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Greater Coordination and a More Effective Policy Needed for International Telecommunications Facilities. CED-78-87; B-168707. March 31, 1978. 60 pp. + 5 Appendices (15 pp.).

Report to Rep. Lionel van Deerlin, Chairman, House Committee on Interstate and Foreign Commerce: Communications Subcommittee; Rep. Louis Frey, Jr., Ranking Minority Member; by Elmer P. Staats, Comptroller General.

Issue Area: Alternative Approaches or Methods to Achieve Federal Program Objectives (3600).
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Congressional Relevance: House Committee on Interstate and Foreign Commerce; House Committee on Interstate and Foreign Commerce: Communications Subcommittee; Senate Committee on Commerce, Science, and Transportation. Rep. Lionel van Deerlin; Rep. Louis Frey, Jr.
Authority: Communications Act of 1934 (47 U.S.C. 151). Communications Satellite Act of 1962 (47 U.S.C. 701). Cable Landing License Act of 1921 (47 U.S.C. 34). Administrative Procedures Act (5 U.S.C. 551). Executive Order 11556. Executive Order 10530. Home Box Office Inc., et al. v. FCC, 567 F.2d 9 (D.C. Cir. 1977).

Although the organization of entities providing international telecommunications services varies from nation to nation, the United States and foreign entities jointly provide international telecommunications services and jointly own the cable and satellite facilities over which the services are provided. Development and implementation of a U.S. policy governing the construction and use of international telecommunications facilities involves primarily the responsibilities of the Federal Communications Commission (FCC), but can also involve the responsibilities of the State Department, the Office of Telecommunications Policy, and the Office of Telecommunications in the Department of Commerce. Findings/Conclusions: A more effective international telecommunications facilities policy can be developed and carried out by developing specific procedures for coordinating the decisionmaking responsibilities of the agencies involved, establishing and maintaining policy guidelines for facilities which will allow U.S. international carriers and foreign entities to plan their own actions; clarifying the process of providing instructions to the Communications Satellite Corporation in its role as U.S. representative in the International Telecommunications Satellite Organization;

amending the statute through which the FCC implements an international facilities policy; and repealing the Cable Landing License Act of 1921. Recommendations: The Chairman of the FCC should: initiate a rulemaking in which procedures will be established for the FCC to coordinate with other agencies in development and implementation of policy or international telecommunications; evaluate future international facilities within a regulatory policy framework; and establish policy guidelines for international telecommunications facilities in other parts of the world. (SC)

REPORT BY THE

Comptroller General

OF THE UNITED STATES

Greater Coordination And A More Effective Policy Needed For International Telecommunications Facilities

GAO believes that a more effective international telecommunications facilities policy can be developed and implemented by:

--Establishing specific procedures for coordinating decisionmaking responsibilities.

--Establishing and maintaining policy guidelines for facilities which will allow U.S. international carriers and foreign entities to plan their own actions.

--Clarifying the process of providing instructions to the Communications Satellite Corporation in its role as U.S. representative in the International Telecommunications Satellite Organization.

--Amending the statute through which the Federal Communications Commission implements an international facilities policy.

--Repealing the Cable Landing License Act of 1921.

CED-78-87
MARCH 31, 1978

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-168707

The Honorable Lionel Van Deerlin
Chairman
and
The Honorable Louis Frey, Jr.
Ranking Minority Member
Subcommittee on Communications
Committee on Interstate and Foreign
Commerce
House of Representatives

Pursuant to your joint April 27, 1977, request, we have reviewed the coordination among the Federal Communications Commission; the Office of Telecommunications Policy; the Office of Telecommunications, Department of Commerce; and the Department of State in implementing the proper oversight of international telecommunications.

In this our second report, we address how effectively each agency is carrying out its responsibilities and what coordination occurs among them. In addition, we have included our recommendations for improving the present U.S. structure for handling international telecommunications.

Our first report, issued September 29, 1977, entitled "Responsibilities, Actions, and Coordination of Federal Agencies in International Telecommunications Services" (CED-77-132), provided appropriate information on the responsibilities and activities of each agency.

As your office requested, we did not take the additional time needed to obtain written agency comments. However, we discussed the matters presented with agency officials and have considered their comments in this report.

As agreed, we are sending copies of this report to the House and Senate Appropriations Committees, the House Committee on Government Operations, the Senate Committee on Governmental Affairs, the House Committee on Interstate and Foreign Commerce, the Senate Committee on Commerce, Science, and Transportation, and the heads of the agencies discussed in the report.

Elmer B. Staats
Comptroller General
of the United States

COMPTROLLER GENERAL'S
REPORT TO THE SUBCOMMITTEE
ON COMMUNICATIONS
COMMITTEE ON INTERSTATE AND
FOREIGN COMMERCE
HOUSE OF REPRESENTATIVES

GREATER COORDINATION AND A MORE EFFECTIVE POLICY NEEDED FOR INTERNATIONAL TELECOMMUNICATIONS FACILITIES

D I G E S T

International telecommunications are vitally important to the United States and other nations of the world. International diplomatic and economic activity, military preparedness, and cultural exchange depend on the network of international telecommunications facilities and services.

The organization of entities providing international telecommunications services, such as telephone or telegraph, varies from nation to nation. While the U.S. international carriers are private businesses subject to Government regulation, most foreign telecommunications entities are national, government-owned operations. Despite the different methods of organization, however, the U.S. and foreign entities jointly provide international telecommunications services and jointly own the cable and satellite facilities over which the services are provided.

Development and implementation of a United States policy governing the construction and use of international telecommunications facilities involves primarily the responsibilities of the Federal Communications Commission. But policy development also can involve the responsibilities of the State Department; the Office of Telecommunications Policy; and the Office of Telecommunications in the Department of Commerce.

A more effective international telecommunications facilities policy can be developed and carried out by:

--Developing specific procedures for coordinating the decisionmaking responsibilities of the agencies.

--Establishing and maintaining policy guidelines for facilities which will allow U.S. international carriers and foreign entities to plan their own actions.

--Clarifying the process of providing instructions to the Communications Satellite Corporation in its role as U.S. representative in the International Telecommunications Satellite Organization.

--Amending the statute through which the Commission implements an international facilities policy to recognize the unique characteristics of the environment in which the Commission reaches a decision.

--Repealing the Cable Landing License Act of 1921.

COORDINATING PROCESS

The Communications Act of 1934 and the Communications Satellite Act of 1962 are the statutory base from which international telecommunications policy has evolved. Regulatory responsibilities contained in these acts have placed the primary statutory authority for developing facilities policy within the Commission. (See p. 46.)

In developing and implementing this policy, however, the Commission has not coordinated its responsibilities effectively with those of the Office of Telecommunications Policy and the State Department. State of course has specific responsibility for foreign policy and relations with other nations and the Office of Telecommunications Policy has broad responsibility to develop executive branch telecommunications policies which promote the public interest, contribute to the full development of the economy, and promote effective use of telecommunications. (See p. 47.)

But this lack of coordination has not been limited to the Commission. While the Office of Telecommunications Policy is required

by executive order to coordinate the activities of the executive branch in developing telecommunications policy, due to a disagreement with the State Department over the extent of this responsibility, the Office did not do so. (See p. 47.)

GAO recommends that:

--The Chairman of the Federal Communications Commission initiate a rulemaking in which procedures will be established for the Commission to actively coordinate with other Federal agencies on the future development and implementation of policy on international telecommunications facilities.

--The Director of the Office of Telecommunications Policy and the Secretary of State establish specific procedures for providing the Federal Communications Commission with unified executive branch views on international matters such as foreign relations, national security, and economic development.

POLICY FOR INTERNATIONAL FACILITIES

The Federal Communications Commission's policy for international telecommunications facilities to date has been confined to the North Atlantic. This policy has evolved from a framework within which the U.S. carriers and their foreign correspondents could plan transatlantic facilities to a Commission policy under which the Commission reviews facilities in the context of a comprehensive plan developed by the Commission. This plan specifies how facilities will be used and when. (See p. 48.)

There is a basic difference between these two. A policy in which the Commission only provides regulatory guidance leaves the responsibility for planning within those entities which construct and operate the international telecommunications network. But a policy in which a comprehensive plan is developed by the Commission shifts planning responsibilities for facilities from the operational entities to

the regulator. In this regard, the Commission's comprehensive plan for the North Atlantic does not provide an effective framework for dealing with international facilities because the comprehensive plan

--does not recognize that final authority over international satellite facilities resides with the International Telecommunications Satellite Organization,

--lacks agreement on the planning principles and specific facilities between the United States and the foreign telecommunications entities, and

--considers and endorses a new satellite facility which had already been approved over a year earlier, in September 1976, by the International Telecommunications Satellite Organization.

Given these circumstances, an effective policy for international facilities cannot be maintained within the context of a Commission-developed comprehensive plan.

The Chairman of the Federal Communications Commission should

--evaluate future international facilities within a regulatory policy framework which establishes and maintains policy guidelines from which the carriers and foreign entities can plan future facilities and

--establish policy guidelines for international telecommunications facilities in other parts of the world.

INSTRUCTING THE COMMUNICATIONS SATELLITE CORPORATION

An improved framework is needed for providing U.S. regulatory and executive branch instructions on regulatory and foreign policy issues to the Communications Satellite Corporation as the U.S. representative in the International Telecommunications Satellite Organization. The current framework is the result

of a disagreement between the Federal Communications Commission and the State Department over their respective authorities to instruct the Corporation on satellite facilities decisions. The current framework did not resolve this disagreement, it provided only a procedural method for providing instructions to the Corporation. The framework also did not clarify the specific matters on which the Government would provide instructions to the Corporation. (See p. 50.)

In addition, it did not anticipate that the Corporation would be given any instruction regarding the construction of new satellite facilities prior to the Commission's approving the Corporation's license application under section 214 of the Communications Act of 1934.

Because the Commission had no objection to the Corporation's acting on a proposed satellite facility, it may have

- --lost its options for ruling on the Corporation's satellite application,
- --denied all parties their procedural rights under the Administrative Procedure Act, and
- --jeopardized the possible continued development of cable and satellite technologies and their most effective and timely applications, contrary to the Commission's policy. (See p. 51.)

The Congress should amend the Communications Satellite Act of 1962 to reflect:

- --That the Commission has final authority to instruct the Corporation under section 201(c) of the Communications Satellite Act for regulatory matters.
- --That the President has final instructional authority under section 201(a) of the Communications Satellite Act for foreign policy matters.

Tear Sheet

--That the President has final instructional authority on a regulatory matter in which he determines that a clear overriding national interest concern exists. In such a case, the President would provide a separate instruction to COMSAT.

--That a final instruction to participate in the construction of a facility will not be issued to the Corporation before the Commission has issued a license for that facility to the Corporation pursuant to section 214 of the Communications Act of 1934.

INTERNATIONAL FACILITIES DECISIONS

In developing a policy for international telecommunications facilities, the Federal Communications Commission has recognized the importance of the views of foreign telecommunications entities in their roles as coowners of cable and satellite facilities and coproviders of international telecommunications services. However, section 214 of the Communications Act--the principal statute with which the Commission implements international facilities policy--does not require the Commission to authorize international facilities in any manner different from domestic facilities and makes no specific provision for considering the views of the foreign entities. Section 214 only requires the Commission to certify that a facility is required by the public convenience and necessity. Therefore, the Commission has determined that the views of foreign entities may not be substituted for, or given precedence over the Commission's determinations of the national public interest. (See p. 52.)

While the Commission's interpretation is within the statutory framework, the Commission's interpretation increases the risk of a U.S. international telecommunications facilities policy which cannot be implemented because it conflicts with the policy of the foreign telecommunications entities.

Interaction between the U.S. and foreign entities should be a two-way street--in that both

the views and concerns of each party are known and shared. Considering the separate views of the foreign entities and the impact on the U.S. ratepayer is a difficult task. However, the United States relies on the foreign telecommunications entities to provide service and ownership in facilities. Consequently, an effective international facilities policy requires a thorough consideration of their views in U.S. decisionmaking.

Therefore, the Congress should amend section 214 of the Communications Act of 1934 to recognize, as a matter of policy, that decisions on international facilities are distinct from decisions on domestic facilities. This recognition should include expanding the test of public convenience and necessity for international facilities to

--recognize the joint ownership of international telecommunications facilities, and

--recognize that Commission decisions can impact the decisions of foreign entities.

REPEALING THE CABLE LANDING LICENSE ACT OF 1921

The Congress enacted the Cable Landing License Act of 1921 when only one telecommunications entity, either foreign or U.S., owned each international cable facility. The act allowed the President to control the landing of cables by foreign entities in the United States. Subsequently, the President delegated his responsibility by executive order to the Federal Communications Commission subject to State Department concurrence. (See p. 54.)

Since international telecommunications have evolved into a joint venture among nations with cable facilities jointly owned and telecommunications services jointly provided, there is no longer a need for a separate act to control the landing of cable facilities by foreign entities. The provisions of section 214 of the Communications Act and the implementation of other recommendations contained in this report

will provide adequate control over the participation of foreign entities in cable facilities.

Therefore, in conjunction with the implementation of other recommendations contained in this report, the Congress should repeal the Cable Landing License Act of 1921.

OBSERVATIONS ON UNRESOLVED QUESTIONS

There are questions relating to international telecommunications which go beyond the coordination of activities and facilities policy issues addressed above. To assist international telecommunications decisionmakers, GAO has provided its observations on the following questions:

--Is comprehensive cable and satellite planning possible?

--Will current efforts on rate of return regulation have an impact on U.S. international carriers?

--What alternatives exist for reducing regulatory lag?

--Will the National Telecommunications and Information Administration be an effective replacement for the Office of Telecommunications Policy and the Office of Telecommunications, Department of Commerce?

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As the Committee requested, GAO did not take the additional time to obtain written agency comments; however, the report was discussed with agency officials and their views were considered. They agreed that clarification of responsibilities is needed.

Contents

ABBREVIATIONS

APA	Administrative Procedure Act
AT&T	American Telephone and Telegraph Company
CEPT	European Conference of Postal and Telecommunications Administrations
COMSAT	Communications Satellite Corporation
FCC	Federal Communications Commission
GAO	General Accounting Office
ICSC	Interim Communications Satellite Committee
IRC	International Record Carrier
INTELSAT	International Telecommunications Satellite Organization
NTIA	National Telecommunications and Information Administration
OT	Office of Telecommunications, Department of Commerce
OTP	Office of Telecommunications Policy

GLOSSARY

Adjudication	Agency process for the formulation of an order
Box-Jenkins	A relatively new method of forecasting economic or business data series developed by two statisticians, George Box and Gwilyn Jenkins
Circuit	A transmission path between one point and another
Communications common carrier	A company, organization, or individual providing wire or electronic communications services for hire
Diversity	The provision of two or more independent routes to supply the required services between specified countries
Docket	When FCC initiates a proceeding through the adoption of a Notice of Proposed Rulemaking or Notice of Inquiry, it is assigned a docket number for administrative control purposes. Docket numbers are assigned sequentially and are also used in other types of investigative and judicial proceedings.
Earth station	A fixed station used in communications satellite service for transmitting or receiving information from satellites
Ex parte	On one side only, done for, in behalf of, or on the application of one party only
Exponential growth	The forecast of a data series which is best described mathematically by a curved line having a constant base and a variable exponent ($y=a^x$)
Facsimile	The transmission of still pictures, maps, diagrams, and text. Images are scanned by the transmitter and reconstructed by the receiver and duplicated on some form such as paper

INTELSAT Board of Governors	The INTELSAT organ which has responsibility for the design, development, construction, establishment, operation, and maintenance of the INTELSAT space segment. Each Governor has a voting participation on the Board equal to that part of the investment which he represents
INTELSAT definitive arrangements	The set of two multilateral agreements consisting of (1) the Agreement Relating to the International Telecommunications Satellite Organization, an agreement among governments and (2) an Operating Agreement between the investors and participants in INTELSAT. The agreements became effective February 12, 1973
International comity	The courtesy and respect of peaceful nations for each other's laws and institutions
Leased channel service	A dedicated private line service whereby a customer can communicate to a given foreign point over circuits set aside for his use
Linear growth	The forecast of a data series which is best described mathematically by a straight line
Memorandum Opinion and Order	A document employed by FCC to announce decisions of FCC proce dings
Message telephone service	Switched service furnished to the general public as distinguished from private line telephone services
Message telegraph service	The international equivalent of domestic telegram service
Notice of Inquiry	When FCC determines that is does not have enough information to support a proposal to amend the rules, it may adopt and publish a Notice of Inquiry requesting the public to provide it with more information and details on specific issues

Notice of Proposed Rulemaking	A document adopted by FCC covering specific rule changes it is proposing to adopt and inviting members of the public to file their written views concerning the proposal
Order	The whole or any part of the final disposition or judgment of an agency in a matter other than rulemaking but including licensing
Pleading	Any one of the formal written statements of accusation or defense presented by the parties in an action of law
Rate of return regulation	A method of regulation which allows a regulated firm to earn revenues equal to its cost of service, including a fair return to stockholders and bondholders. Such regulation attempts to prevent firms from receiving unregulated monopoly profits but still allows them to attract new capital
Reconsideration	Taking up for renewed consideration an item which had been passed or acted on previously
Record	A written account of some transaction drawn up under authority of law by a proper officer and designed to remain as permanent evidence of the matter to which it relates
Record services	Services which generally result in some form of "hard copy," such as a telegram or telex message
Redundancy	The planned provision of excess capacity beyond the service requirements
Rulemaking	Agency process for formulating, amending, or repealing a rule
Space segment	The telecommunications satellites and the tracking, telemetry, command, control, monitoring, and related facilities required to support the operation of the satellites

TASI	Time Assignment Speech Interpolation. A system employed to increase the capacity and reliability of overseas telephone circuits. The system detects pauses in normal conversation and transmits other active conversations during these pauses
Telex	A teletypewriter exchange service whereby a customer obtaining a teletypewriter from Western Union or an international record carrier can communicate with an interconnected teletypewriter on Western Union's domestic network or an international record carrier's international network
Traffic	The total communications flow, such as conversations, written messages, facsimile, or data, in a telecommunications system
Voice-grade cable	A cable containing circuits which are capable of transmitting human speech
Voice services	Services which have an oral input or output, such as ordinary telephone service and private-line telephone service

CHAPTER 1

INTRODUCTION

International telecommunications are vitally important to the United States and other nations of the world. International diplomatic and economic activity, military preparedness, and cultural exchange depend on the network of international telecommunications facilities and services. Technological advances continue to increase the capacity and lower the costs of international facilities as well as improve the services provided over these facilities. These advances have not only stimulated increased use of international telecommunications but also have increased U.S. interaction with other international telecommunications entities.

