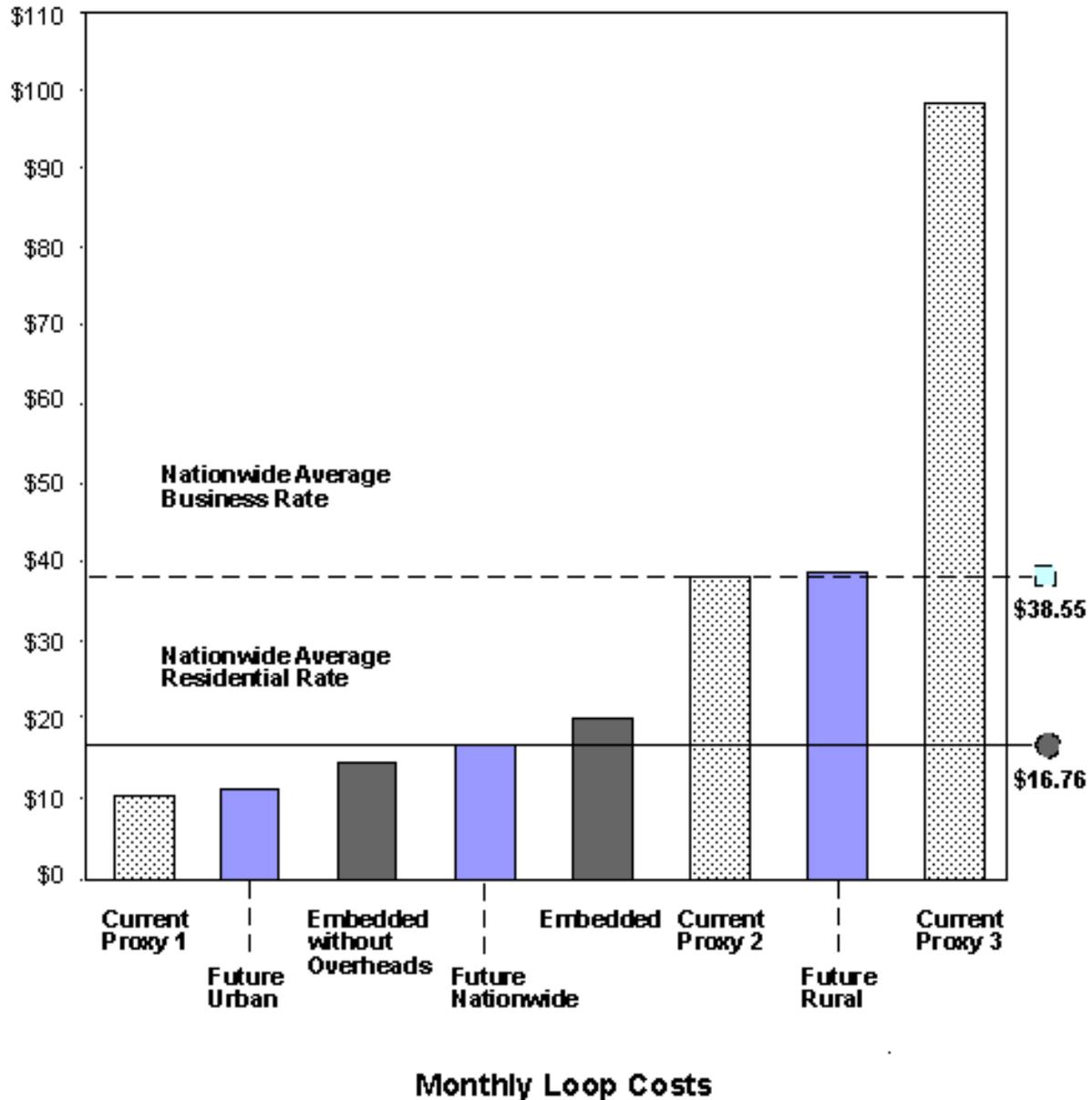
- **Markets with Competition**

The introduction of competition makes the current policies unworkable. Companies have the incentive to serve only those customers that are profitable. Furthermore, the introduction of competition will necessitate development of an appropriate charge to competitors for the use of the incumbent LEC's loop facilities. In order for viable local competition to develop, regulators and companies must develop effective and workable solutions to these challenges.

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Figure 1: Comparison of 1993 National Average Residential and Business Rates with Loop Costs



Costs: Embedded costs are from the Federal Communications Commission (FCC), *Monitoring Report*, CC Docket No. 87-339, Prepared by Federal and State Staff for the Federal-State Joint Board in CC Docket No. 80-286, May 1995, Table 3.3.; embedded costs without overheads are from NECA data for the calculation of the 1994 Universal Service Fund based on 1993 data. Other costs are developed in the paper.

Rates: The 1993 nationwide average residential rate is an unlimited service base rate of \$13.21 and subscriber line charges (SLCs) of \$3.55 for a total of \$16.76. The 1993 nationwide average business rate is an unlimited local calling rate of \$34.85 and SLCs of \$3.70 for a total of \$38.55. Jim Lande, *Reference Book: Rates, Price Indexes, and Household Expenditures for Telephone Service*, Federal Communications Commission, Industry Analysis Division,

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Washington, DC, July 1994, Table 2, page 19, and Table 3, page 26.