Meeting -- Wednesday, April 30, 1969

Henry Catucci, Vice President, Western Union International, Inc.
R. E. Conn, Senior Vice President, Law and Administration
Tom S. Greenish, Executive Vice President

MEMORANDUM

WUI

THE WHITE HOUSE

WASHINGTON

FCC

primary & expertise

needs more staff

no basic structural complaints

Intelsat

Not using carriers

Cable vs. satellite

Merger

support permissive merger legislation

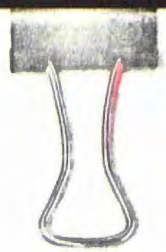
43 statute prohibits merger / makes difficult

merger discussions

Labor problems

competing union unions

WUI & ITT - Teamsters



Legal Dept.

TO Mr. Whitehead
FROM H. G. CATUCCI, VICE PRESIDENT
WUI INC. WASHINGTON, D. C.

WU

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

In the Matter of Amendment of Part 25 of the Commission's Rules and Regulations with respect to ownership and operation of initial earth stations in the United States for use in connection with the proposed global commercial communication-satellite system.	)	Docket No. 15735

REPLY COMMENTS OF
WESTERN UNION INTERNATIONAL, INC.

Robert E. Conn
Ernest Brod
Alexander D. van Eyck

26 Broadway
New York, New York 10004

Attorneys

June 19, 1970

Mr Hutchinson
has original

TO Dr. White
FROM H. G. CATUCCI. VICE PRESIDENT
WUI INC. WASHINGTON. D. C.

WUI

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

In the Matter of	)	
	)	
Inquiry into policy to be followed in future licensing of facilities for overseas communications.	)	Docket No. 18875

COMMENTS OF WESTERN UNION INTERNATIONAL, INC.

Robert E. Conn
Ernest Brod
Alexander D. van Eyck

26 Broadway
New York, New York 10004

Attorneys

September 14, 1970

Mr. Hinkson has original

Chron
SED Chron
FCC
Western Union

December 2, 1970

Mr. Ben F. Waple
Secretary
Federal Communications Commission
1919 M Street, N. W.
Washington, D. C. 20554

Dear Mr. Waple:

The enclosed letter received in the Office of Telecommunications Policy is transmitted to your Commission for appropriate action.

Sincerely,

Stephen E. Doyle
Special Assistant
to the Director

Enclosure

cc: Mr. Doyle
Mr. Whitehead

SEDoyle:jm

Office of Telecommunications Policy

Route Slip

30 NOV 1970

		To
_____	Clay T. Whitehead	_____
_____	George F. Mansur	_____
_____	William Plummer	_____
_____	Wilfrid Dean	_____
_____	Steve Doyle	✓
_____	Walt Hinchman	_____
_____	Charles Joyce	_____
_____	William Lyons	_____
_____		_____
_____		_____
_____	Eva Daughtrey	_____
_____	Timmie White	_____
_____	Judy Morton	_____

REMARKS

55961

Cable: JAFIMPEX

Phone: [illegible]

M. Sulaiman Jaffer.

JAFFER CHAMBERS
VICTORIA ROAD,
KARACHI.
(Pakistan)

23rd November, 1970.

To,

The Secretary,
Ministry of Tele-communications,
Government of United States of America,
Washington - D.C.
U. S. A.

Dear Sir,

When I was in Richmond in the month of August, 1970 I sent an LT cable of about 26 words to NAWABSAHIB Yaqeen International, Frere Road Karachi Pakistan on or about 11th or 12th of August, 1970 and the charges were about $ 3.64 or $ 3.56. When I contacted the addressee later on I learnt that to this date he did not receive the said cable.

I wrote a letter to the Western Union Telegraph Office, Richmond Virginia on October 26, 1970 asking them to investigate as to why it was not delivered, but they had not the courtesy even to acknowledge my letter.

I was surprised to find when I delivered the cable copy for transmission and paid the amount, that the telegraph office does not issue a receipt unless asked for which is rather strange. Secondly there is another private company RCA which also sends cables and I was told that they are more efficient. However, I shall thank you to please investigate about the efficiency of the Western Union Telegraph Office or otherwise and to see that the cable charges recovered from me are refunded and a proper explanation advanced about the non-delivery.