In response to these technological changes the House Subcommittee on Communications, Committee on Interstate and Foreign Commerce, has begun a reassessment of the Nation's principal communications legislation--the Communications Act of 1934 (47 U.S.C. 151 et seq.) and the Communications Satellite Act of 1962 (47 U.S.C. 701 et seq.). As part of this process, the Subcommittee held hearings in March 1977 on international telecommunications services.

Subsequently, on April 27, 1977, the Chairman and the Ranking Minority Member of the House Subcommittee on Communications requested that we review the coordination among the Federal Communications Commission (FCC); the Office of Telecommunications Policy (OTP); the Office of Telecommunications, Department of Commerce (OT); and the Department of State in implementing the proper oversight of international telecommunications. We were asked to address four questions:

--What are the responsibilities of each agency in the development of international telecommunications plans and policies?

--What is each agency actually doing?

--How effective is each agency in carrying out its responsibilities and what coordination occurs among them?

--What changes, if any, are needed to the present U.S. structure for handling international telecommunications?

On Septemter 29, 1977, we issued a report entitled "Responsibilities, Actions, and Coordination of Federal Agencies in International Telecommunications Services" (CED-77-132) which addressed the first two questions and provided appropriate information. In this our second report, we address the remaining two questions.

SCOPE OF REVIEW

Our review focused on the coordination and actions taken by FCC, OTP, OT, and the Department of State in establishing and implementing a policy for facilities providing international telecommunications services. We conducted our review at the Washington headquarters of these agencies. We reviewed pertinent legislation, agency documents, and reports, and interviewed officials from each of the four agencies.

During our review the President began a reorganization of OTP and OT. Accordingly, we interviewed an official in the Executive Office of the President closely associated with the President's reorganization plan. 1/

We also met with officials of the U.S. carriers providing international telecommunications services, as well as with the Communications Satellite Corporation (COMSAT). The service carriers are

--American Telephone and Telegraph Company (AT&T);

--FTC Communications, Inc.;

--ITT World Communications, Inc.;

--RCA Global Communications, Inc.;

--TRT Telecommunications Corporation; and

--Western Union International, Inc.

1/On March 26, 1978, when this report was being finalized, the President merged the functions of OT and OTP by signing Executive Order 12046 creating the National Telecommunications and Information Administration in the Department of Commerce.

CHAPTER 2

ENTITIES INVOLVED IN INTERNATIONAL TELECOMMUNICATIONS--AN OVERVIEW

Providing international telecommunications services involves the interaction of U.S. Government agencies, U.S. common carriers, foreign telecommunications entities throughout the world, and COMSAT--the U.S. representative in a global satellite system, the International Telecommunications Satellite Organization (INTELSAT).

RESPONSIBILITIES DIVIDED AMONG FOUR U.S. GOVERNMENT AGENCIES

FCC, OTP, OT, and the Department of State are all involved in developing policies for international telecommunications facilities. Authority to authorize and activate facilities, while residing primarily with FCC, is shared to some extent with OTP and the Department of State.

The Communications Act of 1934 and the Communications Satellite Act of 1962 provide FCC with a broad range of regulatory responsibilities for international telecommunications. Principally, these responsibilities include the authority to approve facility authorizations, service offerings, and rates filed by U.S. common carriers.

Section 4(i) and section 403 of the Communications Act grant FCC the authority to initiate inquiries to develop policies for facilities providing international telecommunications. Titles II and III of the Communications Act and Title II of the Communications Satellite Act contain the statutory framework for implementing the policies through the authorization and activation of international common carrier facilities.

The Department of State is charged with conducting the foreign relations of the United States. In this context, the Department is concerned with the impact of policies for international telecommunications facilities on overall U.S. foreign policy. In addition, Executive Order 10530 requires Department of State approval before FCC can issue a license to land a cable on U.S. shores, pursuant to the Cable Landing License Act of 1921 (47 U.S.C. 34 to 39). Executive Order 11191 delegated to the Department the President's authority under the Communications Satellite Act to supervise the foreign policy and national interest aspects of COMSAT's participation in INTELSAT.

OTP serves as the President's principal advisor on telecommunications. In this capacity, Executive Order 11556 directs OTP to (1) develop and set forth plans, policies, and programs; (2) coordinate the telecommunications activities of the executive branch; and (3) assure that executive branch views are effectively presented to FCC on telecommunications policy matters. The policies developed by OTP are intended to (1) promote the public interest, (2) support national security; (3) contribute to the full development of the economy; (4) strengthen the position of the United States in neogtiations with foreign nations; and (5) promote effective use of telecommunications. OTP also participates in the oversight of COMSAT under authority contained in Executive Order 11191.

Executive Order 11556 directed the Secretary of Commerce, and thus OT, to support OTP by conducting technical research and analysis in international telecommunications.

President consolidates OTP and OT

On October 19, 1977, the President's Reorganization Plan No. 1 became effective. This plan will, among other things, eliminate OTP from the Executive Office of the President. According to an official in the Executive Office of the President, OTP's and OT's functions will be merged by executive order within the Department of Commerce. The new entity in the Department of Commerce--the National Telecommunications and Information Administration (NTIA)--will be headed by an Assistant Secretary for Communications and Information. This official also told us that a major impediment to finalizing the executive order had been a disagreement between the Department of State and the Department of Commerce over the coordinating function being transferred from OTP to the new Department of Commerce entity.

A Department of State official told us that the Department had always objected to the ambiguity of OTP's coordinating functions. These functions are being transferred to the NTIA. The Department does not accept a separation between international telecommunications policy and foreign policy. He stated that if the executive branch is to comment on international telecommunications policy, the Department of State should play the lead role, not the Department of Commerce. This official noted, however, that the Department of State does not have the necessary expertise to deal with telecommunications issues outside foreign policy and, consequently, would have to rely on the Department of Commerce for technical support.

A Department of Commerce official, acting as a consultant until NTIA is established, felt that the agency with

the technical expertise should do the background and policy formulation work. He also stated that he sees the NTIA as a coordinating agency for the other executive branch agencies. He noted that the Department of State has final authority on foreign policy and, therefore, the Secretary of State would have to approve any policy developed in this area.

An official in the Executive Office of the President told us that the new executive order which is being prepared to create NTIA would try to spell out the relationship between the Department of Commerce and the Department of State, and he expected the two agencies to develop a working relationship after the executive order was issued.

U.S. AND FOREIGN TELECOMMUNICATIONS ENTITIES

The organization of entities providing international telecommunications services varies from nation to nation. While the U.S. entities are private businesses subject to FCC regulation, most foreign entities are national, government-owned operations.

The U.S. international telecommunications carriers can be divided into two sectors--voice services and record services. All international voice services (message telephone service and voice-only private line service) from the continental United States to overseas points are provided by AT&T. The international record carriers (IRCs)--ITT World Communications, Inc.; RCA Global Communications, Inc.; Western Union International, Inc.; TRT Telecommunications Corporation; FTC Communications, Inc.; and U.S. Liberian Radio Corporation--offer services such as message telegraph, telex, leased channel services for data, alternate voice-data, facsimile transmission, and television.

COMSAT, as the sole U.S. entity authorized to participate in the ownership and operation of INTELSAT satellites, occupies a unique position in the U.S. international telecommunications industry. COMSAT does not serve the public directly like the voice or record service carriers. Rather, COMSAT is restricted to leasing satellite circuits to the voice and record service carriers, who, in turn, provide service over these circuits. Thus, COMSAT acts as a "carrier's carrier."

Foreign telecommunications entities typically are governmental or quasi-governmental operations. These entities

supply both voice and record services and are vested with the authority and responsibility to plan and negotiate international telecommunications arrangements which best satisfy a wide range of national interests. In addition to international telecommunications services, these entities may also provide domestic telecommunications services.

Despite their different organization structures, U.S. and foreign telecommunications entities jointly provide international telecommunications services. In addition, they share ownership in the facilities which provide these services. Joint ownership of satellites is provided through INTELSAT. Cable facilities the other principal means of international communications, are jointly owned by U.S. common carriers and foreign telecommunications entities. Ownership of cable facilities is established through multilateral agreements developed by the participating telecommunications entities.

In addition to joint ownership at the international level, facility ownership is often further divided among national telecommunications entities. In the United States, the voice and record service carriers share ownership in cable facilities, along with their foreign counterparts. COMSAT is limited to its participation in the ownership of INTELSAT satellites and does not participate in the ownership of cable facilities. Both COMSAT and the service carriers share in the ownership of U.S. earth stations, which transmit to and receive from INTELSAT satellites.

Foreign telecommunications entities, however, typically control both cable and satellite facilities. While some countries, like the U.S., have a separate agency to participate in INTELSAT, it is usually controlled by the national telecommunications entity.

Joint owners may prefer different facilities

While they share ownership in facilities, the entities providing international telecommunications can have varying incentives--which may lead to a preference for different configurations of international facilities.

U.S. carriers are regulated by rate of return regulation. Each carrier is permitted to recover its reasonable expenses plus an allowed rate of return on its invested capital. Consequently, each carrier can have an economic incentive

to invest in, rather than lease, facilities. 1/ U.S. service carriers invest in cable facilities; however, they lease satellite facilities from COMSAT. COMSAT invests in satellites. Both COMSAT and the service carriers invest in earth stations.

Operational concerns, customer needs, and other business interests can also influence carriers' preference for particular facilities. Industry officials have stated that service reliability needs dictate the use of both cable and satellite facilities, noting that by relying too much on one facility, they expose themselves to its frailties. Officials have also stated that their business requirements necessitate that they use both cable and satellite facilities. For example, in private line leasing the customer usually dictates what type of facility he wants. One U.S. carrier also has an interest in the manufacture of components of cable systems.

While the underlying reasons may differ, the U.S. carriers' foreign correspondents also may have varying economic and other incentives--which can lead to differing preferences between cable and satellite facilities. For example, because satellite facilities are jointly owned by all members of INTELSAT, while cable facilities are owned by a small number of U.S. carriers and foreign entities, control over cable facilities is greater. In addition, there are varying capabilities among nations in the manufacture of cable and satellite facilities, as well as different social and political objectives which may affect each country's preference for cable and satellite facilities. Finally, foreign entities, like their U.S. counterparts can have diverse operational viewpoints about the cost, reliability, and performance of cable and satellite facilities.

INTELSAT

INTELSAT is a 101-member international organization established to plan, own, and operate the space segment, comprised mainly of satellites, of an international communications system. INTELSAT was established by two international agreements. The first is an "agreement among governments" declaring the basic principles on which the consortium was

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1/ In the field of regulatory economics, a model known as the Averch-Johnson effect demonstrates that firms which are regulated by the rate of return method may invest excessively in capital facilities because, whatever they invest, they can expect to earn more income from their total operations.

to be built. The second, open to signature by governments or their designated telecommunications entities, contains the technical, financial, and operating obligations of the signatories. The U.S. Government is a party to the intergovernmental agreement, while COMSAT is the U.S. designated signatory of the operating agreement.

INTELSAT members are required to contribute to the investment and operating costs of INTELSAT in proportion to their use of the system's capacity. Each member's investment share is approximately equal to its percentage of the total use of the system. COMSAT's original ownership share in INTELSAT was 61 percent; however, as worldwide use of the system has increased and use by other nations has grown, COMSAT's share has declined to approximately 25 percent as of March 1978. COMSAT still is the largest single user and owner of the system.

Earth stations are generally owned and controlled by the designated operating entities in the countries in which they are located. In the United States, COMSAT is responsible for the operation of all but one of the seven U.S. earth stations; however, COMSAT shares ownership of the stations with the U.S. common carriers. COMSAT currently has a 50-percent ownership interest in the stations, while the other carriers share the remaining 50 percent in varying proportions.

Decisions regarding the design, development, construction, establishment, operation, and maintenance of the INTELSAT system are made by the Board of Governors. The investment share of the signatories determines their position on the Board of Governors. While the Board endeavors to reach decisions unanimously, occasionally a vote is necessary. In these cases, each Governor's voting power corresponds to his relative use of the system. Consequently, as COMSAT's share has declined, so has its voting power.

As noted by a COMSAT official, when the INTELSAT agreements were signed, because of COMSAT's large share of the system, the United States virtually controlled INTELSAT. As COMSAT's share has declined, its control of INTELSAT has diminished. COMSAT, with its 25-percent voting share, could be voted down on a question before the Board.

The official noted, however, that, by virtue of its large investment share and considerable influence, COMSAT could block an unpalatable INTELSAT action. There has not been any attempt to do this in the past, he stated.

CHAPTER 3

COORDINATION IN ESTABLISHING A POLICY FOR INTERNATIONAL TELECOMMUNICATIONS FACILITIES

Development of a policy for facilities providing international telecommunications services has had as its focal point FCC's Docket 18875 entitled an "Inquiry Into the Policy to be followed in Future Licensing for Overseas Communications." Begun in 1970, this policy development culminated in a decision by FCC in 1976 to proceed with a comprehensive plan for international facilities. During this 6-year period OTP, OT, and the Department of State supplied FCC with technical and policy input.

DEVELOPING A POLICY

Development of a facilities policy began formally with FCC's Notice of Inquiry dated June 1970. To formulate a policy, FCC stated that it would evaluate the following factors:

--There is a growing need for new and expanded oyerseas communications facilities and services.

--Cable and satellite technology may each be expected to develop new and improved applications with substantial public benefits in the form of improved and expanded service at lower costs. Any policy must be sufficiently flexible to accomodate unforeseen developments.

--The U.S. is committed by the Communications Satellite Act to a policy establishing and maintaining a global communications network and to implementing this commitment through participation in INTELSAT.

--The Communications Satellite Act states that the intent of the Congress is that COMSAT be so organized and operated as to maintain and strengthen competition in the provision of communications services to the public.

In addition, FCC requested from the carriers data relating to the projected supply of facilities and the projected demand for the use of their facilities. The carriers and any interested persons were also asked to comment on:

--The need for redundancy and diversity of facilities.

--The extent to which licensing of facilities other than satellites might be inconsistent with the objectives of the Communications Satellite Act of 1962.

--The desirability of encouraging competition between satellites and other media.

--The nature of the policy FCC should adopt to govern the licensing of overseas media and the specific manner in which this policy should be implemented.

FCC stated that, to the extent possible, the policy developed should govern the future licensing of facilities and enable the carriers and their foreign correspondents to plan their own actions.

Prior to the announcement of a policy, FCC conducted two meetings. In February 1971, FCC and a Department of State representative met with the European telecommunications entities. The Department encouraged this meeting because certain European entities were not pleased with FCC's role in international telecommunications. FCC also in June 1971 convened a public conference to discuss (1) comments filed in response to its June 1970 Notice of Inquiry, and (2) a pending application for a new transatlantic cable facility (TAT-6).

Following the public conference, FCC in June 1971 adopted a Statement of Policy and Guidelines. This statement established the following policy framework for transatlantic routes:

"--The public interest requires that we promote the continued development of both cable and satellite technologies and their most effective and timely applications to meet future requirements for international communications services;

"--The public interest also requires that we authorize the most modern and effective facilities available via both cable and satellite technology with due regard for efficiency, economy, diversity and redundancy;

"--The public interest and due regard for the concerns of the Administrations which operate the foreign end of cables require that care

should be taken to minimize the need for imposing artificial formulae to govern the distribution of traffic among available media; and

"--The public interest requires that the economies available from each advance in technology be reflected in charges for service to the public."

