



# CIRF

## **Converging Industries Research Foundation**

*Practical Solutions for Communications Policy*

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### **Pick a Card: Cost Allocations and the Impact on Service Competition**

*Executive Summary*

**October 7, 1997**

*Presentation at the November 1997 NARUC Meeting,  
Boston, MA*

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# **Pick a Card: Cost Allocations and the Impact on Service Competition**

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Telecommunications Industries Analysis  
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# Pick a Card: Cost Allocations and the Impact on Service Competition

## *Executive Summary*

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### **Objective**

This paper illustrates the consequences of applying thinking appropriate for a fully regulated environment to an environment where there is partial competition. This paper examines the result of selecting a particular regulatory choice, called “cost allocations,” and its impact on service competition and on investment in networks that share services.

### **Definition of Cost Allocations**

When the same network carries two or more services, traditional communications regulatory rules, called cost allocations, distribute the common costs of this network among the services. These rules currently divide, or “allocate,” costs of networks (and the associated overheads) along various service lines, such as voice (telephony) and video (cable TV).

### **Overall Results**

When a magician asks you to “Pick a card, pick any card,” out of a deck, you have fifty-two choices, any one of which will do the trick. However, once picked, your card limits the options available to the magician, who must use this particular card as the focus for the trick.

Similarly, when a method of defining costs for regulatory purposes is at issue, you have a vast array of choices. However, once selected, your choice channels the result in a particular direction. The results from the model indicate the following points:

- Arbitrary regulatory treatment (including retroactive regulation) of new services before they have even been developed may delay, or even prevent, the deployment of these services. (Regulatory uncertainty is a disincentive for investment).
- Using cost allocations, which were developed for a regulated monopoly market, arbitrarily favors one industry over another and inhibits competition.

### **Overview of the Model**

A simple model compares three different cost allocation scenarios which allocate the common costs of a telephone company network between voice and video services. For each scenario, costs are modeled for representative urban, suburban, and rural facilities. The results for telephone company provision of video services are then compared to cable TV company provision of video services (**Figure 1**). The three scenarios use allocators submitted in public proceedings for video dial tone (VDT) and for open video systems (OVS).

### **What Do the Results Indicate?**

The charts in **Figure 1** show patterns and relationships resulting from the use of three different allocation percentages. While one scenario may favor one industry over another, *the important point is the arbitrary nature of these allocations.*<sup>1</sup> There is no “correct” allocator.

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<sup>1</sup> None of these scenarios reflects the business case, since voice and video services are not equivalent. Furthermore, technology allows even more, significantly different services to be carried by these networks or by portions of these networks.

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## Pick a Card: Cost Allocations and the Impact on Service Competition

### *Executive Summary, cont.*

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- **Scenario 1: A “Minutes of Use” Approach (24% Voice and 76% Video)**

This scenario represents an attempt to prevent the telephone company customers who pay for voice services from subsidizing lower rates for video services over the same network. The underlying assumption for this allocation is minutes of use. It assumes that a minute of talking on the phone is the same as a minute of watching television. This assumption makes one service prohibitively expensive in relation to the other — either extremely expensive television programs or extremely inexpensive telephone calls. In the model, in all three markets (urban, suburban, and rural), the cable TV provider has the lowest cost for video services. This choice favors the cable TV industry.
- **Scenario 2: A “Split the Difference” Approach (50% Voice and 50% Video)**

In this case, the proposed allocator is a compromise between two traditional regulatory approaches (**Scenarios 1 and 3**). These approaches are increasingly irrelevant due to rapid technological change and to new market entrants. In the urban and suburban markets the cable TV company has the lowest cost for video service. In the rural market, the telephone company has the lowest cost for video services.
- **Scenario 3: An “Operational Savings” Approach (78% Voice and 22% Video)**

This scenario represents an attempt to use a traditional regulatory approach. The underlying assumption for this allocation is that costs are regulated and any savings are passed on to the customer. Therefore, the operational savings from implementing new technologies are passed on to the telephone customers. Once this new network is in place, it is then used for video services. In this scenario, the results are based on arbitrary allocators instead of on customer demand. This choice favors the telephone company in suburban and rural markets and favors the cable TV industry in urban markets.

### **What are Some New Options for OVS?**

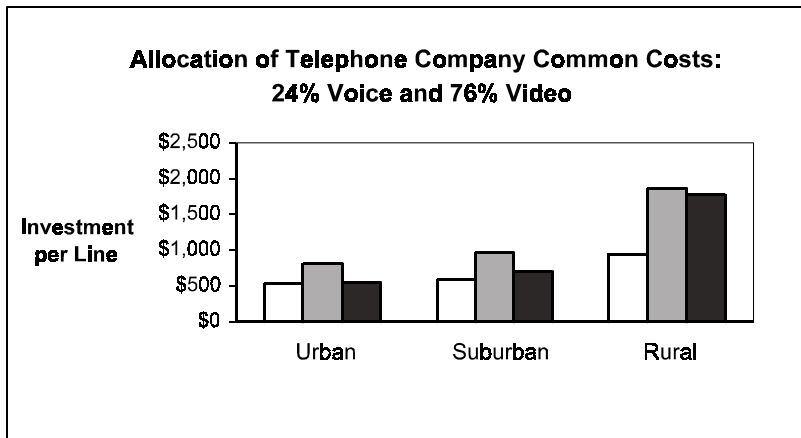
The following are new options that might be used instead of cost allocations for OVS. These options may be looked at singly or in combination:

- Use regulatory forbearance as long as it is consistent with the public interest and as long as regulation is not necessary for “just and reasonable” service provision, or for consumer protection.
- Use antitrust rules and pricing oversight to police the competitive market. In terms of prices, the questions that need to be asked are: Is the price right? Is it affordable? What's the definition of and context for "affordable"?
- Allow new services to be introduced without the same regulatory constraints as the older ones.
- Regulate only access to basic voice service regardless of the technology, and deregulate all other services.
- Use the same set of rules for everyone (after a transition period).
- To the degree that it's possible, avoid rules that reward gaming which is based on the structure of the rules, including the use of the regulatory structure.