Thanking you,

Yours faithfully,

(M. SULAIMAN JAFFER)

AHS

November 9, 1970

Mr. R. W. McFall
Chairman of the Board
and President
Western Union
Suite 1001
1828 L Street, N. W.
Washington, D. C. 20036

Dear Russ:

I too enjoyed our luncheon and hope we can keep in touch as OTP develops and communications policy evolves.

Thank you for Art Okun's name -- a good Republican too!

Sincerely,

Clay T. Whitehead

cc: Mr. Whitehead

CTWhitehead:jm

western union

R. W. McFALL
CHAIRMAN OF THE BOARD
AND PRESIDENT

November 4, 1970

Dear Tom:

I very much enjoyed seeing you and having lunch today.

The name of the economist I mentioned is Arthur Okun.

With best personal regards,

Sincerely,

Mr. Clay T. Whitehead
Special Assistant
to the President
The White House
Washington, D. C. 20500

1828 L STREET N. W., SUITE 1001, WASHINGTON, D. C. 20036

A Profile of International Communications

by

E. A. GALLAGHER
President
Western Union International, Inc.

Reprinted from SIGNAL, January, 1970
Armed Forces Communications and Electronics Association
1725 Eye St., N.W., Washington, D. C. 20006

A Profile of International Communications

by

E. A. GALLAGHER
President
Western Union International, Inc.

WESTERN UNION INTERNATIONAL is a world-wide telecommunications facility utilizing submarine cable, high frequency radio, tropospheric scatter, microwave and satellites linked to domestic systems on every continent. It is a network designed to carry more information farther, with greater speed and greater reliability and at lower cost, than ever before was possible. Through its world-wide network and affiliates, WUI serves the communication needs of business and industry as well as government in every area of the world.

The international common carrier communications industry today consists of three basic classifications:

- The telephone companies which operate mainly through cables and satellites in the rendition of voice communications services. The telephone companies include the Long Lines Department of American Telephone & Telegraph Company and the Hawaiian Telephone Company.

- The so-called record/data carriers which similarly operate mainly through cables and satellites. These carriers furnish overseas messages (cablegrams), international telex (customer-to-customer two-way written dialogue through automatic dial-up systems), leased channels (private customer circuits) including data/voice for alternate or simultaneous use, Datel (high speed data transmission on a per minute basis) and international television transmission. The three major world-wide record/data carriers are ITT Worldcom, RCA Globcom and Western Union International.