FCC stated that the policy allowed U.S. carriers and their foreign correspondents the latitude and flexibility required to plan transatlantic facilities. FCC stated that a policy regarding other areas of the world would be announced later. However, FCC's policy development has remained confined to the North Atlantic, and, as of March 1978, no policy for other areas of the world has been announced.

Policy development stops

Following its policy announcement in June 1971, FCC took no further official action for almost 4 years. A former FCC official stated that FCC originally began Docket 18875 in response to the TAT-6 proposal. Through the docket, FCC intended to develop broad guidelines to use in deciding the TAT-6 application. According to FCC officials, the lapse in policy development occurred because FCC authorized the construction of TAT-6 in July 1973, thus alleviating the need for additional transatlantic facilities. Consequently, they stated, there was no continuing problem which required policy development. In addition, FCC stated that staff was not available to keep the effort going.

A NEW POLICY--TO DEVELOP A PLAN

Revival of policy development for international facilities began with a Further Notice of Inquiry dated February 1975. This redefining of policy was prompted in part by a May 1974 document known as the Spoleto Document, prepared by the European telecommunications entities. Among the major points in this document was that the groups planning transatlantic cables and satellites should be aware of each other's activities so that a comprehensive, coordinated plan could evolve. The revival was also prompted by a growing interest in a new transatlantic cable facility--TAT-7.

In its Further Notice of Inquiry FCC noted that, because of the increasing complexity and growth in communications, it needed to establish and refine principles and guidelines for the planning and implementation of international facilities. FCC chose to focus its efforts initially on the North

Atlantic because of the high concentration of traffic and cable facilities investment in this area. It wished to obtain information and data as well as comments and recommendations concerning what factors should be studied in refining the principles and guidelines. FCC noted that its inquiry was not a rulemaking.

While FCC was redefining its policy, it held a series of meetings with the European telecommunications entities 1/ and U.S. carriers. Officials of OTP, OT, and the Department of State also attended these meetings. The principal purpose of the meetings was to reach agreement on the principles underlying the planning of facilities--traffic forecasting, service reliability, and costing methodologies.

Anticipating the issuance of an additional Statement of Policy, FCC issued in October 1975 a Third Notice of Inquiry. Through this notice, FCC wished to obtain written comments and recommendations to aid it in updating, refining and expanding--as necessary and appropriate--the 1971 Statement of Policy and Guidelines and in applying these revised policies to the planning of future facilities.

FCC went on to state:

> "As a part of this continuing effort, we intend to establish and define criteria and prescribe procedures for Commission consideration of applications for international communications facilities. Specifically, we shall attempt to identify the factors which the Commission will take into consideration (e.g., service reliability, traffic forecasts, cost), the various elements that comprise such factors, how such factors will be applied in comparing cables and satellites, the information that the Commission will require from applicants, the methodology employed to obtain such information, its utilization and the timing of the submission of such information to the Commission."

FCC requested information from the U.S. carriers and interested parties in several broad areas, including

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1/ The European telecommunications entities have organized themselves into a group known as the European Conference of Postal and Telecommunications Administrations (CEPT).

--overall policy,

--traffic forecasting methodology,

--service reliability considerations,

--comparative costs, and

--present and future use of facilities.

In November 1976, FCC adopted a refined policy statement--A Further Statement of Policy and Guidelines. In this statement, FCC reaffirmed its 1971 policy and added the following policy statements:

> "This Commission does not, as a matter of policy, favor the use of one technology over another nor any predetermined distribution of traffic or transmission capacity among alternative technologies or suppliers. Pursuant to our statutory mandate, our primary policy objective has been and remains the achievement and efficient utilization of the lowest cost combination of facilities which can satisfy valid traffic needs and service objectives irrespective of technology or supplier. Within this basic policy framework, both cable and satellite technologies--as well as any other--can and should be afforded the opportunity to evolve."
>
> * * * * *
>
> "The existing operational structure and attendant economic and other incentives of the international communications industry are not such as to lead automatically to the realization of the basic public interest policy objectives enunciated above. Accordingly, this Commission must and will continue to scrutinize thoroughly both facility installation and utilization proposals of U.S. carriers prior to authorizing these carriers' participation in such facility programs, in order to ensure that U.S. communications users are not unnecessarily burdened with excessive facility investments or inefficient utilization of authorized facilities."
>
> * * * * *
>
> " * * * we will not in the future consider the authorization of major facility investments and utilization proposals as isolated instances, but will instead evaluate them in the context of a

comprehensive long-range plan for the establishment and use of facilities to serve a particular geographic area during a specific future planning period."

FCC went to state that its Statement of Policy and Guidelines should afford the U.S. carriers and COMSAT sufficient guidance for developing plans, providing sufficient information, and advocating before FCC the public interest arguments in favor of adoption of a particular transatlantic plan.

For the first time FCC called for the development of a long-range plan for use in the authorization of facilities in the North Atlantic. According to FCC officials, this change in policy resulted primarily because the European entities were more interested in discussing the need for the new TAT-7 transatlantic cable than in developing planning principles. FCC informed the European entities that it could not, under U.S. law, give its views on TAT-7 without either a specific application for a TAT-7 facility or agreement on the planning principles needed to judge the facility.

FCC officials stated that during the consultative meetings with the European entities they were unable to reach a consensus on the principles which underlie the planning of facilities. Consequently, these officials told us, FCC decided to attempt to apply what principles and guidelines it had to the development of a plan and evaluate the TAT-7 facility within the context of this plan.

Planning principles--was any consensus reached?

Prior to the consultative meeting held October 1976 in Rome, FCC officials asked OTP officials to prepare a forecast for the North Atlantic. Traffic forecasting was one of the principles underlying the planning of facilities on which FCC and the European entities were trying to reach a consensus. In response, an OTP official and officials of OT took traffic forecasts previously developed by OT and, working with the U.S. carriers and their traffic forecasts in an ad hoc group, developed a range of forecasts for the period 1980 to 1990. The forecasts were developed on a path-by-path, country-by-country basis, and ranged from a forecast known as the "Rome Low" (slightly higher than the OT forecast) to a forecast known as the "Rome High" (slightly lower than AT&T's forecast). These forecasts were subsequently presented at the October 1976 meeting in Rome.

At this meeting FCC presented a paper on a forecasting methodology known as "Box-Jenkins," which was different from the forecast methodology utilized by the ad hoc group noted above. This difference in forecasting methods created confusion regarding whether or not there was a commonly agreed on forecast.

Industry officials felt that a consensus among all the parties was reached during the meeting regarding forecasting. They told us that the forecasts developed by the ad hoc group represented a reasonable range of numbers agreeable to all parties which could act as a basis for planning.

It is not clear if this consensus included FCC. At the meeting, FCC officials stated that the efforts of the ad hoc group and FCC represented two entirely separate projects. The efforts of the ad hoc group were based on so-called conventional forecasting methods, while the FCC paper represented an attempt to develop and implement a new forecasting methodology. However, subsequent to the meeting FCC stated that considerable progress was made at this meeting toward establishing a mutually acceptable traffic forecast for planning purposes.

AGENCY COORDINATION

Agency coordination took two different forms during the 1970-1976 period of policy development--technical input and policy input. In either form coordination was not extensive.

Technical input

In addition to the development of traffic forecasts by the ad hoc group, there were two other specific instances of coordination of technical input. To develop its new policy approach, FCC's Common Carrier Bureau organized three informal working groups which included representatives from FCC, OT, OTP, and the U.S. carriers. Each group was assigned a topic--traffic forecasting, service reliability, and economic considerations, which included methods of estimating facility costs--and charged with the task of discussing, analyzing, and presenting information to the Common Carrier Bureau on the topic.

The preliminary reports of the three working groups were submitted to the Common Carrier Bureau in May 1975, however, the working groups were never reconvened. An FCC official stated that FCC did not consciously abandon the working groups; that is, it did not send out correspondence

informing the participants of the groups' termination. Rather, FCC directed its attention to other matters and let the working groups lapse.

Participants in the working groups held diverse opinions about why the groups were never reconvened. Industry officials told us that the service carriers and COMSAT held irreconcilable views on the three areas. They attributed these conflicting views to the different roles the carriers and COMSAT play in international telecommunications. Two industry officials also told us that FCC had a specific outcome in mind for the working groups and, when the groups did not produce that outcome, they were disbanded.

An OTP official told us that the working groups were a beginning and that additional work was necessary. This official noted that the working groups should not have been expected to resolve the many conflicting views in the 5 to 6 weeks alloted them.

OT officials stated that the working groups had made some initial progress in developing approaches to the problems in the three areas; however, they told us that they were unclear from the beginning as to the end purpose of the working groups.

An FCC official told us that the reason for allowing the working groups to lapse was that their output was worthless, with the exception of some of the work developed by the Service Reliability Working Group.

In addition to OT participation in the working groups, FCC requested OT to assist FCC in summarizing carrier submissions filed in response to FCC's October 1975 Third Notice of Inquiry. According to OT officials, they were unaware of how FCC used their summary material.

Policy input

In response to FCC's June 1970 Notice of Inquiry, OTP, in May 1971, provided the administration's policy recommendations for international facilities. Principal recommendations were:

--New facilities should be approved only when necessary to meet valid growth requirements and only on demonstration that the facilities will result in the lowest additional cost.

--Excess capacity should only be authorized to the extent necessary to allow for failure and restoration of facilities.

--Public policy does not require a particular ratio between satellite and cable circuit capacity.

OTP also proposed that an international working group of government and industry be established to explore ways to permit more flexibility in investment and circuit activation decisions. OTP further recommended that, within reasonable limits set by FCC, the carriers should be allowed to choose the type and timing of new facilities. FCC did not formally respond to these recommendations.

After FCC began to reconsider its policy, OTP, in December 1975 sent FCC a document entitled "Recommendations on International Telecommunications Facilities Planning." OTP focused its attention primarily on FCC's past decision to allocate circuits between cable and satellite facilities. OTP's recommendations consisted of three main points:

--Eliminate cable/satellite market-allocation formulas.

--Improve the balance of financial incentives associated with cable/satellite investment decisions.

--Improve the application-handling process to operate a telecommunications facility by suspending highly-detailed, route-by-route consideration of the future use of the facilities.

An OTP official told us that these December 1975 recommendations were OTP's and were not the view of the executive branch. He told us that OTP did not coordinate an executive branch viewpoint to present to FCC because Docket 18875 primarily involved regulatory matters and not, for example, foreign policy matters which would require coordination with the Department of State.

In its November 1976 Statement of Policy and Guidelines, FCC did not explicitly analyze or discuss OTP's December 1975 recommendations. Rather, FCC only stated that:

"The Office of Telecommunications Policy filed recommendations in December 1975 regarding policies we should consider in this proceeding. Those views as well as the information and recommendations filed pursuant to the Third Notice of Inquiry have been considered in formulating the policies announced herein."

The two OTP documents were the only written executive branch input received by FCC during the development of the policy. An FCC official, however, was not sure how much weight was given to any of OTP's recommendations. He stated that, if the record contained no discussion of OTP's views, it could be assumed that OTP's views were not unique.

FCC officials did not consult with OTP or the Department of State as part of the policy development process. They offered the following reasons for not coordinating:

--FCC has specific responsibilities under the Communications Act of 1934 and the Communications Satellite Act of 1962 and should parties to the proceeding disagree with FCC's decision, FCC would have to answer in court. For this reason, FCC felt it should be solely responsible for the policies developed in Docket 18875.

--As FCC has moved toward a rulemaking in Docket 18875, it has become concerned about the limitations placed on ex parte contacts by the Administrative Procedure Act (5 U.S.C. 551 et seq.). Any consultations with OTP or the Department of State would have to be made part of the record. Lacking this, FCC felt it could not talk with OTP or the Department of State. In this regard, however, an FCC official stated that, although FCC had internally discussed the limitations of the Administrative Procedure Act (APA), no formal legal opinion had been prepared.

In response, an OTP official told us that they did not consider themselves a party to FCC's proceeding in Docket 18875. This official said that OTP had gone out of its way not to file comments with FCC in the form of a pleading. Rather, OTP's comments have been presented in the form of letters or policy statements.

Limitations of the Adminstrative Procedure Act

The Administrative Procedure Act does place limits on agency action; however, the extent of the limitations depends on the status of the docketed proceeding. If the docket is in a rulemaking phase, the following procedural requirements of the APA, appearing at 5 U.S.C. 553, would have to be followed:

"(b) General notice of proposed rule making shall be published in the Federal Register, unless persons subject thereto are named and either personally served or otherwise have

actual notice thereof in accordance with law. The notice shall include--

"(1) a statement of the time, place, and nature of public rule making proceedings;

"(2) reference to the legal authority under which the rule is proposed; and

"(3) either the terms or substance of the proposed rule or a description of the subjects and issues involved.

* * * * *

"(c) After notice required by this section, the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation. After consideration of the relevant matter presented, the agency shall incorporate in the rules adopted a concise general statement of their basis and purpose * * *.

"(d) The required publication or service of a substantive rule shall be made not less than 30 days before its effective date, except--

"(1) a substantive rule which grants or recognizes an exemption or relieves a restriction;

"(2) interpretative rules and statements of policy; or

"(3) as otherwise provided by the agency for good cause found and published with the rule.

"(e) Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule."

According to a recent Court of Appeals decision, Home Box Office Inc., et al. v. FCC, 567 F 2d 9 (D.C. CIR. 1977), once a Notice of Proposed Rulemaking has been issued there should be no informal contact (i.e. discussion without notifying interested parties and giving them an opportunity to comment) between an agency and an "interested private party." If such contacts nonetheless occur, the court said, any written document or a summary of an oral communication should

be placed in the public file. Even if an interested agency were considered to be bound by this rule, the agency would not be prohibited from formally communicating with FCC about a particular rulemaking in accordance with the procedural requirements of the APA. Furthermore, the Home Box Office decision recognizes that informal contacts are an important part of the administrative process.

If the docket is not in a rulemaking phase, but involves only a general statement of policy, it is exempt from the procedural requirements of the APA and FCC would not be prohibited from informal contact with interested agencies. (See 5 U.S.C. 553(b)(3)(A) and Home Box Office.)

CHAPTER 4

DEVELOPMENT OF THE PLAN--A CONTROVERSIAL ACTION

The development of a policy for international telecommunications facilities reached a turning point in November 1976 when FCC decided that its policy should be to evaluate future transatlantic facilities in the "context of a comprehensive long-range plan * * *." FCC's use of a plan as a policy approach and its decisional process in developing the plan has been the subject of controversy.

OTP and OT have called for FCC to return to the original objective established in its June 1971 Statement of Policy and Guidelines of developing policy and guidelines which the carriers would follow in developing plans. The U.S. service carriers have also disagreed with FCC's 1976 policy approach, viewing it as an infringement on their responsibilities. The European telecommunications entities, while generally supporting the concept of a comprehensive plan, have objected to FCC's view of the "international interest."

FCC's final decision on a plan has not ended this controversy. Citing contradictions in the information used by FCC to reach a decision, OTP, OT, and the U.S. service carriers have asked FCC to reconsider its decision.

DEVELOPING THE PLAN

Following FCC's November 1976 Statement of Policy and Guidelines, a consultative meeting was held in December 1976 between FCC, OTP, the Department of State, the U.S. carriers, and the European entities to discuss the concept of a long-range facilities plan. The European entities felt that some sort of negotiation would be necessary to develop a plan; however, FCC stressed that it was restricted from direct negotiation.

To resolve this impasse, the U.S. and European representatives agreed that a European transatlantic facilities plan would be developed in parallel with the U.S. plan. In addition, the representatives agreed to meet in Rome in June 1977 to exchange views on common features and differences in the two plans.

In late April 1977, the carriers submitted alternative plans and data as directed by the first phase of FCC's November 1976 Further Statement of Policy and Guidelines. FCC's four-phase development for the long-range plan is

shown in appendix I. This gave FCC approximately 5 weeks to develop a tentative plan before the scheduled June 1977 meeting. Multiple plans were submitted by the service carriers acting as a group and by COMSAT. According to FCC officials, they could not directly compare the two sets of plans because the plans were based on diffent traffic forecasts, different cost elements, different methods of estimating costs, and different assumptions regarding the availability of facilities. In addition, FCC officials noted two major deficiencies in the information provided by the carriers.

First, neither COMSAT nor the service carriers provided quantitative data regarding the effect of the various alternative plans on service reliability--one of the key criteria under consideration. Rather, according to FCC, their plans relied on generalized, unsupported conclusions.

Second, the data submitted by the service carriers in their joint plans indicated they were forecasting an exponential growth rate in traffic. The COMSAT plans used the Rome High forecast, which also forecasted exponential growth. FCC stated that a forecast based on an exponential growth rate was not supported by the data provided by the carriers. Rather, FCC believed the data supported a linear growth rate and used this assumption to develop a forecast of its own.

Because of these two major deficiencies FCC stated that it could not directly compare the plans as submitted. FCC staff, therefore, using the plans submitted by the carriers as a base, formulated a number of alternative plans. Five representative plans were selected and each was evaluated on the basis of the

--ability of the plan to satisfy traffic forecasts,

--ability of the plan to maintain adequate service reliability, and

--ability of the plan to minimize additional costs.