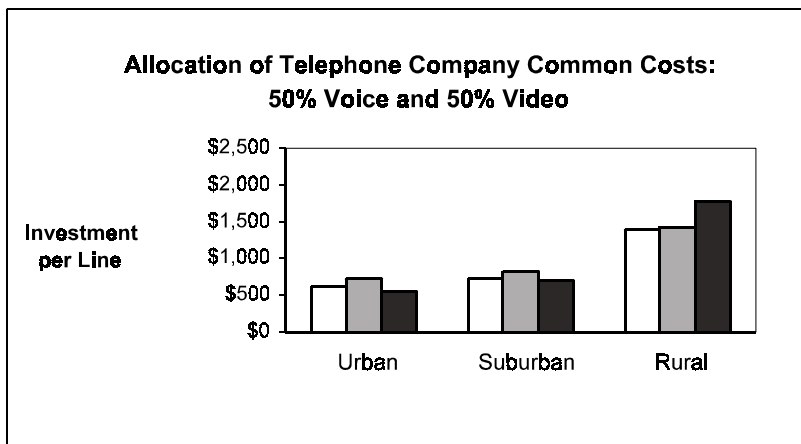
# Pick a Card: Cost Allocations and the Impact on Service Competition

## *Executive Summary, cont.*

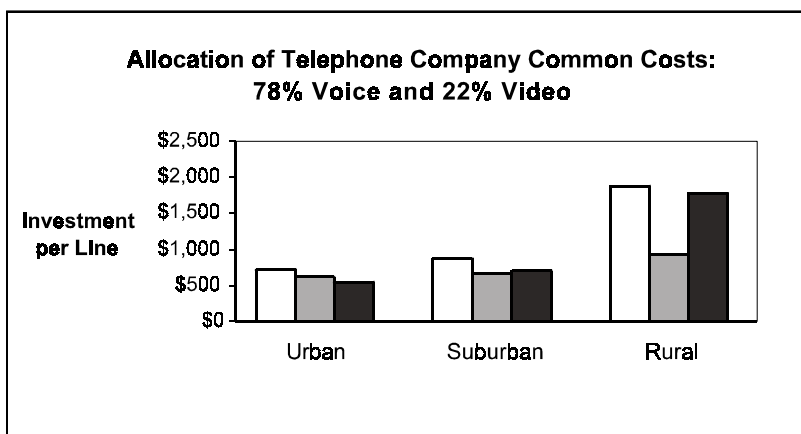
**Figure 1: Comparison of the Three Cost Allocation Scenarios**



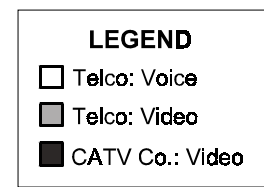
**Scenario 1: A "Minutes of Use" Approach**



**Scenario 2: A "Split the Difference" Approach**



**Scenario 3: An "Operational Savings" Approach**



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## Project Information

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### List of Participants in the Telecommunications Industries Analysis Project

October 1997

#### State Regulators

NARUC Representatives from:  
California Public Utilities Commission  
Florida Public Service Commission  
Illinois Commerce Commission  
Iowa Utilities Board  
Massachusetts Department of Public  
Utilities

#### Companies and Governments

AT&T  
Bell Atlantic  
BellSouth  
Corning  
France  
France Telecom  
GTE  
Kalona Cooperative Telephone  
MCI  
Nortel  
NTT America  
SBC Communications  
Sprint  
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#### Sponsors:

Corporation for Public Broadcasting

#### Assisting with *public* data:

Bellcore  
Federal Communications Commission  
National Exchange Carrier Association  
National Telecommunications and Information Administration

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## Project Information, cont.

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### Background on the Telecommunications Industries Analysis Project

The Telecommunications Industries Analysis Project (TIAP), a seven-year-old research consortium, conducts and reports impartial research in the areas where network planning, business financials, and public policy (regulation and legislation) intersect. The participants actively work together to develop new options for telecommunications policies to meet the needs of consumers, governments, and companies in a changing, competitive environment. Participants include regulators, domestic and foreign telecommunications companies, materials and equipment manufacturers, and other communications-based organizations.

The purpose of the Project is to produce research and analysis that will assist policy makers in making informed decisions.

TIAP incorporates the following features:

- **Neutral setting**  
The Project provides a neutral setting, free of partiality, thereby ensuring objective and independent research.
- **Multiple viewpoints**  
Participants play an active role in the research and analysis, represent their own interests, and understand and assist in developing others' perspectives.
- **Analysis and results of alternatives**  
The Project provides research data, tools, and models for critical decision making.
- **Public distribution of research**  
Data used by this Project are publicly available. Research products become public domain information.