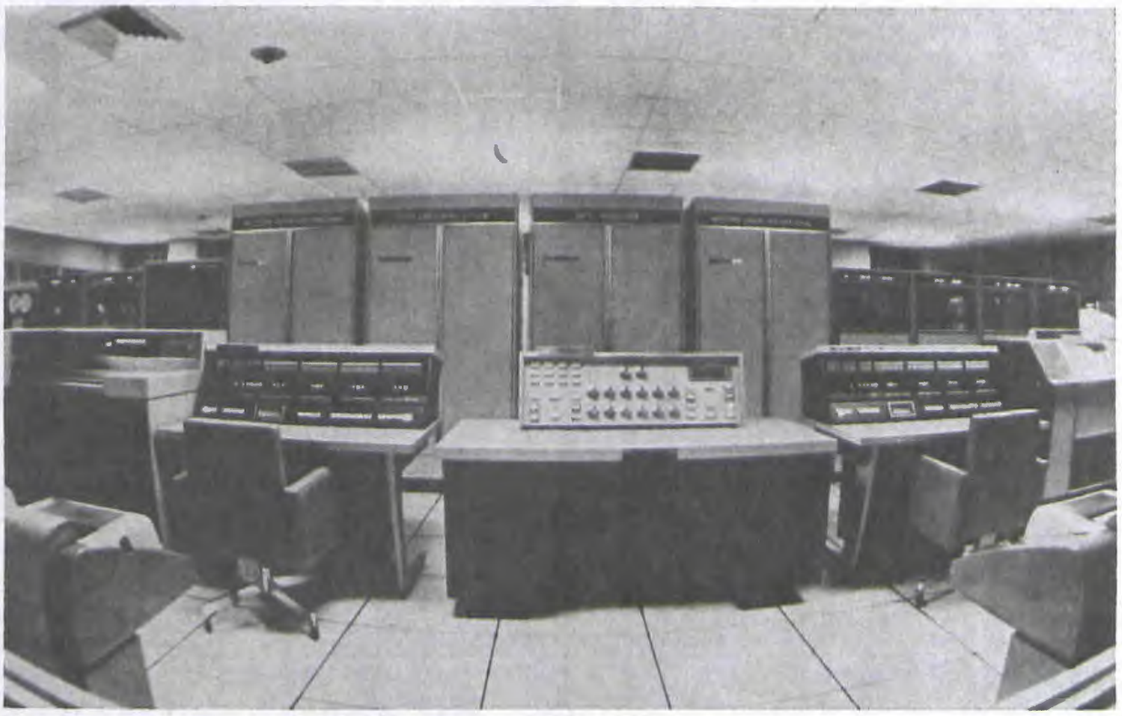
- Communications Satellite Corporation which leases to the voice and record carriers satellite channels in the Intelsat-owned satellite system. (Intelsat is a consortium of, at present, 69 nations.) The earth stations associated with the Intelsat satellites are owned jointly in the U. S. mainland, Hawaii, Puerto Rico and Guam by all of the United States entities referred to above. All of the overseas cable systems which emanate from the United States are "jointly owned" by AT&T, ITT Worldcom, RCA Globcom and Western Union International in varying proportions, with Hawaiian Telephone Company also participating in the Pacific cables.

The international record/data carriers maintain operating, switching, pickup and delivery services in the gateway cities: New York, Washington, D. C., San Francisco, Honolulu and to a limited extent, Miami. Tropical Radio and Telegraph Company, which serves the Latin American region, operates in Miami and New Orleans.

The facilities of the international carriers are interconnected at the gateway cities in the continental United States with the domestic facilities of AT&T and The Western Union Telegraph Company and with the domestic facilities of Hawaiian Telephone Company at Honolulu. As a result of a Congressional mandate, the international operations of Western Union were divested in 1963, and Western Union International, Inc., began operations as a separate entity. WUI is the only United States international communications carrier directly serving the public whose stock is publicly traded. WUI's stock trades on the American Stock Exchange.

The international carriers provide their overseas services generally in conjunction with foreign telecommunications entities which operate the overseas terminals. The overseas entities are, for the most part, government owned. Nearly every nation in the world belongs to the International Telecommunications Union, an agency of the United Nations, which coordinates international communications.

The international communications industry is experiencing an era of unprecedented growth, particular-



WUI computerized telex switching center.

ly in the newer services such as international telex and leased channels. The familiar cablegram is, in the international field, seemingly immune from any substantial erosion by new developments and services. During the last 40 years, message traffic has generally been increasing in volume. Since 1961, the annual volume of international traffic has averaged about 25 million messages, including United States originating, terminating and transiting traffic.

Telex Growth Rate

International telex service is one of the more spectacular modes of communication in terms of customer acceptance and growth. The total amount spent by the public here and abroad for this service between the United States and abroad or in transit through the United States has risen from $44 million in 1965 to about $90 million at present levels, at an annual growth rate of more than 30 per cent.

The international record/data carriers provide telex service to their customers in the gateway cities. In addition, approximately 75,000 AT&T and Western Union Telegraph teletypewriter customers throughout the United States are interconnected for overseas calls through the telex systems of the international carriers.

A major innovation in telex occurred in 1966 when WUI placed in operation the first computerized on-line real-time circuit switching system. The computer switched Telex system provides high-speed, automatic connection to over one-half million overseas telex machines throughout the world. In its basic operation, the computer acknowledges a call, searches for an outgoing international trunk line, establishes a connection and informs both parties by written acknowledgments that they are connected and can commence keyboard-to-keyboard conversation. Upon completion of the transmission, the computer releases the connections upon receipt of a disconnect signal from the customer. If an alternate signal is sent by the customer, the computer releases the overseas trunk, transmits to the caller the billable time for the call and finally disconnects the customer's connection. If abnormalities appear in the calling signal or if other problems arise, they are detected immediately by the computer and the call is transferred to switchboard positions for operator assistance.