The five plans are briefly summarized in appendix II.

The five plans developed by FCC were based on three basic facility planning and implementation options. The first, advanced by the service carriers and embodied in Plan 1, introduced the TAT-7 cable in 1981. The second option, advanced by COMSAT and reflected in Plan 2 and in FCC-developed Plans 4 and 5, did not include TAT-7 during the planning period (through 1985). The third option, also developed by FCC and

embodied in Plan 3, introduced the TAT-7 cable in 1983. All of the plans did include, however, a new satellite facility--Intelsat V.

The five plans were submitted to the FCC Commissioners approximately 1 week before they were to officially vote on an accepted plan to take to the scheduled Rome meeting. The FCC staff recommended Plan 5. FCC officials told us that, before the staff's submission of the five plans, the FCC Commissioners and the Chief of the Common Carrier Bureau were unaware that more than one long-range plan was being developed by the staff. An FCC official told us that five plans were developed because FCC did not have sufficient time between the end of April, when the carriers submitted their plans, and the beginning of June to refine the submissions into one tentative plan.

In setting forth the five plans as those representing the position to be given at the Rome meeting in June 1977, FCC did not mention the lack of sufficient time; rather, FCC stated:

> "Based on a preliminary review of these several plans, we have concluded that our basis for ultimately adopting a comprehensive plan would be enhanced by soliciting comments on each of these plans, and the staff's analysis thereof, rather than a single tentative plan as contemplated by our November action. Presentation of a number of plans and associated staff analyses will enable parties to better assess the effects of alternative facilities configuration, circuit distributions, and traffic forecasts on service reliability and costs. This will also enable parties to raise and comment on other issues which they consider relevant in the context of each individual plan, thus providing us with a more comprehensive and well-focused record for decision.
>
> "Finally, we believe it would be useful for the Commission's representatives to the June 13-15, 1977 consultative meetings with representatives of the CEPT countries and Canada to present a range of staff plans and analyses for discussion. In view of the major role which these countries properly play in the planning, ownership, and use of transatlantic communications facilities, their views on alternative facility plans are clearly of great importance to not only the Commission

but indeed to all U.S. parties to this proceeding. By presenting a range of plans and associated staff analyses, we hope to enrich these consultative discussions."

Disagreement over the five-plan approach

U.S. officials and the U.S. carriers met in Rome in June 1977 with representatives of the European and Canadian telecommunications entities to discuss the five plans prepared by FCC. The Europeans, through CEPT, had prepared a single plan similar to FCC's Plan 1. FCC's submission of five plans instead of one long-range plan was not warmly received by U.S. officials, U.S. carriers, or the European entities.

According to OTP, they and the U.S. carriers had been given the five FCC plans less than a week before they were to leave for Rome, allowing practically no time to review the plans or develop a unified U.S. position. OTP, in an April 22, 1977, letter to FCC had noted the possibility of different submissions from the service carriers and COMSAT. OTP called for a concerted effort among U.S. Government agencies to develop a unified approach for the Rome meeting. FCC, however, never responded to this letter. FCC officials told us that they were concerned about the limitations of the Administrative Procedure Act. In addition, OTP and OT officials did not agree with FCC's development of a linear forecast under Plan 5. OTP noted this method deviated from the traffic forecasting principles developed in the October 1976 consultative meeting.

The U.S. carriers questioned FCC's methodology for forecasting traffic and determining service reliability.

The European representatives did not agree with FCC's traffic forecasts in Plan 5. In addition, they disagreed with FCC in its use of a new technology known as TASI-C in Plan 4. TASI-C can increase the amount of useable telephone circuits on a given cable. The Europeans pointed out that TASI-C was a new, unproven technology.

Despite this disagreement, some consensus was reached at this meeting. In particular, a refined timetable for the final adoption of a plan was agreed on. Following the June 1977 Rome meeting, FCC officially adopted the agreed-on timetable to be followed in developing the comprehensive plan. This timetable is shown in appendix III.

FCC SELECTS A PREFERRED PLAN

On July 20, 1977, FCC adopted a Memorandum Opinion, Order and Notice of Proposed Rulemaking, which issued its plans for public comment, and designated FCC's preferred plan. In addition to the five plans FCC had presented at the Rome meeting, FCC issued two additional plans. The first, designated Plan 1-M, represented Plan 1 modified to account for the circuit distribution pattern of the European plan. The second plan, designated Plan 4-M, represented FCC's Plan 4 modified to reduce the utilization of TASI-C.

To arrive at its preferred plan, FCC analyzed the seven plans in light of the three planning principles. Based on its analysis, FCC stated that any of the seven plans could be expected to provide adequate capacity to meet the traffic requirements and provide essentially the same level of service reliability. FCC stated that the least costly plans were those which did not contain a TAT-7 cable--Plans 2, 4, 4-M, and 5. Recognizing that there were uncertainties involved in traffic forecasting, however, FCC felt that the capability to handle a higher traffic level should be incorporated in the plan to be selected by FCC as long as the costs were not excessive. Consequently, FCC selected Plan 4-M.

In addition to the three principles used to analyze the plans, there were two other major factors FCC wished to consider in adopting a final plan.

--International comity and the impact of FCC's final plan on the European plan.

--The impact of the final plan on the research, design, and manufacturing of cables in the United States.

On September 19, 1977, FCC held an "on-the-record" meeting with representatives of CEPT and the Canadian telecommunications entity. The Canadian and CEPT representatives urged adoption of Plan 1-M and vigorously opposed FCC's preferred Plan 4-M.

In addition to opposing FCC's interpretation of the principles underlying facilities planning, the foreign entities stressed that the development of facilities linking nations transcended national interests and should be considered in the light of "international interests."

In particular, the Canadian representative stressed that:

" * * * not only should the public interests of a given country not be allowed to prevail unduly

over that of another country but in view of the close interdependence of the individual national networks over one another for international service purposes, the public interest of a given country can only be recognized as having been adequately satisfied if the legitimate interests of the nations with which traffic is to be exchanged, are accomodated in such a way as to lead to an agreed plan since in the absence of agreement on an end-to-end network, services cannot be provided effectively end-to-end and thus the public interest of the countries at both ends is bound to be negatively affected. In other words, since one cannot act unilaterally at the international level, a plan which is not agreed by all administrations at both ends is not a plan for purposes of international teleecommunications as it cannot form the basis of an end-to-end network."

A FINAL DECISION ON THE PLAN

An open FCC meeting held November 22, 1977, set the stage for FCC's final decision on the comprehensive plan. At this meeting, FCC accepted the "concept" that there would be no TAT-7 cable during the planning period; however, the plan approved by the Commission did include the Intelsat V satellite facility. Several FCC Commissioners questioned whether the Intelsat V facility was a "given" in light of the INTELSAT Board of Governors' approval of construction of the the Intelsat V satellite system in September 1976, prior to FCC's November 1976 Further Statement of Policy and Guidelines.

In response to the Commissioners' questions, the Chief of the Common Carrier Bureau stated that Intelsat V was not a "given." He stated that, while FCC did not control INTELSAT's planning and that a decision on Intelsat V was made by the INTELSAT Board of Governors prior to the development of FCC's plan, FCC staff proceeded in its analysis as if there was no commitment. The staff, thus, arrived at the conclusion that the Intelsat V system, in conjunction with existing facilities, could provide adequate capacity.

On December 21, 1977, FCC in Report, Order and Third Statement of Policy and Guidelines decided that it could not find any public interest justification for a facilities plan which included an additional cable facility (TAT-7). Consequently, FCC adopted its preferred plan, Plan 4-M, as the planning guideline against which FCC would judge facility

applications for the North Atlantic through 1985. The executive summary of FCC's decision is contained in appendix IV.

In its decision, FCC indicated a desire to continue the consultative process with foreign entities and to further discuss facilities planning principles, the possible need for additional facilities, and the INTELSAT planning process. In calling for a continuation of the consultative process, FCC stated:

> "We are particularly interested in further discussions concerning the INTELSAT planning process, which we believe is too isolated from the consultative process, from the cable planning process, and indeed from our own regulatory process. Despite our conclusions herein, we are not satisfied that the INTELSAT-V program per se necessarily constitutes an optimum satellite system configuration, or that a more coordinated and comprehensive approach to facility planning might not have produced some combination of different cable and satellite facilities which would even better serve the public interest than Plan 4-M."

FCC defines international comity

In its final decision, FCC also addressed at considerable length the question of international comity. FCC noted that it had long recognized the importance of international comity and had noted its importance in prior decisions relating to transatlantic facilities, however, FCC had not fully discussed the relationship of international comity to its statutory mandate.

FCC felt international comity was important because FCC decisions affect countries other than the United States. According to FCC, international comity requires that a nation provide a full opportunity for other nations to demonstrate potential effects which, in this case, alternate facility plans will have on those nations' ability to provide telecommunications services. International comity also requires that nations supply comprehensive information supporting their view of the effects. This exchange of information, coupled with a thorough consideration of the information in reaching a decision, constituted FCC's view of the role of international comity.

In defining the decisional weight given international comity, however, FCC stated that considerations of international comity may not be substituted for, nor given

precedence over, national public interest determinations. This is the case in the U.S., FCC stated, where the responsibility for public interest determinations:

> "* * * has been delegated primarily to the Federal Communications Commission by means of a statute which makes no specific provision for considerations of international comity but does specifically provide that the Commission must find that the public interest requires the construction of proposed facilities. In short, considerations of international comity cannot, in our view, serve as justification for an action which is significantly contrary to that which the responsible agency determines will best satisfy that nation's public interest."

FCC assesses cable industry impact

In its July 1977, Memorandum Opinion, Order and Notice of Proposed Rulemaking, FCC asked for comments on the impact of a final plan on the research, design, and manufacture of cables in the United States. Only AT&T and COMSAT, however, offered comments.

AT&T argued that delay of TAT-7, through adoption of Plan 4-M, would cause AT&T to end its cable research and development efforts and likely cause other U.S. entities to do the same. COMSAT, on the other hand, argued that AT&T would not cease it cable operations and concluded that, even if AT&T were to cease its operations, it would be irrelevant to the issues FCC was considering.

After reviewing the arguments, FCC concluded that it was unlikely that AT&T would end its cable activities and if AT&T did there was no evidence that other U.S. entities involved in the cable industry would do the same.

Decision not unanimous

Two FCC Commissioners disagreed with FCC's decision. One Commissioner stated that FCC's conclusions were reached:

> "Pursuant to the concept of a so called 'master plan,' whereby satellite and cable facilities are to be planned jointly to accomodate projected traffic for a specific period of time, and facilities are to be authorized, consistent

with Commission policies favoring diversity and competition, based upon the findings of the 'master plan.'"

* * * * *

"However, examination of the actual planning process reveals that we have no realistic 'master plan' before us * * *."

This Commissioner noted that FCC was in no position to make a determination that Plan 4-M or any other plan served the public interest while the planning process remained incomplete.

In addition, this Commissioner stated that FCC had reversed some of the policies and guidelines which had been established in 1971 and again reaffirmed in 1976. The facts and practical effects, he stated, demonstrate that:

"* * * we are not promoting both satellite and cable technologies; we are fostering rapidly decreasing diversity; we are showing an apparent preference for satellite over cable, a preference which will intensify with each succeeding planning period and INTELSAT generation; and, we have no 'comprehensive long-range plan for the establishment and use of facilities. . . during a specified future planning period.'"

This Commissioner attributed the lack of a master plan and the reversal of FCC's policies to the nature of the INTELSAT organization and FCC's lack of input into INTELSAT's planning.

The other Commissioner did not agree with FCC's conclusions that Plan 4-M best met the needs for traffic growth, service reliability, and diversity at the lowest cost. This Commissioner noted that FCC's decision would stifle competition between satellite and cable technologies and did not believe:

"* * *sufficient account has been given to the decisons of 26 sovereign correspondent nations nor to the Commission's commitment to give 'due regard' to the needs and strongly articulated views of their administrations."

DISAGREEMENT WITH FCC'S POLICY APPROACH AND PLAN

FCC's policy approach of developing a comprehensive plan and decision to select its preferred plan--4-M--has generated considerable disagreement among the three other Government agencies having responsibilities in international telecommunications. Each of these executive branch agencies have either sent letters or filed comments with FCC expressing their concerns.

OTP asks FCC to develop principles and forego plan

In January 1977, the Director of OTP sent a letter to the Chairman, FCC. He stated that, while he recognized the lead role which FCC had played in developing policy for facilities providing international telecommunications services, he believed that OTP's participation was necessary because the issues involved "policy considerations which go beyond those traditionally considered by a regulatory commission."

OTP reiterated its December 1975 recommendations on international telecommunications facilities planning. Regarding FCC's long-range plan approach, OTP noted that:

> "* * * the * * * proposal of the Commission may prove to be impractical, unduly complex and may have unfortunate repercussions in terms of providing service to the public as well as adversely affecting our relations with overseas partners."

OTP agreed with FCC's premises that (1) the facilities authorized should represent the least cost mix and (2) authorized facilities should be fully utilized. OTP noted, however, that there were other equally important considerations, in particular, the relations with other owners of the facilities--the Europeans. OTP noted that FCC's long-range plan approach had three serious problems:

--Antitrust problems raised by the U.S. carriers getting together to agree on facility use.

--Lack of control over INTELSAT planning.

--Calculation of satellite costs based on the investment costs of COMSAT rather than the circuit lease costs paid by the carriers.

OTP urged FCC to continue to develop the principles which underlie the plan, but not to force the plan on the Europeans.

Regarding OTP's request that FCC reconsider its master plan approach, in its July 1977 Memorandum Opinion, Order and Notice of Proposed Rulemaking, FCC stated that its goal in adopting the master plan approach was to:

> "* * * expedite Commission determination of the need of future facilities and to indicate our findings at the earliest possible time in order to minimize distruption [sic] of agreements already reached among the carriers and the overseas operating entities."

FCC further noted that its past experience with individual applications had shown the need for the same detailed information required for the master plan and did not prove satisfactory at addressing the issues or reaching timely decisions. While it did not exclude the possibility that its procedures could be improved, FCC maintained that the master plan approach represented a significant improvement over past policies. Consequently, FCC denied OTP's request that it abolish its master plan approach.

After FCC designated its preferred plan in July 1977, the Director of OTP in August 1977 sent a letter to the Chairman, FCC. OTP did not request FCC to abandon its planning approach; however, OTP did address two issues it believed were fundamental to the Commission's recent actions.

First, OTP stated that FCC's attempt to develop a comprehensive approach to cable and satellite planning could not be achieved under present institutional circumstances. OTP stressed that:

> "The plain fact is that neither through the government instruction process nor Section 214 regulation of the Act can the U.S. Government directly control the construction and installation of the INTELSAT space segment. Given this inability, it is not possible for the Commission, on its own, to develop a meaningful cable/satellite Master Plan."

Second, OTP addressed the question of international comity. OTP expressed the concern that FCC's July 1977 order designating a preferred plan was based on the premise that cost efficiency is "the single driving yardstick of domestic policy and that international comity is but a secondary concept." OTP, on the other hand, viewed international comity

as a vital and important part of decisions made under section 214 of the Communications Act.

OTP urged FCC on the grounds of international comity not to adopt Plan 4-M which OTP believed reflected no accommodation of the views of the European telecommunications entities. OTP felt FCC should not insist on the dominance of U.S. views by adopting Plan 4-M. This approach, OTP stated " * * * would appear to be inconsistent with the broad statutory scheme of the 1934 and 1962 Acts and certain to be self-defeating."

OT advocates return to principles

In September 1977, OT filed comments with FCC advocating a return to FCC's original objective--the development of policy and guidelines which COMSAT and the service carriers would follow in developing plans on a coordinated basis. OT stated that FCC's involvement in planning constituted " * * * excessive, rather than effective, regulation." OT stated that the development of a plan was the role of industry.

OT recognized the possible antitrust concerns that joint industry planning raised and criticized FCC's approach on several technical grounds, including:

--Failure to adopt the Rome consensus forecast.

--Incorrect comparison of cable and satellite system costs, using investment costs for satellites instead of lease costs.

Department of State addresses international comity

In an October 1977 letter to FCC, the Department of State noted that FCC had concluded that any of the plans could be expected to provide adequate capacity to meet traffic requirements and ensure a suitable level of service reliability. In light of this conclusion, the Department urged FCC to reexamine:

> "* * * the cost assumptions which led the Commission to prefer a plan to which European and Canadian officials have taken strong exception. We would be remiss were we not to observe that their argumentation was consistent with our own view that international comity and, indeed, an effective partnership, obliged each party to take into account the legitimate costs incurred

by all other parties in implementing particular international facilities arrangements."

The Department also noted that U.S. regulatory procedures with respect to facilities planning have given rise to considerable frustration for the foreign telecommunications entities. For this reason, the Department had supported the consultative process. The Department did not comment on FCC's policy approach or its interpretation of planning principles.