Abbreviated Dialing

For frequently made calls to a given station, WUI provides abbreviated dialing through use of special 3-character codes which instruct the computer to generate the full numerical sequence required to establish a connection. The establishment of a correct connection is verified by an exchange of automatic answerback characters which identify both parties to each other. A tailored billing feature facilitates departmentalized costing of telex service within the user's organization. Both abbreviated dialing and tailored billing are available at no extra cost to the user.

As the international operations of business and government grow more complex and demanding, the need increases for accurate transmission of large volumes of data. Aside from volume, the need has also

arisen for private dedicated communication channels. The record carriers have met the challenge by providing private leased channel service which gives the user capacity ranging from about 16½ words per minute to about 9,600 words per minute, together with the ability to switch from one mode to another, i.e., data, voice and facsimile. Customers may subdivide leased voice grade channels and use them alternately or simultaneously for different modes of communication. For example, a customer can have three duplex teleprinter circuits in continuous operation while data, voice or facsimile communications are carried on simultaneously across the ocean between the customer's offices.

Sophisticated leased data/voice channels are provided by WUI and the other record/data carriers to government defense and space agencies in increasing quantities. In 1966, WUI was selected by the Defense Communications Agency to furnish it with the first commercially provided leased satellite channels, ten alternate data/voice channels between Hawaii and the U. S. mainland.

Leased channels between the United States and abroad produced revenues of about $40 million in 1965 which are presently about $75 million. The increase in revenues has occurred notwithstanding very substantial reductions in rates. For example, a 66-word-per-minute private channel to Puerto Rico in 1965 cost the user $5,000 per month. Today, the customer may obtain an entire voice grade channel of 4-kilohertz bandwidth at the same monthly cost of $5,000 with the privilege to subdivide the channel into twenty-two 66-word-per-minute teleprinter channels or use the channel for voice/facsimile or data. This type of price reduction has occurred because of operating efficiencies and the great increase in available channels, cable as well as satellite. Within the past year a new 720-channel cable was installed to serve the Puerto Rico/Virgin Island area and a satellite earth station was constructed in Puerto Rico.

Western Union International has pioneered a number of innovations on the international scene including, for example, a stock-ticker service through which a stockbroker overseas can read the moving ticker tape of the New York stock exchanges at the same instant as his counterpart on Wall Street. The international record/data carriers now provide a variety of stock information services.

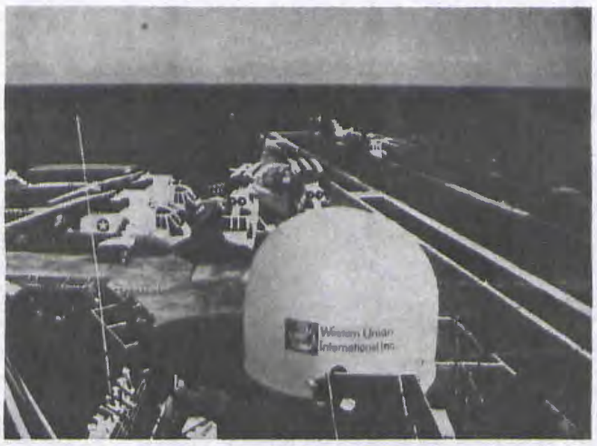
Intercontinental Transmission

Intercontinental television transmission is an exciting new service which began commercially in 1965. WUI has participated in the overseas transmission of some memorable telecasts, including the address of the Pope to the United Nations in New York in October 1965.