FCC ASKED TO RECONSIDER DECISION

Controversy over FCC's policy approach and plan has not ended with FCC's final selection of Plan 4-M. OT, OTP, and the U.S. service carriers all have filed petitions or sent letters requesting reconsideration of FCC's decision.

OT in its February 1978 comments stated that FCC's selection of Plan 4-M was based on unrealistic cost assumptions and should be voided. Echoing its September 1977 comments, OT also stated that the selection of Plan 4-M was

"The culmination of a process that, in our opinion, did not serve the public interest, failed to take sufficient notice of international comity and contradicted the Commission's earlier approach ascribing primary responsibility for facilities planning to industry."

OT again called for FCC to abandon its policy of controlling facilities planning through the issuance of a FCC-derived master plan. OT called for a process which involved the development of policy to guide industry in planning international facilities.

OTP took a different approach in its Feburary 1978 letter to the Chairman, FCC. While OTP continued to believe FCC had made an unwise decision, it stated that it did not intend to reargue policy considerations. Rather, OTP asked FCC to hold Docket 18875 open for further study and analysis because of problems it had identified with FCC's analysis and new information not available to FCC at the time of its decision.

OTP had engaged two independent contractors to evaluate FCC's analysis. These contractors found FCC's methodology and analysis flawed and inadequate in several areas. In addition, one contractor found a serious contradiction in INTELSAT documents which raised questions about whether

Intelsat V satellite facilities will be adequate to handle projected transatlantic traffic requirements. This was a key assumption in FCC's decision to select Plan 4-M.

U.S. service carriers in their filings also stressed this contradiction. In addition, the service carriers again challenged FCC's methodologies and criticized FCC for not fully considering the views and judgment of the European telecommunications entities.

The Department of State did not request FCC to reconsider its decision. Department officials told us that, in general, the Department could not take a position on reconsideration without evidence to support its position. On March 15, 1978, however, the Department of State sent a letter to FCC summarizing the views of eight European countries which had contacted the Department. The eight European countries unanimously expressed the belief that a TAT-7 cable would be justified in the 1981-1985 time period and that consultations among the countries and the FCC should be continued so that a solution could be reached which would be acceptable to all parties.

The Department stated that it considered the views of the eight European Governments to be indicative of the extent to which the Europeans regarded FCC's decision as involving important foreign policy concerns affecting relations between the United States and Europe. The Department urged FCC to resume consultations with the Europeans as soon as possible.

CHAPTER 5

IMPLEMENTING POLICY THROUGH AUTHORIZING AND ACTIVATING INTERNATIONAL TELECOMMUNICATIONS FACILITIES

Policies developed for international telecommunications facilities are implemented through the authorization and activation of these facilities. The Communications Act of 1934 provides FCC with the primary authority to authorize and activate facilities. FCC, however, must interact with the Department of State and OTP pursuant to the provisions of the Cable Landing License Act of 1921, the Communications Satellite Act of 1962, and Executive Orders 10530 and 11191.

This interaction has directly impacted FCC's decisional process for satellite facilities. Disagreement among the agencies over their responsibilities for the supervision of COMSAT as the U.S. representative in INTELSAT has led to the development of a process by which the three agencies can provide instructions to COMSAT. This process, however, has not resolved the initial area of disagreement.

FCC'S STATUTORY AUTHORIZATION AND ACTIVATION AUTHORITY

FCC is responsible under the Communications Act of 1934 and Communications Satellite Act of 1962 for the authorization and activation of common carrier facilities. This authority is contained in titles II and III of the Communications Act, and title II of the Communications Satellite Act.

Specifically, title II, section 214 of the Communications Act requires that, before the acquisition or construction of a new line of communications or the extension of an existing line, FCC must certify that the present and future public convenience and necessity require the construction or operation of the additional or extended line. Title III, section 319 of the Communications Act, requires that a carrier must secure a construction permit from FCC before the construction of any radio facility, such as an earth station or INTELSAT satellite facility.

In its administration of the Communications Satellite Act, FCC is required by title II, section 201(c)(9) and (10) to:

--Insure that no substantial additional facilities are added to the satellite system, including terminal equipment, unless required by the public interest, convenience, and necessity.

--Require additional facilities be added to the satellite system, including terminal equipment, where such additions would serve the public interest, convenience, and necessity. Such additions are subject to the procedural requirements of section 214 of the Communications Act of 1934.

There is no requirement in either act that FCC authorize international telecommunications facilities in any manner different from domestic telecommunications facilities.

When the Cable Landing License Act of 1921 was passed, cable facilities were wholly owned by either foreign telecommunications entities or U.S. carriers. Since the advent of the more expensive voice-grade cables in the mid-1950s, cable facilities have been jointly owned by the U.S. common carriers and foreign telecommunications entities. This act gave the President the authority to issue a license to land or operate a submarine cable connecting the United States with any foreign country. The President can withhold or revoke a license when he is satisfied that his action will

--assist in securing landing rights in another country,

--assist in maintaining the rights and interests of the United States in foreign countries, or

--promote the security of the United States.

Section 5(a) of Executive Order 10530 delegated to FCC the President's authority. The executive order does, however, require FCC to obtain the approval of the Secretary of State and advice from any executive department FCC deems necessary before it issues or revokes a license.

Issuing a cable license

An FCC official informed us that an application for a cable landing license is generally considered in conjunction with the application to construct the cable filed under section 214 of the Communications Act. FCC sends both applications to the Department of State with a covering letter asking for the approval of the cable landing license and for any recommendations concerning the conditions of the license. If the Department of State concurs, it sends FCC a letter stating its approval.

According to Department of State officials, they consider political or foreign policy implications during their review of cable landing license applications, but do not consider the economic factors involved in determining the

need for the cable. These officials could recall no instances in which a request for their approval of a cable landing license had been denied; however, they have on occasion expressed views on facilities authorization.

For example, in an April 22, 1968, letter about the TAT-5 cable, the Department stated that in its view, approval of the cable must not prejudice the earliest establishment of large-capacity satellites, particularly the Intelsat IV, in light of the national commitment to INTELSAT.

We asked FCC officials if they had ever requested advice from either OTP or OT in connection with the issuance of a cable landing license. After reviewing cable applications back to 1970, an FCC official informed us that he could find no record of FCC having solicited advice from either OTP or OT.

INTERACTION IN SATELLITE FACILITIES-- THE INSTRUCTIONAL PROCESS

Disagreement over the authorities assigned FCC, OTP, and the Department of State through the Communications Satellite Act and Executive Order 11191 gave birth to an "instructional process" for supervising COMSAT's actions in INTELSAT. The process, however, has not resolved the basic disagreement over the agencies' authorities.

Divided authorities caused disagreement

The Communications Satellite Act of 1962 set forth as the policy of the United States the establishment of a commercial communications satellite system in connection and in cooperation with other countries. To implement this policy the President and FCC were given responsibilities under title II of the act. Subsequently, the President delegated his authority to the Department of State and OTP through Executive Order 11191. FCC's authority for authorizing satellite facilities under section 201(c) of the act is discussed on page 35.

The Secretary of State was delegated the responsibility given the President under title II, section 201(a)(4) of the act, to exercise supervision over relationships of COMSAT with foreign governments or entities or with international bodies as may be appropriate to assure that such relationships shall be consistent with the national interests and foreign policy of the United States.

OTP was delegated the President's responsibility under section 201(a)(3) to coordinate the activities of

governmental agencies with responsibilities in the field of telecommunications so as to insure that there is full and effective compliance at all times with the policies set forth in the act.

A Department of State official told us that a disagreement took place between FCC and the Department concerning their respective authorities under sections 201(c) and 201(a) of the Satellite Act. This disagreement focused on instructions concerning satellite facilities. The Department felt that section 201(a) of the act gave the President or his delegate the authority to make the final determination on Government instructions to COMSAT.

This official noted that FCC took the position that it was to be the final authority on instructions concerning section 201(c) matters. FCC argued that its powers under section 201(c) were not intended by the Congress to be subject to any review whatever by another Government entity. While FCC agreed that "foreign relations" and "national policy" had to be taken into account in determining instructions to COMSAT, FCC said it must do this, on the advice of the Department of State and other relevant agencies, in the course of its determinations pursuant to section 201(c). FCC took the position that, if a section 201(c) issue came to the stage of an FCC public hearing, foreign policy interest would be subsidiary to the narrow statutory test of the "public interest"; the Department of State countered that the public interest might itself be subsidiary to the national interest of the United States as defined in section 201(a).

How it works

On July 26, 1966, the Department of State sent a letter to FCC and also to the Office of Telecommunications Management, OTP's predecessor, which noted the need for a clear definition of the manner in which the United States should function in dealing with COMSAT. The letter enclosed a statement entitled "Procedures for U.S. Government Instruction of the Communications Satellite Corporation in its Role as U.S. Representative to the Interim Communications Satellite Committee (ICSC)." The ICSC was the predecessor of the INTELSAT Board of Governors.

The statement said that supervision by the various agencies of the U.S. Government should be accomplished essentially by instructing COMSAT on its course of action in INTELSAT on those items where the United States has a statutory or general foreign policy interest.

The statement established procedures which

> "provide a method by which the various agencies of the U.S. Government can, in a coordinated manner, participate in giving appropriate instructions to COMSAT * * *."

The entire statement as approved by the agencies in August 1966 is provided in appendix V.

The procedures require COMSAT to give each of the agencies copies of the proposed INTELSAT agenda items and to advise the agencies of its position on those items. This is required so that COMSAT can be provided with instructions on the agenda items.

Department of State, FCC, and OTP officials told us that representatives of the three agencies meet with COMSAT after reviewing the agenda items to discuss the U.S. positions to be taken. The principal participants in the meetings include representatives from FCC's Common Carrier Bureau, OTP's international group, and the Department of State's Office of International Communications Policy.

If an instruction is needed, it is prepared by the Department of State and sent by letter to COMSAT. Department officials said that they also phone COMSAT to discuss the text of the instruction and to work out any problems. If necessary, the Department goes back to OTP and FCC to discuss any changes. After the INTELSAT Board of Governors meeting, another meeting among the agencies and COMSAT is held to discuss action taken by the Board. According to officials from FCC and the Department of State, no minutes are kept of the meetings they hold with COMSAT.

Who is in charge?

The question of who has ultimate authority in deciding on the U.S. position to be presented to COMSAT was not clarified by the August 1966 statement. A former FCC official told us that, when it was developed, the instructional process was intentionally left vague and the issue of who was in charge of instructing COMSAT was never resolved.

An FCC official told us that there still is no hierarchy for resolving disagreements. An OTP official shared this view, citing a lack of clear statutory authority concerning how this problem should be resolved. Department of State officials, however, reiterated the belief that the Department has ultimate authority for advising COMSAT, at

least on nonregulatory issues, such as supervising international relationships.

A COMSAT official felt that the Department of State was in charge by virtue of its authority under section 201(a)(4) of the Communications Satellite Act. He noted that COMSAT communicates with both FCC and the Department of State; however, if a question arises regarding how to act in an INTELSAT Board of Governors meeting, COMSAT looks to the Department of State for instructions since INTELSAT is an international body.

THE INSTRUCTIONAL PROCESS AT WORK--INTELSAT V

An example of the operation of the instructional process and some of the problems previously described can be found in the events surrounding decisions on COMSAT's participation in Intelsat V. Although the decision on the construction of the Intelsat V satellite system did not come before the INTELSAT Board of Governors until its September 1976 meeting, discussion of Intelsat V began with the previous satellite program, Intelsat IV-A, as did FCC's concern over INTELSAT planning.

In September 1974 FCC sent a letter to the Department of State concerning an item on the agenda of the INTELSAT Board of Governors' meeting to be held later that month involving the procurement of additional Intelsat IV-A satellites. FCC noted that this item was related to COMSAT's application for authority to participate in the IV-A program.

FCC recommended that an instruction be sent to COMSAT which indicated that, before the Board of Governors decided on the procurement of the additional IV-A satellites, COMSAT should seek to have the Board of Governors adopt a specific plan designed to make maximum use of the satellites. FCC also recommended that COMSAT seek to have the Board of Governors agree that the need for future Intelsat V satellites could only be determined in light of a specific plan for Intelsat IV-A utilization. On September 24, 1974, an instruction to this effect was sent to COMSAT.

While COMSAT received approval to participate in the procurement of the additional Intelsat IV-A satellites in November 1974, little action was taken by INTELSAT with regard to planning. Consequently, planning continued as a subject of subsequent instructions to COMSAT and as a source of FCC concern.

Reflecting this concern, FCC, beginning in December 1974, required COMSAT to submit monthly reports on the progress made to adopt and implement a plan for the utilization of satellite facilities. The report also was to provide a continuing update on the impact the utilization of existing facilities would have on the next system--Intelsat V. These monthly reports are still required.

INTELSAT continued to develop the Intelsat V system during the next 2 years and in February 1976, COMSAT filed an application under section 214 of the Communications Act of 1934 to participate in the construction of seven Intelsat V satellites. As a Board of Governors' decision on Intelsat V approached, instructions provided the by Department of State for the May 1976 Board meeting stated that COMSAT should:

> " * * * make the Board aware that the U.S. Government is seriously concerned with the apparent inability to implement an agreed upon plan for satellite utilization. The Board should also be made aware that the U.S. Government believes it essential that the Board promptly agree upon utilization plans and undertake measures to assure implementation of those plans, for the time periods prior to and after the introduction of the INTELSAT V satellites."

The instruction issued for the July 1976 Board of Governors meeting reiterated this concern and added that, while the U.S. Government recognized the difficulties associated with obtaining the necessary commitments to develop and implement a plan, the Board should be made aware that COMSAT may not be in a position to support final approval of the Intelsat V program prior to the adoption of a plan.

An instruction on Intelsat V is given--no objection

Action to approve the construction of the Intelsat V satellites was scheduled for the September 1976 Board of Governors' meeting. Although FCC had not approved COMSAT's application for a construction permit for Intelsat V, an instruction was sent by the Department of State on September 7, 1976, to COMSAT in which the U.S. Government interposed "no objection" to COMSAT supporting a Board of Governors' decision to procure the Intelsat V satellites. This instruction was approved by FCC.

In addition, the instruction called for COMSAT to read to the Board, and have appended to the meeting's record, a statement to the Board of Governors explaining that the U.S.

regulatory authorities had not yet made the findings required under section 214 to support the issuance of authority to COMSAT, in its capacity as a regulated U.S. common carrier, to invest in the Intelsat V facilities.

On September 8, 1977, COMSAT called the Department of State to object to the portion of the instruction which required appending the statement to the meeting's record. COMSAT believed distribution of the statement to all of the Parties and Signatories, which would occur if the statement were appended to the record, would only confuse the uninitiated about the U.S. commitment to INTELSAT and to the Intelsat V program in particular.

The Department of State consulted with FCC and OTP and an agreement was reached to delete the requirement that the statement be appended to the record, however, COMSAT was required to read the statement.

No objection instruction ignores FCC policy

In providing a "no objection" instruction to COMSAT for participating in the Intelsat V program, FCC officials acknowledged that it had not followed its own April 9, 1974, policy entitled "Statement of Policy Concerning Procedures Applicable to Comsat's Applying for Commission Authorization to Participate in Certain Intelsat Activities." In this statement, FCC pointed out that, in addition to and apart from the general governmental instructional process, COMSAT as a communications common carrier must secure authorization from FCC pursuant to the Communications Act and the Communications Satellite Act before it may participate in certain INTELSAT activities. FCC added:

> "Experience has demonstrated the necessity for supplementing existing procedures by establishing more definite guidelines for securing such authorizations."

Thus, FCC stated:

> " * * * it is now appropriate to set forth specific procedures to be followed in those instances where COMSAT is required by statute to obtain authorizations from the Commission to participate in the construction or operation of INTELSAT satellite facilities. These procedures are designed to provide opportunity for comment by interested parties, to encourage efficiency, and to promote the public interest."

The procedures were to be comparable to those applicable to the authorization of other types of communications facilities, recognizing that:

> " * * * additional factors * * * must be taken into account with respect to COMSAT in connection with these procedures in view of its role in INTELSAT and the role assigned to the Executive Branch under the provisions of Section 201(a) of the Satellite Act."

The procedures required COMSAT, in cases where FCC authorization was necessary, to submit applications as soon as possible after the proposed facilities or operational programs became defined to the point where specific design, operational configurations, services, and service dates were under review and there was a reasonable probability that a proposal would be presented to the Board of Governors for consideration. This would allow FCC time to consider COMSAT's application and comments from interested parties prior to the time the matter is presented to the Board of Governors for action.

On reaching a decision on COMSAT's application, FCC would notify the Department of State, and FCC and the Department would then decide how to release FCC's decision.

The impact of the issuance of a "no objection" was not limited to the disregard by FCC of its 1974 policy. The instruction raised a significant legal question regarding what future control FCC has over COMSAT's participation in Intelsat V.

Department of State and OTP officials, as well as a former responsible FCC official, felt that FCC had lost its options for ruling on COMSAT's pending section 214 application to participate in the Intelsat V program. In particular, an OTP official felt that instructions given through the instructional process bind FCC to a particular course of action in later deciding on COMSAT's section 214 application. As an example, this official stated that if FCC gave COMSAT an instruction to vote for a particular facility acquisition, FCC could not in a later section 214 hearing decide that COMSAT could not utilize the facility or include the facility in its rate base.

COMSAT officials shared OTP's viewpoint. They told us they believe that an instruction containing approval or offering no objection to COMSAT voting for a particular facility commits FCC to approve COMSAT's section 214 application.

FCC officials conceded that, with the "no objection" instruction, FCC gave up control over the Intelsat V program and the configuration of the Intelsat V satellites. FCC officials noted that FCC still controlled the future utilization of Intelsat V by COMSAT. They also stated that FCC still has section 214 authority and COMSAT's pending application for Intelsat V has not been prejudged.

FCC officials stated that FCC had not been able to take action on COMSAT's section 214 application prior to the Board of Governors meeting and thus issued a "no objection" instruction because FCC lacked sufficient information, particularly relating to INTELSAT's planning process, to make an intelligent decision. An FCC official told us, however, that FCC had not done an explicit study before it entered its "no objection" instruction, although some preliminary work had been done on COMSAT's pending application. As of March 1978, COMSAT's application was still pending before FCC.

INSTRUCTIONAL PROCESS RAISES OTHER PROBLEMS

In addition to raising a legal question regarding FCC's future options in deciding COMSAT's Intelsat V application, the Government's action and subsequent "no objection" instruction has highlighted three additional problems surrounding the instructional process.

The first problem is whether COMSAT can dominate the instructional process. An OTP official asserted that the Government lacks the ability to keep up with all of the information COMSAT deals with daily. A former FCC official concurred, stating that the volume and complexity of the information supplied and the time needed to digest the information made it difficult to deal with COMSAT.

FCC officials stated that they did not receive complete enough information from COMSAT and did not have enough time to evaluate the information they did receive. Consequently, they felt they lacked control over COMSAT.

A Department of State official viewed the situation somewhat differently. He felt that, when the U.S. Government gets involved in detailed items, there is the likelihood that COMSAT can dominate the discussion. When the process centers on policy or more broad matters, he felt the U.S. Government and COMSAT act as equals.

The second problem area involves the legal force of instructions to COMSAT. In this regard, a Department of State official noted that COMSAT tends to refer to instructions as "advice." This same official, however, felt the legal force

was not as important as the fact that COMSAT and the U.S. Government rely on each other to accomplish things in INTELSAT.

An OTP official took a different view. He noted that there is no specific statutory language which gives the President (and thus the Department of State) explicit authority to issue instructions to COMSAT. The existing instructional process is the product of an interagency agreement; it has no formal, explicit legal authority, he stated.

A COMSAT official stated that in areas of foreign policy or the authorization of facilities, COMSAT views the instructions as instructions and accepts them as binding. This official stated that on technical matters, such as the type of launch vehicle INTELSAT will use, COMSAT did not think the Government should issue instructions even though it has in the past. He viewed instructions in these areas as "advice."

The final problem area is FCC's possible violation of the Administrative Procedure Act because of its participation in the instructional process. This potential violation of the APA, however, hinges on a positive determination that an instruction on a facility binds FCC to subsequent approval of a section 214 application.

Typically, the instructional process is conducted informally and off-the-record in meetings among the three Government agencies and COMSAT. On the other hand, proceedings in which FCC decides section 214 facility applications are of a formal nature. The APA binds the Commission in these proceedings to observe the legal requirements for notice, opportunity to be heard, and other procedural rights.

If, as suggested by OTP and COMSAT, FCC legally decides on COMSAT's facility application when it issues an instruction to COMSAT on a facility question, a potential exists for a violation of the APA because an instruction is developed informally and off-the-record.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

International telecommunications are vitally important to the United States and other nations of the world. While the entities providing international telecommunications differ from country to country, they share a common bond through the joint provision of services and the joint ownership of the cable and satellite facilities which enable them to provide these services.

Within the United States, FCC, OTP, OT, and the Department of State have the decisionmaking responsibilities for developing and implementing policies for effective international telecommunications facilities. Greater coordination of their decisionmaking responsibilities and more effective development and implementation of facilities policy can be achieved by

--developing specific procedures for coordinating the decisionmaking processes of the four agencies,

--establishing and maintaining policy guidelines which will allow the international carriers to plan their own actions,

--clarifying the process of providing instructions to COMSAT,

--recognizing by statute that decisions on international facilities are distinct from decisions on domestic facilities, and

--repealing the Cable Landing License Act of 1921.

COORDINATING PROCESS

The Communications Act of 1934 and the Communications Satellite Act of 1962 contain the statutory base from which international telecommunications policy has evolved. Regulatory responsibilities contained in these acts have placed the primary statutory authority for developing policy within FCC. FCC, however, has not effectively coordinated its policymaking role with OTP, OT, or the Department of State. This lack of an interaction among the four agencies has resulted in a piecemeal policy approach.

FCC cites two basic reasons for not coordinating its efforts with the other three agencies. First, FCC has

specific responsibilities under the Communications Act and Communications Satelite Act. Second, the Administrative Procedure Act limits ex parte contacts.

We would agree that FCC has the primary responsibility for developing and implementing a policy for the authorization of international telecommunications facilities under the Communications Act. We believe, however, that the issues with which OT, OTP, and the Department of State are concerned--foreign relations, national security, economic development, and user needs--go beyond those factors traditionally considered by a regulatory commission. Consequently, FCC must ensure that the policy it develops fully reflects the concerns and views of these three agencies.

In addition, we would agree that the Administrative Procedure Act does place limits on agency action; however, the extent of the limitations depends on the status of the docketed proceeding. Docket 18875, FCC's proceeding to develop an international facilities policy, was not designated a rulemaking proceeding until the issuance of FCC's July 1977 Memorandum Opinion, Order and Notice of Proposed Rulemaking. Prior to that time, the docket involved only general statements of policy. Thus, FCC was exempt from the procedural requirements of the APA (see 5 U.S.C. 553(b)(3)(A)) and was not prohibited from informal contact with interested agencies. After Docket 18875 was designated as a rulemaking proceeding, there was no prohibition on participation by interested agencies if done pursuant to the procedural requirements of the APA and on-the-record.

The lack of a coordinated approach for policy development has not, however, been limited to FCC. OTP is required by Executive Order 11556 to coordinate the telecommunications activities of the executive branch and also formulate its policies and standards. OTP did not, however, develop and present to FCC an executive branch policy which effectively represented the views of the executive branch.

OTP stated that a coordinated executive branch viewpoint was not presented to FCC, primarily because Docket 18875 involved regulatory matters and did not, for example, include foreign policy matters which would require coordination with the Department of State. However, in its January 1977 and August 1977 letters to FCC, OTP discussed at length the impact of FCC's policy on the foreign telecommunications entities and urged FCC to consider the entities' views. We believe this apparent conflict of views by OTP actually reflects the continuing disagreement over the

extent of the coordination OTP should achieve with the Department of State. This lack of a coordinated effort between OTP and the Department of State has led to a fragmented approach in providing executive branch policy input.

In our opinion, a two-step approach is needed to provide for more effective coordination by FCC in obtaining the views of other agencies and by OTP and the Department of State in providing executive branch views.

First, FCC should develop specific procedures to receive, consider, and coordinate the views of other Federal agencies in the development and implementation of regulatory policy for international telecommunications. We believe these procedures could best be developed through a rulemaking, thus subjecting their development to a thorough scrutiny by the affected Federal agencies, the public, and the U.S. carriers. The resulting process would then become part of the Commission's rules.

Second, the executive branch, through OTP and the Department of State, must provide FCC with a unified policy position. In doing so, a more consistent executive view on international telecommunications policy will evolve.

RECOMMENDATION TO THE CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION

We recommend that the Chairman of the Federal Communications Commission initiate a rulemaking in which procedures will be established for FCC to actively coordinate with other Federal agencies on the future development and implementation of policy on international telecommunications facilities.

RECOMMENDATION TO THE DIRECTOR, OFFICE OF TELECOMMUNICATIONS POLICY, AND THE SECRETARY OF STATE

We recommend that the Director of the Office of Telecommunications Policy and the Secretary of State establish specific procedures for providing the Federal Communications Commission with unified executive branch views on international matters such as foreign relations, national security, and economic development.

POLICY FOR INTERNATIONAL FACILITIES

FCC's policy approach for international facilities has evolved through several stages. This evolution, however,

has occurred largely in response to pressure for decisions on facilities and has resulted in incomplete policy development.

Adopted in June 1971, FCC's initial policy for international telecommunications facilities provided a framework within which the U.S. carriers and their foreign correspondents could plan transatlantic facilities. After utilizing this policy to approve the TAT-6 facility in 1972, FCC ceased policy development, citing the lack of a continuing problem. FCC also stated that it would develop policy for other regions of the world; however, to date it has taken no action in this regard.

Three years later, in 1975, FCC began a reassessment of its policy in order to develop and refine the principles and guidelines underlying facilities planning. This action was prompted by the interest of the European telecommunications entities in facilities planning and in a new transatlantic cable facility--TAT-7.

FCC changed its policy approach in 1976 from developing a policy framework for international telecommunications facilities to a policy in which international facilities were reviewed in the context of a comprehensive plan for the North Atlantic. The plan specified how and when facilities will be implemented and used. This action occurred for two reasons. First, there was a lack of a consensus among FCC, the European telecommunications entities, and the U.S. carriers on the principles underlying facilities planning; and second, there was mounting pressure from the European entities for a decision on TAT-7.

There is a basic difference between a policy framework for international telecommunications facilities in which there exists latitude and flexibility for the U.S. carriers and their foreign correspondents to plan facilities, and a policy framework in which a plan is developed and implemented by FCC for the establishment and use of facilities to serve a particular geographic area during a specific planning period. A policy framework in which FCC only provides regulatory guidance maintains the responsibility for planning within those entities which construct and operate the international telecommunications network. A policy framework in which a comprehensive plan is developed by FCC shifts, however, planning responsibilities for facilities from the operational entities to the regulator. In this regard, FCC's comprehensive plan for the North Atlantic does not provide an effective framework for dealing with international facilities because

--the comprehensive plan developed by FCC does not recognize that final authority over international satellite facilities resides with INTELSAT,

--the comprehensive plan lacks agreement on planning principles and specific facilities between the United States and the foreign telecommunications entities which is needed to implement any plan, and

--the comprehensive plan considers and endorses a facility--Intelsat V--which was approved by the INTELSAT Board of Governors in September 1976, and which FCC lost influence over by its September 1976 "no objection" instruction to COMSAT.

Therefore, we believe the comprehensive plan, as FCC officials have acknowledged, was merely a reaction to the pressure for a decision on the TAT-7 cable facility.

In addition, we believe FCC contributed to the lack of a consensus among the telecommunications entities on planning principles, and thus FCC's November 1976 change in policy, by (1) abandoning the 1975 working groups and (2) failing to enunciate its position on the traffic forecasting methodology developed at the October 1976 Rome meeting.

Given these circumstances, we conclude that an effective policy framework for international facilities cannot be maintained within the context of an FCC-developed comprehensive plan.

RECOMMENDATION TO THE CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION

We recommend that the Chairman of the Federal Communications Commission

--evaluate future international facilities within a regulatory policy framework which establishes and maintains policy guidelines from which the carriers and foreign entities can plan future facilities and

--establish policy guidelines for international telecommunications facilities in other parts of the world.

PROVIDING INSTRUCTIONS TO COMSAT

If the United States is to continue to play a strong role in the development and utilization of international telecommunications, a clear framework must be developed from

which U.S. regulatory and executive branch views are provided to COMSAT as the U.S. representative to INTELSAT.

This framework should clarify

--the respective agencies' responsibilities for supervision of COMSAT,

--the binding nature of the U.S. Government's instructions to COMSAT, and

--the specific areas in which the Government will instruct COMSAT.

Disagreement over the authorities assigned FCC, OTP, and the Department of State through the Communications Satellite Act and Executive Order 11191 gave birth to the "instructional process" for supervising COMSAT's actions in INTELSAT. This process, however, did not:

--Resolve the disagreement between FCC and the Department of State over their respective authorities under sections 201(c) and 201(a) of the Satellite Act to instruct COMSAT on satellite facilities decisions. Rather, the instructional process only provided a procedural method for instructing COMSAT.

--Anticipate that a "no objection" instruction would be provided to COMSAT to participate in Intelsat V before FCC made a decision on COMSAT's license application under section 214 of the Communications Act of 1934.

--Clarify the INTELSAT matters on which the Government would provide instructions.

Each of these factors has, in part, contributed to the lack of an effective, coordinated international telecommunications policy approach.

First, by not agreeing on their statutory responsibilities, each agency has proceeded to develop its own policy posture and, only when confronted with the need for an instruction to COMSAT, has attempted to provide a unified approach.

Second, FCC by providing a "no objection" instruction to COMSAT to participate in the Intelsat V program prior to a Commission decision under section 214 of the Communications Act may have (1) lost its options for ruling on COMSAT's pending application, (2) denied all parties their procedural

rights under the APA if a positive determination is made that an instruction on a facility binds FCC to subsequent approval of the section 214 application, and (3) jeopardized the possible continued development of cable and satellite technologies and their most effective and timely applications, contrary to FCC's policy.

Third, there are basic differences among OTP, the Department of State, and COMSAT as to the statutory role of the U.S. Government in providing instructions to COMSAT. For example, OTP noted that there is no specific statutory language which gives the President (and thus the Department of State) explicit authority to issue instructions to COMSAT. COMSAT views an instruction as an instruction only in those areas in which foreign policy or authorization of facilities are involved. Instructions on technical matters are considered advice. The Department of State feels that the legal force of the instruction is not as important as the fact that COMSAT and the U.S. Government must rely on each other to accomplish things in INTELSAT.

RECOMMENDATIONS TO THE CONGRESS

To resolve these problems, we recommend that the Communications Satellite Act of 1962 be amended to reflect:

--That FCC has final authority to instruct COMSAT under section 201(c) for regulatory matters.

--That the President has final instructional authority under section 201(a) of the act for foreign policy matters.

--That the President has final instructional authority on a regulatory matter in which he determines that a clear overriding national interest concern exists. In such a case, the President would provide a separate instruction to COMSAT.

--That a final instruction to participate in the construction of a facility will not be issued to COMSAT before FCC has issued a license for that facility to COMSAT pursuant to section 214 of the Communications Act of 1934.

INTERNATIONAL FACILITIES DECISIONS

The Communications Act of 1934 and the Communications Satellite Act of 1962 do not require FCC to authorize international telecommunications facilities in any manner different from domestic telecommunications facilities. Rather,

section 214 of the Communications Act only requires FCC to certify that a facility is required by public convenience and necessity.

The courts have stated that the standard of public convenience and necessity should be construed so as to secure for the public the broad aims of the Communications Act. 1/ The purpose of the act as set out in section 1 is to make available "a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities."

International telcommunications is distinct from domestic telecommunications because foreign telecommunications entities share ownership in the facilities and provide half the service. Consequently, we believe the role and views of these entities are important in determining whether an international facilities policy or a particular facility achieves the goals of the Communications Act.

FCC in developing its international facilities policy has recognized as a matter of international comity, the role of the foreign telecommunications entities and has requested their views. However, recognizing that the statute (section 214) by which it reaches facility decisions makes no specific provision for considering international comity, FCC has determined that the views of foreign entities may not be substituted for or given precedence over FCC's determinations of the national public interest.

Without a statute which recognizes the unique characteristics of international telecommunications, FCC's interpretation of the role of international comity is certainly within its statutory framework. However, while FCC has invited the views of the foreign entities, the decisional weight given them precludes their views from significantly impacting U.S. policy development. Consequently, this decisional weight increases the risk of a U.S. international telecommunications facilities policy which cannot be implemented because it conflicts with the policy of the foreign telecommunications entities. This is the case in FCC's recent decision in Docket 18875.

We recognize that interaction between the U.S. and foreign entities should be a two-way street in that both the

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1/ Western Union Division v. United States, 87 F. Supp. 324 (D.C.C. 1949), affirmed 338 U.S. 864 (1949).

views and concerns of each party are known and shared. We also recognize that considering the separate views of the foreign entities and their impact on the U.S. ratepayer is a difficult task. However, the United States relies on the foreign telecommunications entities to provide service and ownership in facilities. Consequently, an effective international facilities policy requires a thorough consideration of their views in U.S. decisionmaking.

RECOMMENDATIONS TO THE CONGRESS

Therefore, we recommend that section 214 of the Communications Act of 1934 be amended to recognize, as a matter of policy, that decisions on international facilities are distinct from decisions on domestic facilities. This recognition should include expanding the test of public convenience and necessity for international facilities to

--recognize the joint ownership of international telecommunications facilities and

--recognize that FCC decisions can impact the decisions of foreign entities.