Western Union International has transmitted live and in color back to the United States the splashdown and recovery operations for each of the Apollo earth and lunar orbital missions. A transportable satellite earth station, developed for WUI by General Electric's Space Division, has been used aboard the Navy recovery vessels for the entire Apollo program including the historic lunar landing missions. During the Apollo 11 mission, WUI operated a press center aboard the *USS Hornet* for teletype transmission via the transportable station of news releases concerning both the splashdown and President Nixon greeting the astronauts. For shipboard service, the station's 15-foot parabolic reflector is mounted on a gyro-stabilized platform which permits the beam to lock onto a satellite 22,300 miles from the earth regardless of the motion of the ship. This transportable earth station, with its collapsible umbrella-like antenna, can be shipped by commercial cargo jet aircraft for television coverage of fast breaking events in areas not readily accessible via permanent fixed location earth stations.

New generations of higher capacity submarine cables and satellites will be developed and placed in service. The continents will be drawn closer together by the growing network of communications channels.

Although we have just seen the dawning of the era of 720-plus channel cables and 1200 channel satellites, activity is beginning to look toward 3000 channel cables and 6000 channel satellites. New technologies



WUI transportable earth station on board a U. S. aircraft carrier. The station is covered by an air-inflated radome.

such as the laser beam may find application to international communications.

With this increase in capacity, new international services will be introduced and charges for some of the existing services will be reduced. High-speed data and facsimile transmission will become available on a dial-up basis under a time-charging pattern, similar to international telex service, and users will be able to switch modes among data, facsimile and voice. Computer-to-computer dialogue will transit the oceans. Intercontinental closed circuit television for business and government use might well emerge, and there should be greatly increased usage of intercontinental television for broadcasting purposes.

The long-range growth of the international carriers would appear to be limited only by their initiative and imagination. Advanced technology is here today. All we have to do is apply it. As a result, within the next decade the most sophisticated international communications methods will be as familiar to us as television is to our post-radio offspring.

• • • — • —

THE WHITE HOUSE

WASHINGTON

December 18, 1969

MEMORANDUM FOR

Mr. Peter Flanigan
Dr. Lee A. DuBridge
Mr. Paul McCracken
General George A. Lincoln

As you know, we have been reviewing the issue of what the government's policy should be with regard to the use of satellites for domestic communications services. A working group was established in August to review the economic and technical considerations; a summary of those reports is attached. Also attached is a proposed memorandum for the FCC stating the Administration's policy recommendations. I would appreciate your comments as soon as possible since we would like to plan for release as soon as possible. The working group made no recommendations because of factors other than economic and technical considerations needed to be considered in formulating policy. These are discussed below:

Social, economic, and national security objectives

Our economy and our society are becomingly increasingly dependent on telecommunications. The telephone, television and radio, and now data communication, are an integral part of our commercial and social way of life. However, apart from the content of public broadcasting, the government's prime concern is that the telecommunications industries operate efficiently, do not engage in discriminatory or other anticompetitive practices, do not realize excessive monopoly profits, and vigorously pursue innovations in lower-cost technology or new services. Apart from government-owned telecommunications facilities, the national security interest implies the same objectives.

There are, of course, specific objectives the government may declare as with any industry. For example, it has always been government policy to encourage widespread access to telephone

service and to broadcast stations; and the military services may require particularly reliable, redundant, or survivable communications capabilities. No such special objectives appear at this time to suggest negating or compromising the basic objective of a healthy and vigorous industry structure for domestic satellite services.

INTELSAT and other international considerations

The primary consideration with respect to INTELSAT is that the economic viability of the global system not be jeopardized and that the announcement of a U.S. policy at this time not upset our negotiations on permanent arrangements for the INTELSAT consortium. While it is true that a domestic U.S. system would take away some traffic between the Mainland and Hawaii, Puerto Rico, and later Alaska, this is not sufficiently large to impair the economic strength of INTELSAT -- especially in view of the growing demand for international communications. Further, Governor Scranton, who heads the U.S. Delegation to the INTELSAT Conference, does not feel the proposed domestic satellite policy will cause any problems in our negotiations; to the contrary, it may be of some assistance.