REPEALING THE CABLE LANDING LICENSE ACT OF 1921

The Congress enacted the Cable Landing License Act of 1921 at a time when international telecommunications facilities were owned entirely by one entity, either foreign or U.S. The act allowed the President to control the landing of cables by foreign entities in the United States and to deny or revoke a landing license to assist in securing landing rights in another country or to maintain U.S. security or interests in another country. Through Executive Order 10530, the President delegated his responsibility to FCC subject to Department of State concurrence. The Department's concurrence has become largely routine.

Since international telecommunications has evolved into a joint venture among nations with cable facilities jointly owned and telecommunications services jointly provided, we believe the act has lost its significance. Section 214 provides adequate control over the participation of U.S. carriers and foreign entities in cable facilities. FCC's development of a formal coordinating process, as recommended on page 48 will assure that Department of State foreign policy concerns will be included in FCC's decisionmaking on a cable facility. In addition, the amendment of section 214, as recommended on page 54, to recognize the unique status of

international telecommunications will enable FCC to fully consider Department of State foreign policy considerations.

Consequently, we conclude that the joint ownership of international facilities has removed the need for an individual act to control the landing of cable facilities, and that the provisions of section 214 of the Communications Act and the implementation of other recommendations contained in this report will provide adequate control over the participation of foreign entities in cable facilities.

RECOMMENDATION TO THE CONGRESS

We recommend that in conjunction with the implementation of other recommendations contained in this report, the Cable Landing License Act of 1921 be repealed.

CHAPTER 7

INTERNATIONAL TELECOMMUNICATIONS--

OUR OBSERVATIONS ON UNRESOLVED QUESTIONS

There are questions relating to international telecommunications which go beyond the coordination activities addressed in previous chapters of this report. Determining a telecommunications policy is a dynamic process requiring continued reassessment of regulatory and other goals against available information in such areas as foreign policy, user need, new technologies, and social and economic factors. We have provided below our observations on some of the questions facing international telecommunications decisionmakers:

--Is comprehensive cable and satellite planning possible?

--Will current efforts on rate of return regulation have an impact on the international carriers?

--What alternatives exist for reducing regulatory lag?

--Will the National Telecommunications and Information Administration be an effective replacement for OTP and OT?

IS COMPREHENSIVE CABLE AND SATELLITE PLANNING POSSIBLE?

Cable facility ownership is established through multilateral agreements developed by the participating telecommunications entities--the U.S. service carriers and foreign telecommunications entities. Joint ownership of satellites is provided through INTELSAT. Earth stations are generally owned and controlled by the designated operating entities of the countries in which they are located. In the United States, COMSAT and the service carriers share ownership of the earth stations.

Like ownership, planning for cable and satellite facilities is also divided. The U.S. service carriers and foreign telecommunications entities plan the development of the cable facilities in which they participate. INTELSAT plans the development of satellite facilities; however, the primary data on which this planning is based comes from the final users of the system, the U.S. service carriers and their foreign counterparts. Earth station planning is done by the entities owning the facility.

The entities involved in international telecommunications may take diverse actions which can lead to excess overall capacity. Within INTELSAT, there are several potential reasons for overcapacity. INTELSAT designs its primary path satellites to have a certain amount of overcapacity for technical reasons. The primary path satellites act as the master switchboards, so that all nations participating in INTELSAT may communicate with each other. However, in order to spread development costs as far as possible, INTELSAT builds all of its other satellites, which are used to handle major traffic streams or act as spares, to the same size as the primary path satellites. As a result, there can be excess capacity in satellites other than the primary path satellite.

In addition, the useful life of satellites is generally 7 years. Because of the dynamics of technology, each satellite generation has vastly increased circuit capacity over prior generations. Since launch costs constitute a significant portion of the costs of a satellite system, the incremental cost of the additional capacity made available by technological change is very low.

Complicating this potential for overcapacity within the satellite system is the fact that INTELSAT does not control the provision of earth stations. Although the satellite system may be planned adequately, if INTELSAT members decide not to build the earth stations necessary to communicate with the satellites, overcapacity could develop.

Potential reasons for overcapacity are not confined to the technical or operational characteristics of INTELSAT. The entities involved in providing international telecommunications have varying incentives which may lead them to prefer one facility over another or to prefer a specific mix of facilities. The net effect of these varying incentives may be an overall excess capacity in international telecommunications facilities.

The division of cable and satellite facilities ownership and planning results in no focal point in a single nation or organization for comprehensive facilities planning. This situation, in turn, makes a single solution to comprehensive cable and satellite planning difficult. For example, in Docket 18875 COMSAT favored a plan which did not include the introduction of a new cable facility during the 1979-1985 planning period. The service carriers, however, preferred the introduction of a new cable facility in 1981.

A focal point for the U.S. carriers, acting as a planning catalyst, could strengthen the planning decisions made

by the carriers and FCC. Establishing this focal point and a clear U.S. international policy which reflects to the extent possible the views and plans of other nations could serve as a benchmark against which other international telecommunications entities could plan for future facilities.

WILL CURRENT EFFORTS ON RATE OF RETURN REGULATION HAVE AN IMPACT ON THE INTERNATIONAL CARRIERS?

The Communications Act of 1934 requires FCC to regulate the rates and practices of telephone, telegraph, and cable companies and to approve or disapprove proposed mergers and acquisition of properties and extensions and reductions in service. Title IV, section 401 of the Communications Satellite Act of 1962 provides common carrier status to COMSAT, thus subjecting it to the service and rate regulatory requirements of the Communications Act.

In this regard, FCC has not conducted a general rate inquiry for international record carriers since 1958. In that proceeding, known as the "Bellwether Case," FCC identified RCA as the low cost (bellwether) carrier and established 7.5 to 8.5 percent as the allowable rate of return on investment for all international record carriers based on RCA's costs.

Although it established an allowable rate of return, currently FCC does not regularly determine (1) each carrier's rate of return and (2) the relative return on net investment of the various international services. In this connection, one industry official maintained that the carriers, thus, were not subject to rate base regulation by FCC.

Although FCC has not conducted a general rate investigation since 1958, FCC has adjusted some rates, usually as a by-product of authorizing the construction of a new facility. For example, in authorizing the construction of the TAT-5 transatlantic cable facility, FCC required a reduction of 25 percent in rates for message telephone service.

In addition, since 1965 FCC has been investigating COMSAT's rate structure for INTELSAT services. FCC reached a decision in this case in November 1975 and after judicial review a final settlement was reached in Feburary 1978.

In April 1976 FCC initiated an Audit and Study of Operations of Internatonal Carriers (Docket 20778). FCC officials told us the docket has essentially two parts--a cost study and an audit of the carriers' operations. The cost study is expected to show for each carrier the cost of service and rate of return by service for various geographical

areas. The audit portion will identify the (1) nature of the carriers' operations, (2) carriers' accounting procedures, (3) compliance of the carriers with FCC's rules, and (4) compliance of the carriers with their internal procedures. An FCC official stated that he was not certain when the Commission would issue a final public report.

Effective rate of return regulation conducted on a continuing basis could strengthen the implementation of an international facilities policy through control of the inclusion of investment in the carriers' rate base.

WHAT ALTERNATIVES EXIST FOR REDUCING REGULATORY LAG?

Reducing regulatory lag is an important goal in the development of an effective regulatory process. Delay in reaching decisions on the authorization and activation of facilities can (1) affect the U.S. carriers' ability to serve customers, (2) impair the carriers' credibility in dealing with foreign counterparts by restricting their ability to reach binding agreements, and (3) add to the carriers' costs.

Regulatory lag can also affect foreign telecommunications entities. For example, having reached an agreement with the U.S. carriers on a particular facility, the foreign entities must wait for FCC approval before the project can begin. These delays may deprive them of returns on invested capital.

Methods to reduce regulatory lag include, for example, (1) application of time limits, (2) automatic grants of authority, and (3) limited deregulation. The imposition of time limits, however, can be difficult because the matters under consideration by FCC can vary widely in complexity. Furthermore, section 405 of the Communications Act currently requires FCC action within 90 days on certain petitions for rehearing; however, according to industry officials this timeframe is rarely observed, thus reducing its effectiveness.

Automatic grants of authority may be possible on applications where there is no opposition from other carriers or interested parties. Limited deregulation may be achieved on applications where there is characteristically no opposition or where FCC determines the carriers can act without regulation.

When considering methods for achieving a more timely regulatory process, it appears that the following actions may provide additional insight:

--Determining the relative impact of regulatory lag on the carriers and users for each area of FCC action.

--Determining how activities within each area are prioritized.

--Examining the method applied in each area for reaching a decision.

--Measuring the impact of regulatory lag against the decisionmaking and prioritization methods.

WILL THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION BE AN EFFECTIVE REPLACEMENT FOR OTP AND OT?

The functions of OTP and OT will be merged by executive order to create a new entity within the Department of Commerce--the National Telecommunications and Information Administration (NTIA). Areas of concern exist, which if not recognized, could hamper NTIA's effectiveness. Among these areas are the following:

--Disagreement between the Department of Commerce and the Department of State over coordinating functions and their respective roles in developing executive branch international telecommunications policy had hindered the implementation of the reorganization plan. The occurence of this, prior to NTIA's establishment may reflect on NTIA's future ability to coordinate.

--Officials in the Executive Office of the President, OTP, and industry all stated that OTP had not been as effective as it could have been in coordinating and carrying out other functions because it lacked active presidential support. It appears NTIA will be assigned essentially the same functions as OTP, thus, absent Presidential support it could suffer the same lack of effectiveness.

APPENDIX I

FOUR PHASES OF THE DEVELOPMENT OF FCC'S LONG-RANGE PLAN

Phase 1 - Development and submission of alternative plans for the establishment and use of future transatlantic facilities by the U.S. carriers and COMSAT by April 30, 1977.

Phase 2 - FCC adoption of a tentative long-range plan for the establishment and utilization of future transatlantic facilities. This will require approximately 2 months, assuming the information submitted is comprehensive. The tentative plan is subjected to comments, pleadings, and the appropriate coordination before the adoption of a final plan.

Phase 3 - FCC adopts a final plan and entertains applications from the U.S. carriers and COMSAT necessary to implement the plan. About 3 to 4 months are required between adoption of the tentative plan and adoption of the final plan to complete the comment and consultation process.

Phase 4 - Applications are submitted to FCC. Approximately 2 months will be required for processing, after which FCC issues authorizations for the establishment and utilization of future transatlantic facilities.

APPENDIX II

SUMMARY OF FIVE PLANS DEVELOPED BY FCC IN DOCKET 18875

Plan 1 - basically represented a plan proposed by AT&T and the IRCs in which a TAT-7 cable would be introduced in 1981.

Plan 2 - basically represented a plan proposed by COMSAT in which a TAT-7 cable was not introduced during the 1979 to 1985 planning period.

Plan 3 - generated by FCC staff, was similar to Plan 1, but it delayed the introduction of the TAT-7 cable until 1983.

Plan 4 - generated by FCC staff, used AT&T's and the IRCs' traffic forecast, but did not introduce the TAT-7 cable during the 1979 to 1985 planning period.

Plan 5 - generated by FCC staff, was the only plan to utilize a linear forecast and did not introduce a TAT-7 cable during the 1979 to 1985 planning period.

FINAL TIMETABLE FOR DEVELOPING COMPREHENSIVE PLAN AGREED ON AT JUNE 1977 CONSULTATIVE MEETING

1. No later than July 31, 1977, we shall issue for public comment the five alternative plans including any proposed alternatives or modifications and will designate which one of those is the Commission's tentative preferred plan.

2. Comments on the alternative plans will be due no later than August 31, 1977.

3. Following receipt of the comments, the Commission will analyze the plans in light of the comments received and begin to prepare its final plan.

4. With the agreement of CEPT and Canadian officials, the Commission will also schedule a 1-day meeting in Washington, D.C., for the purpose of further discussions with representatives from those nations having decisional responsibilities within their respective countries concerning international communications facilities. We anticipate that such a meeting will occur on September 19, 1977.

5. Following such a meeting, we would allow 15 days for the filing of a final round of comments from interested persons--due October 5, 1977.

6. The Commission would then consider the material before it and issue its final plan on November 1, 1977.

APPENDIX IV

EXECUTIVE SUMMARY PROVIDED BY FCC IN REPORT, ORDER AND THIRD STATEMENT OF POLICY AND GUIDELINES--DOCKET 18875

1. On June 16, 1970, we insititued Docket No. 18875 as an inquiry into the "Policy to be followed in Future Licensing of Facilities for Overseas Communications." An initial "Statement of Policy and Guidelines was issued on June 25, 1971. On February 25, 1975, in response to requests by European telecommunications for further consultation and policy development concerning North Atlantic facilities planning, the proceeding was reopened. Following a series of comments and consultative meetings, we issued a "Further Statement of Policy and Guidelines" on November 29, 1976. In addition to setting forth the basic public interest objectives and evaluation criteria to be considered in authorizing U.S. carriers' future facility investment and utilization programs, the November 1976 Policy Statement established procedures for the development of a comprehensive, long-range facility implementation and utilization plan against which specific applications for facility authorization and use could be evaluated. On August 1, 1977, we designated the current phase of this proceeding as rulemaking, and adopted the procedural steps appropriate to such a proceeding.

2. As indicated in the November 1976 Policy Statement, the Commission's primary objective with regard to overseas facilities authorizations is to ensure the establishment and efficient utilization of the lowest cost combination of facilities which can satisfy valid traffic needs and service objectives, irrespective of technology or supplier. The principal U.S. parties to this proceeding, i.e. the U.S. International Service Carriers (USISC) 1/ and the Communications Satellite

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1/ Those carriers are American Telephone and Telegraph Company (AT&T), The French Telegraph Cable Company (FTCC), ITT World Communications Inc. (ITT Worldcom), RCA Global Communications, Inc. (RCA Globcom) TRT Telecommunications Corporation (TRT), and Western Union International, Inc. (WUI).

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Corporation (Comsat), were each invited to submit proposed facility implementation and utilization plans consistent with this objective, for the period 1979-1985. On April 29, 1977, the USISC submitted several alternative plans and expressed a strong preference for one which includes both additional satellite facilities and an additional North Atlantic cable facility to be constructed and in operation by 1981. On April 26, 1977, Comsat also submitted several alternative plans and expressed support for one which included no additional cable facility or other augmentation of existing cable capacity during the 1979-1985 planning period. In addition to the plans submitted, the Commission staff formulated several other plans for the purpose of evaluating the feasibility and effect of certain intermediate options not included in the parties filings -- e.g. expanded use of existing cable facilities with circuit multiplication equipment (TASI-C . The staff also reformated the principal plans submitted by USISC and Comsat to facilitate a consistent and comprehensive comparative evaluation of their respective capacity, reliability, and cost implications. Finally, we have had the opportunity to review a plan developed concurrently by the European telecommunications entities in consultation with the USISC.

3. Our examination of these alternative plans, which cover various combinations of both cable and satellite facilities, leads us to conclude that any plan which includes the construction of an additional North Atlantic cable facility during the 1977-1985 period would apparently impose a substantial and unnecessary cost burden on U.S. telecommunications entities and users, since such a facility is not required to satisfy capacity needs or to maintain adequate service reliability. This conclusion is based on the following specific findings:

a) the addition of a new North Altantic cable would not provide enough additional capacity to handle the increased U.S./Europe traffic expected during the 1979-1985 period;

b) addition of the INTELSAT-V satellites now under construction, together with existing cable and satellite facilities, would provide sufficient capacity to handle these traffic increases, with or without an additional cable facility;

c) adequate service reliability can be maintained throughout the 1979-1985 period using only existing cable and satellite facilities supplemented with the INTELSAT-V satellite system, without the installation of an additional cable facility; and,

d) any combination of facilities using both the INTELSAT-V facility and an additional SG cable facility would result in substantially greater

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costs than would be occasioned if only the INTELSAT-V satellite system and additional circuit multiplication equipment were implemented and used with existing cables to carry the increased U.S.-CEPT traffic. The U.S. share of these added cost burdens ranges from $20,000,000 to $37,000,000 in present value. The added revenue requirement which would be levied on the U.S. consumer by the installation of an unnecessary SG cable facility would be $192,000,000 for the period 1979-1985, or $765,000,000 over the full 24 year life of such a facility.

4. Our approach and analytic methods used in evaluating these various plans have been described and discussed in prior phases of this proceeding, including in particular the U.S.-CEPT 2/ consultative meetings. The principal steps in this analysis, in sequential order, are

Step 1 - Determine the most probable forecast of U.S.-CEPT telecommunications traffic and corresponding circuit requirements for the period 1979-1985.

Step 2 - Determine whether either the new cable facility or the new satellite facilities which could be available to carry U.S.-CEPT traffic within this period (i.e. TAT-7 SG cable or INTELSAT-V satellites) could, in conjunction with existing facilities, satisfy all projected U.S.-CEPT traffic during this period, or whether some combination of these facilities is required to ensure adequate capacity.

Step 3 - Determine what combinations of additional and existing satellite and cable facilities (including circuit multiplication techniques) are capable of both satisfying forecast circuit requirements and maintaining an adequate level of service reliability.

Step 4 - Determine the future investment and operating costs attributable to the U.S. for each combination of satellite and cable facilities capable of satisfying forecast traffic requirements and maintaining an adequate level of service reliability, for the period mid-1977-1985.