National interest in an early system

There is some concern in Congress that we should be the first nation, or at least among the first, to use satellites in domestic communications. While national pride and prestige are important considerations, there are important reasons why they should not dominate in this case. (1) We should not impose such objectives on the domestic economy unless a significant national interest is to be served; this does not appear to be the case here. (2) The United States enjoys particularly sophisticated, reliable, extensive, and low-cost terrestrial communication facilities; satellites may well be economically useful in less well developed or more sparsely settled nations before they are in the United States. (3) The United States and other nations already use INTELSAT satellite services for domestic traffic, and the United States already benefits from the prestige of having developed satellite communications technology and the INTELSAT system.

The desirability of competitive forces

The telecommunications industry is in transition from a relatively small and self-contained industry dominated by the provision of switched public message (telephone) service on a monopoly basis to a large, rapidly changing industry providing a wide range of economically and socially important services. Regulatory policies and the industry structure are heavily oriented toward centrally planned, often monopolistic, operations. There can be no argument that the past performance has on the whole been superb. However, the rapid technological, social,and economic change surrounding the industry is causing problems. There are increasing numbers of specialized service demands and of potential suppliers eager to meet those demands. It is very difficult, however, for the FCC in spite of its fine staff to keep track of and be responsive to such rapid change within the past framework.

There can be no abdication by the FCC of their regulatory responsibilities and no untrammeled competition that would be detrimental to the public interest. But the public interest is also damaged by the inability of the Commission to deal decisvely with these problems in the traditional manner of highly centralized planning and negotiated compromise. We must move incrementally toward more competition in the communications industry; a good place to start is with a wholly new technology that is largely separable from the provision of public message service.

Effect on existing services

There is no immediate threat to any cross-subsidized services from satellite systems per se. It is possible, however, that a new data communications network could compete vigorously with Western Union in the provision of teletype service. Should Western Union lose much or all of this business, the viability of the public telegraph service would be in question. Such a situation should be dealt with on its merits only after it proves to be a problem; it should not be an a priori consideration in precluding competition.

Clay T. Whitehead
Staff Assistant

SUMMARY OF ECONOMIC AND TECHNICAL COMMITTEE REPORTS DOMESTIC SATELLITE WORKING GROUP

The Working Group has limited its deliberations to technical and economic issues bearing on domestic communications satellite policy. Before formulating such policy, other matters must also be considered. Among these other considerations are:

- -- the impact on social, economic, and national security objectives;
- -- the impact on INTELSAT and other international considerations with regard to orbital and spectrum usage;
- -- the importance to the national interest of early establishment of a domestic satellite system;
- -- the desirability of introducing competitive forces into the domestic communication industry and the effect of such forces on rate making practices now pursued in landline services;
- -- the effect on services now being furnished by terrestrial means, but which may not be economically viable under conditions of competitive alternatives since they are currently subsidized by more profitable services.

The report is considered to be a sound basis for policy decisions insofar as technical and economic matters are concerned.* However, since no examination of the problems beyond these areas was undertaken, no recommendations with respect to policy are offered.

* However, not all members of the technical committee agree fully with the economic committee's analysis, so that this composite summary does not necessarily represent a unanimous point of view of all members of the working group.

The Technical Framework

The establishment of U. S. domestic communications satellite facilities is technically feasible within the present state of the art, and there are spectrum and orbital resources available to accommodate several Western hemisphere satellite systems within the presently allocated 4 and 6 GHz bands. At least one transmit/receive earth station can be located in or near most urban areas, although the most suitable locations may be a number of miles from dense communications centers. A larger number of receive-only stations can be located in proximity to urban areas, particularly if some degradation of signal quality is not important. The exact number and location of earth stations is a subject for detailed engineering on a case-by-case basis.

Radio relay networks and satellite earth stations can share the 4 and 6 GHz frequency bands without harmful interference, provided reasonable precautions are taken in the design, location, and operation of the systems. To permit a large number of satellites, it is desirable that earth station antenna be as large as economically feasible. It, therefore, may be necessary to set minimum antenna standards based on geographic location in conjunction with satellite orbital location.

Technical considerations place no serious constraints on the formulation of policies for the ownership or mode of operation (single- or multi-purpose) of domestic communication facilities. Though of great importance in the engineering, operations, and economics of specific systems, these considerations can be dealt with effectively under any reasonable ownership structure.

The Economic Framework

The most immediately apparent potential for domestic communication satellites is to provide transmission and routing functions for long-haul television distribution. A second possibility is to provide highly specialized broad band services for thinly dispersed and highly specialized broad band users.

Several institutional arrangements for satellite service were considered. The two primary alternatives were: 1) a single system in which all satellites are established and managed by a chosen instrument, for which relatively detailed system characteristics and operating rules would be specified by the FCC and to which conventional regulatory

constraints would be applied; and 2) a more flexible industry structure permitting relatively open entry and where government involvement in technical design, operations, and management would be minimized.

These two basic options were evaluated from the standpoint of maximum contribution to the public interest in reliable, low-cost telecommunications services. Five criteria were used for this purpose: reasonableness of rates; service flexibility; technical and service innovation; efficient use of satellite facilities and radio resources; and new opportunities for learning.

1) The U. S. experience is that with multiple suppliers, competitive market forces tend to keep rates at reasonable levels. Even in regulated industries, competition has been a useful complement to regulation. The lack of evidence for economies of scale in satellite service and the competitive availability of large capacity, low-cost terrestrial networks suggests that excessive rates would be both unlikely and untenable under conditions of open entry. On the other hand, a chosen instrument would receive close scrutiny by the regulatory authorities, and it could be expected that rates allowed would restrict earnings to a reasonable level.

2) A large organization has greater resources and capability for service flexibility than a small organization. Yet, several smaller organizations may be more responsive to customer needs than a single large organization; this is especially true in areas of rapid technological and economic change. It is also true that the mere opportunity for competitive entry will provide incentives for initial entrants to explore new services that they otherwise might ignore. Unless the only entrant is a dedicated television distribution system, therefore, the competitive entry option can be expected to offer the greatest flexibility in meeting customer demands.

3) Technical innovation is more likely to occur where there are several competing manufacturers, and this is in turn more likely to occur with multiple operating entities than with a single chosen instrument. A chosen instrument may well be very innovative in offering new services, yet there is somewhat more opportunity for new services to be offered when entry is not sharply restricted.

4) Efficient satellite use requires both economic efficiency and efficient use of orbital and spectrum resources. Since there does not appear to be evidence of strong economies of scale or of specialization, either of the two options appear comparable in terms of economic efficiency. The type of regulatory control associated with a chosen instrument might avoid wasteful use of orbital capacity; and the current state of the art is such that reasonable standards for earth station and satellite design could be specified by the FCC to assure that the same result is achieved under conditions of open entry. The development of an open entry structure would be well suited to the transfer of systems and spectrum resources to more productive uses in the future without detailed Federal intervention in corporate operations that would be required with a single chosen entity.

5) A final objective of a domestic satellite policy is to increase learning about possible uses, costs, and services. A chosen instrument could be assigned certain public interest responsibilities to explore and offer potentially unecomic services and to carry on technical research. However, the primary uncertainties relate to cost and to market and service innovations. The incentives provided by competition among a number of entities are expected to result in a more vigorous examination of these uncertainties than would be expected from a chosen instrument.

Under either of the two basic options considered here, the FCC will exercise its licensing authority over spectrum usage. Interference with existing terrestrial microwave installations represents a potential problem area for any prospective domestic satellite operator, and future satellite systems may cause interference with one another. Procedures for resolving differences over interference questions between satellite services and terrestrial carriers should receive careful attention. Satellite operating entities should have equal status with respect to access to radio spectrum as the terrestrial users.

Under either policy option, a potential exists for cross-subsidization of services and for limiting entry through interconnection and access restrictions. Such practices could result in inequitable rate structures or anticompetitive practices and should be minimized.

As previously noted, technical considerations appear to pose no serious constraints to the adoption of either of the two basic policies examined in the economic study. The economic considerations appear to favor the competitive entry option although the chosen instrument option is also viable should public policy considerations suggest that course is preferable. Although there are substantial uncertainties as to the economics and technical operation of domestic communication satellite services, these are not so great as to justify any delay in proceeding with licensing of such services. For this reason, it may be desirable to adopt a policy on an interim basis with subsequent review in the light of actual experience.