5. Step 1: Traffic Forecast. The USISC and CEPT estimates for U.S.-CEPT circuit requirements range from about 7,200 in 1979 to 18,950 in 1985. Our staff estimates, based on a linear extrapolation of

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2/ Conference Europeene des Administrations des Postes et des Telecommunications, an association of the Postal and Telecommunications entities of 26 European nations.

APPENDIX IV

recent growth trends, indicate that U.S.-CEPT traffic will require 5,415 circuits in 1979, rising to 8,998 circuits in 1985. While we therefore question the very high growth rate projected by CEPT and USISC, we have used the latter forecasts as the probable upper limit in evaluating the potential need for additional circuit capacity, and in the service reliability and cost analyses.

6. Step 2: Circuit Capacity. The capacity of current generation cable technology (e.g. AT&T's SG system or the British Post Office's NG-2) ranges from 4,000 to 5,500 circuits. This is not adequate to handle the traffic increases forecast for U.S.-Europe in the 1979-1985 period, leaving aside both the additional traffic among other Atlantic locations which can be expected during this period and the need to replace existing satellites which reach the end of their design life. Thus, all parties have included use of additional satellite facilities in each of their plans, in recognition that these facilities are required irrespective of any additional cable facilities that might be constructed.

7. On the other hand, the INTELSAT-V satellite system together with existing facilities, is capable of providing at least 15,473 circuits for U.S.-CEPT service in 1979, rising to 23,063 in 1985. It is also capable of handling the additional traffic which can be expected among other Atlantic locations during this period. Thus, in terms of basic transmission capacity, the INTELSAT-V satellite system, together with existing facilities can provide sufficient capacity to satisfy even the highest traffic forecasts.

8. In view of these findings, each of the alternative facility combinations considered in our further analysis of service reliability and costs includes some utilization of the INTELSAT-V satellite system, whereas some combinations considered do not contemplate the use of an additional cable facility. In all instances, however, the full allocated cost of the INTELSAT-V system corresponding to the degree of utilization contemplated is attributed to that particular plan -- i.e. no INTELSAT-V costs are considered as "sunk" in this analysis.

9. Step 3: Service Reliability. We have analyzed some 15 different cable and satellite facility implementation and utilization plans, each capable of providing the requisite total circuit capacity, for the purpose of determining their comparative impact on service reliability. Since both cable and satellite facilities generally provide high quality transmission and achieve very high levels of service availability (e.g. better than 99 percent of the time), the comparative analysis of alternative combinations focuses on the potential impact of a major facility outage occurring during the busy period for U.S.-CEPT traffic. While the probability of such an outage is relatively low, it's potential impact on service availability is of such potential magnitude that adequate protective measures are deemed essential.

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10. To evaluate this potential impact, and the adequacy of alternative protective measures, we have first undertaken to determine the blocking probability, i.e. percentage of attempted calls which would be unsuccessful, that would result in the event of a major facility outage during the busy period for each combination of facility and utilization plans and each U.S.- CEPT traffic stream. Having computed these specific blocking probabilities, the next step was to determine which, if any, of the combinations exceeded a blocking probability "threshold" of 10 percent. Beyond this threshold major corrective actions (e.g. imposing controls on subscriber access to international circuits, restoring lost circuits via redundant capacity in other facilities, etc.) would have to be undertaken to avoid progressive deterioration of service availability due to network and switching congestion. 3/ We determined through this analysis that the blocking probability threshold would be exceeded, by a substantial margin, for each of the facility combinations considered. We therefore concluded that none of the combinations was capable of withstanding the outage of a major facility during the busy hour, and thus, that each combination required the prompt institution of major corrective actions to maintain reliable service. Moreover, we determined that such corrective actions would be equally sufficient in all cases to maintain reliable service. In short, we concluded that no one combination offered any greater or lesser expectation of reliable service than any other combination. To the contrary, we concluded that any of the combinations considered, together with necessary and sufficient restoration and network management procedures, would be capable of providing an adequate level of service reliability even in the unlikely event of a major facility outage during the busy period.

11. Several parties have argued that a rough balance between cable and satellite circuits should be maintained for major traffic streams, to ensure adequate service reliability. It is also implied by the same parties that the ultimate objective would be to establish enough equally loaded independent routes (facilities) between the US and CEPT countries to ensure that the 10% blocking threshhold set forth in CCITT recommendation E.542 would not be exceeded in the event of a major facility interruption during the busy period. These propositions are advanced in support of the proposed installation of an additional SG cable facility in 1981. However, we find no justification for either of these propositions.

12. As we have noted in previous policy statements and facility authorizations, we find no public interest justification for establishing or authorizing any predetermined distribution of traffic

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3/ CCITT Recommendation E.542 - Acceptable reduction in the number of circuits of a final route in the event of a breakdown. See Volume II-A--Rec. E.542, Volume VI--Rec. Q.96.

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or transmission capacity among alternative technologies or suppliers. Both cable and satellite technologies provide a high standard of service, even though both are subject to service interruptions. More important, however, is the fact that the unit costs of both cable and satellite technologies are steadily declining under the stimulus of manufacturer competition, with resultant benefits to the consumer. The establishment of a predetermined allocation of traffic or transmission capacity between these technologies would, we believe, seriously erode this competitive stimulus. Moreover, this would also prevent both technologies from realizing their inherent economies of scale, by unnecessarily limiting their full growth and utilization potential.

13. With regard to the second proposition concerning route or facility diversity, we note that in order to keep the blocking level below the 10 percent level suggested in Recommendation E.542, more than ten equally loaded routes would be required for the major U.S.-CEPT traffic streams. Since there are now only five major North Atlantic facilities, whose capacities differ substantially, 4/ it is not possible to distribute the traffic on these major traffic streams equally among even five routes. As both traffic and the capacity of newer generations of cable and satellite technology continue to grow at a rapid rate, it is quite clear that older but still functional facilities will not retain the capability of carrying their share of the total U.S.-CEPT traffic, whether the objective were five, ten, or some other number of independent routes. Only if all ten or more facilities were to be established at the same time, each having the same capacity including a substantial excess over current traffic requirements, would such a planning objective seem realistic; and in view of the substantial cost penalties which such a program would entail, in terms of both underutilized capacity and technological advancements foregone, we are confident that no party would propose adoption of such a plan. Accordingly we must reject, as a basic planning objective, the concept of achieving any particular number of equally loaded independent routes for handling U.S.-CEPT traffic. We also must reject, for the reasons noted, the proposition that an additional SG cable facility would per se represent a meaningful step toward realizing such an objective. While it is without question desirable to maintain a multiplicity of routes for U.S.-CEPT traffic, it is clearly unrealistic and uneconomic to expect that each such route will be capable of carrying an equal share of U.S.-CEPT traffic, or to authorize facility investments on the basis of such expectations. We conclude therefore that continued reliance must be placed on the speed of restoration using redundant capacity in alternatve facilities and network management techniques together with reasonable diversity to minimize the adverse affects of a major

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4/ TAT-5--845 circuits; TAT-6--4,000 circuits; CANTAT-2--1,840 circuits; INTELSAT IV-A Primary Path-->5,000 circuits; INTELSAT IV-A Major Path-->7,000 circuits.

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facility outage. We find that such an approach would be a more effective and cost efficient means now and in the future to maintain an acceptable level of service reliability.

14. Step 4: Cost Analysis. The primary determinants of the charges to be borne by U.S. consumers of international communications services are the facility investment and operating expenses attributable to U.S. carriers -- since these expenses form the primary justification for the rate that carriers charge for communication services. For each of the alternative satellite-cable facility combinations considered, the Commission's staff identified that portion of future North Atlantic facility investment and operating costs which were properly attributable to the U.S. carriers according to established ownership arrangements. Past investment and operating expenses, as well as lease charges resulting therefrom, were determined not be an appropriate basis for evaluating the costs and revenue requirements of new facilities. However, the full investment and operating costs for that portion of the INTELSAT-V satellite program properly attributable to U.S.-CEPT traffic were included, despite the prior international commitment to that program, since the actual U.S. share of such expenses will be determined by the extent of U.S. usage of the system. Moreover, an allowance was made for the remaining useful life for each facility expected to continue in service beyond 1985. Finally, all future investment and operating costs were converted to present values employing a 12 percent annual discount rate, in order to establish a common basis for comparing alternative programs which necessarily incur differing future expenditures at different times.

15. Comparing the present values of future investment and operating expenses for the several alternative facility programs examined, we found that a Comsat plan which includes no additional cable facilities apparently represents the absolute least cost alternative, at a present value of $170,459,000. This plan does not, however, include any use of circuit multiplication techniques which we believe are both economically attractive and desirable to increase the capacity of existing cable facilities. At the other end of the cost comparison, the present value of the 1977-1985 costs for Plans 1 and 1-M, proposed by the USISC and CEPT respectively, are $206,565,000 and $209,884,000. The higher cost of these plans results primarily from the inclusion of a new SG cable to be operational in 1981. An alternative plan formulated by the staff, in which a new SG cable facility would be introduced in 1983, would result in 1977-1985 costs having a present value of $191,586,000. However, the plan which provides the best balance between cost minimization and the full exploitation of new technological capabilities, and thus the one we find most reasonable, includes no additional SG cable facilities within the planning period, but includes circuit multiplication capabilities as well as a more balanced distribution of traffic among available routes than does the Comsat plan, at only slightly greater overall costs ($171,382,000 in present value). This is the plan we have adopted as the one most likely to satisfy basic public interest objectives.

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16. The present value analysis we have employed is the generally accepted means for comparing the economic effects of future investment and other expenses which will be incurred in differing amounts and at different times, taking into consideration the time value of money. Such an analysis does not, however, fully account for all the economic burden which may be imposed on the consumer of public utility services provided by a rate-base, rate-of-return regulated supplier as a result of added investments. An alternative method of evaluating the consumer effect of such investment decisions is to compute the added revenue requirement (i.e. combination of capital recovery, return on investment, and operating expenses) which would be occasioned by a particular investment and/or operating decision. For example, since we have determined that an additional SG cable facility would not be required to satisfy traffic requirements or service reliability objectives during the 1981-1985 period, the added revenue requirements of such an unnecessary facility during this period provides another measure of the impact on consumers of authorizing such a facility. We have computed this added revenue requirement, assuming a 10 percent rate of return on investment, at $192,000,000 for the period 1981-1985. Over the entire 24 year estimated life of an SG cable installed in 1981, the added revenue requirement would be some $765,000,000. Under either the present value or revenue requirement analyses, it is therefore clear that the addition of an unneeded SG cable facility in the 1981-1985 time frame would result in significant additional costs to be attributed to U.S. telecommunications entities and services and ultimately to be borne by the U.S. consumer.

17. Deferring the addition of such a cable until 1983 would reduce but not eliminate the added cost burden to the consumer during this period. Neither of these programs would, according to our analysis, provide any greater service reliability than could be achieved without the additional SG cable facility.

18. Other Considerations. Those parties supporting the establishment of a new SG cable facility within the 1979-1985 period also contend that such action is necessary or desirable to maintain a viable cable manufacturing industry, to ensure continued development of cable technology, to minimize or offset the risks of new satellite technology, and to maintain adequate security of international communications. While some of these arguments are far less central to our public interest mandate than are the primary factors of capacity, reliability, and cost, we have given careful consideration to all of them. As discussed more fully in the main text, we find that none of these have sufficent merit to offset in any way the basic findings described above.

19. Given these findings and conclusions, we cannot find on this record any public interest justification for adopting a facilities implementation and use plan at this time which includes an additional North Atlantic cable facility in the 1981-1985 period. Accordingly, we are adopting the

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facilities configuration and use plan embodied in Plan 4-M. This will be the planning guideline against which specific facility applications will be judged. We will be prepared, however, to reinstitute appropriate rulemaking proceedings to review our policy determinations herein should sufficient additional information be brought to our attention.

20. In reaching our conclusion in this proceeding, we have given full consideration to international comity. This factor was a vital and important part of our deliberations, as discussed in the body of this decision. Moreover, when this proceeding is terminated, we would like to continue our consultative discussions with the CEPT countries and Canada concerning the principles and criteria for facility planning and authorization as well as the possible need for new facilities in the future. We are particularly interested in further discussions concerning the INTELSAT planning process, which we believe is too isolated from the consultative process, from the cable planning process, and indeed from our own regulatory processes. Despite our conclusions herein, we are not satisfied that the INTELSAT-V program per se necessarily constitutes an optimum satellite system configuration, or that a more coordinated and comprehensive approach to facility planning might not have produced some combination of different cable and satellite facilities which would even better serve the public interest than Plan 4-M. We intend to explore, within our own jurisdiction, mechanisms which will better ensure that such coordinated planning occurs, and we hope that other administrations will be prepared to undertake similar coordination at the international level in conjunction with the consultative program.

APPENDIX V

PROCEDURES FOR U.S. GOVERNMENT INSTRUCTION OF THE COMMUNICATIONS SATELLITE CORPORATION IN ITS ROLE AS U.S. REPRESENTATIVE TO THE INTERIM COMMUNICATIONS SATELLITE COMMITTEE

Introduction

The world system for communication by satellite is organized in a unique manner. The space segment of this system is owned and controlled by a consortium of more than 50 countries whose governing Board is the Interim Communications Satellite Committee (ICSC). The Communications Satellite Corporation (Comsat) is the owner of the largest share of the consortium, is the U.S. representative to the ICSC, and in turn acts as manager in the development and operation of the space segment. It is also, of course, a domestic U.S. corporation with certain functions having little or nothing to do with the work of the ICSC.

This document deals only with the problem of the supervision of the U.S. Government over Comsat in its role as U.S. representative to the ICSC, and as a member of the international consortium. In these roles, Comsat exercises, of course, among other things, an important foreign policy function on behalf of the U.S. Government. In some respects its role is similar to the role of other U.S. delegates to international bodies. Specific statutory responsibility for the supervision of Comsat in this role is provided in the Communications Satellite Act of 1962, and particularly Section 201 thereof. That Section imposes responsibilites both on the President and on the Federal Communications Commission (FCC). The President in turn has delegated some of his responsibility to the Director of Telecommunications Management and to the Secretary of State.

The supervision by the various agencies of the U.S. Government should be accomplished essentially by instructing Comsat on its course of action in the ICSC and consortium on those items where the U.S. has a statutory or general foreign policy interest. The manner in which these instructions are formulated and conveyed to Comsat is itself a critical policy matter.

The following procedures take into account the above considerations and provide a method by which the various agencies of the U.S. Government can, in a coordinated manner, participate in giving appropriate instructions to Comsat in its role as U.S. representative to the ICSC, consistent with

the President's overall responsibility for the conduct of foreign affairs. This document is not concerned with the discharge of the statutory responsibilities of the particular government agencies involved, other than in the determination and issuance of instructions to Comsat.

(1) Comsat shall circulate copies of proposed agenda for meetings of the ICSC to the Department of State, the Director of Telecommunications Management, and the Federal Communications Commission at least four weeks before the matters on the agenda are to be considered by the ICSC. Amendments to agenda shall be circulated as soon as possible.

(2) Each of the agencies shall review the agenda promptly and advise the Department of State of those items on which it believes prior U.S. Government instructions to Comsat are required. The Department shall instruct Comsat that it shall not take action on such agenda items until it receives U.S. Government instructions. As to such items, Comsat shall furnish pertinent documentation as soon as possible.

(3) On important matters Comsat should advise the Department of State, the Director of Telecommunications Management (DTM), and the FCC of the position it desires to take well before the time such matters are placed on the agenda and as soon as meaningful consideration can be given by the agencies, so as to allow inter-agency consultation in arriving at a determination of instructions to Comsat.

Comsat shall be advised that, where consideration by the FCC is required, its submission to the FCC shall be in such form, and with sufficient supporting data, so that the U.S. Government instructions may provide the flexibility required in discussions in the ICSC, without need for additional instructions on minor changes.

(4) The U.S. Government shall exercise its responsibility to instruct the U.S. representative in an expeditious and, ordinarily, nonpublic manner. This requirement raises particular considerations with respect to the FCC, in view of its obligations under 201(c) of the Communications Satellite Act of 1962, and its position as a regulatory agency. However, the FCC, under applicable statutory provisions, is able to operate in an expeditious and nonpublic manner with regard to its determinations concerning instructions to Comsat as the U.S. representative to the ICSC.

(5) Nevertheless, from time to time, the FCC, after consultation with the Department of State and the DTM, may

find it appropriate and desirable to arrive at its determinations by means of a public hearing.

(6) On matters where consideration by the FCC is required, the FCC, after having followed either procedure, shall then request the Department of State to issue appropriate instructions to Comsat.

Otherwise, each agency, including the FCC, shall, as promptly as possible, advise the Department of State of its determinations with respect to items of interest to it.

(7) On receipt of the advice of the several agencies, the Department of State, in conformance with Section 201 of the Communications Satellite Act and Executive Order 11191, will issue instructions to Comsat as to the position it should take on the agenda items, taking into account the respective agency determinations.

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