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A CHRONICLE OF POLICY AND PROCEDURE: THE FORMULATION OF THE REAGAN ADMINISTRATION POLICY ON INTERNATIONAL SATELLITE TELECOMMUNICATIONS

Richard R. Colino*

Introduction

On August 31, 1962, President John F. Kennedy signed into law the Communications Satellite Act of 1962¹ (Satellite Act). This unique piece of legislation which had widespread bipartisan support in the United States Congress and was opposed by a handful of liberal Senators² contained provisions of far reaching consequence in a number of respects, including statements of telecommunications and foreign policy. It created the Communications Satellite Corporation (COMSAT), required the National Aeronautics and Space Administration (NASA) to launch satellites for civilian commercial purposes, and was the first step in the establishment of INTELSAT, the International Telecommunications Satellite Organization.

The Satellite Act stated:³

(a) . . . it is the policy of the United States to establish, in conjunction and in cooperation with other countries, as expeditiously as practicable a commercial communications satellite system, as part of an improved global communications network, which will be responsive to public needs and national objectives, which will serve the communication needs of the United States and other countries, and which will

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¹Communications Satellite Act, Pub. L. No. 87-624, 76 Stat. 419 (1962), 47 USC §701 *et seq.* [hereinafter referred to as the "Satellite Act"].

²See Glassie, *Note: Analysis of the Legal Authority for Establishment of Private International Communications Satellite Systems*, 18 GEO. WASH. J. INT'L L. & ECON. 355, 361-368 (1984) The legislation was "filibustered" by Senator Kefauver and several other Democratic senators, embroiling the Senate in one of its most bitter debates resulting in the first cloture vote passed by the Senate since 1927. *Id.* at 364. See also *Note. The Communications Satellite Act of 1962*, 76 HARV. L. REV. 388, 389 (1962). The final passage of the Satellite Act was by 354 to 9 in the House and by 66 to 11 in the Senate. See CONG. REC., August 27, 1962, at 16605; May 3, 1962 at 7133; and August 17, 1962, at 15874. See also Colino, *INTELSAT: Doing Business in Outer Space*, 6 COLUM. J. INT'L L. 31, 32 (1967)

³Satellite Act, Sec. 102(a) and (b), 47 USC §§701(a) and (b).

contribute to world peace and understanding.

(b) The new and expanded telecommunication services are to be made available as promptly as possible and are to be extended to provide global coverage at the earliest practicable date. In effectuating this program, care and attention will be directed toward providing such services to economically less developed countries and areas as well as those more highly developed, toward efficient and economical use of the electromagnetic frequency spectrum, and toward the reflection of the benefits of this new technology in both quality of services and charges for such services.

From these origins, INTELSAT was established in 1964⁴ as a "single global commercial communications satellite system"⁵ to

provide expanded telecommunications services to all areas of the world, . . . contribute to world peace and understanding. . . [and] provide, through the most advanced technology available, for the benefit of all nations of the world, the most efficient and economical service possible consistent with the best and most equitable use of the radio spectrum. . .

U.S. policy in 1962 contemplated that the United States and other countries could and would establish and operate domestic satellite systems⁶ and foresaw the establishment of other international systems when it stated: ". . . (it is not the intent of Congress) to preclude the creation of additional communications satellite systems, if required to meet unique governmental needs or if otherwise required in the national interest."⁷ At the time of the creation of INTELSAT in 1964, and the negotiation of and entry into force of the INTELSAT definitive arrangements (1969 to 1971 for the negotiation of these complex agreements and the entry into force in 1973 of the Agreement and Operating Agreement of INTELSAT⁸), the U.S. policy position was that

⁴International Telecommunications Satellite Consortium "INTELSAT" Agreement Between the United States of America and Other Governments, done at Washington, August 20, 1964, with Special Agreement and Supplementary Agreement on Arbitration concluded by certain Governments and Entities designated by Governments, 15 UST 1705, TIAS No. 5646 [hereinafter referred to as the "Interim Agreement" and the "Special Agreement"].

⁵*Id.*, Preamble to the Interim Agreement.

⁶Satellite Act, Sec. 102(d), 47 USC § 701(d). See *Hearings before the Subcommittee on Communications of the Committee on Commerce*, 89th Cong., 2nd Sess., Aug. 10, 17, 18 and 23, 1966, Serial 89-78, at pp. 14-18, 67-69, 81-83, 88-89, 100-107, 113-116, 128-140, 148, 155-157, 173-177, 215-217. See also Glassie, n. 2 *supra*, at 364-368.

⁷*Id.*

⁸The Agreement relating to the International Telecommunications Satellite Organization (INTELSAT) and the Operating Agreement, done at Washington D.C., August 20, 1971, entered into force February 12, 1973. TIAS No. 7532.

the INTELSAT agreements contemplated a single global commercial communications satellite system. This objective was seen as the purpose of the Satellite Act, i.e., to authorize one unique international satellite system which became the INTELSAT system, and to espouse the view that other international systems were unnecessary and at odds with the creation of INTELSAT.⁹

With the exception of a number of domestic satellites and certain limited international satellite systems, this represented the state of events until 1983.¹⁰

⁹See Colino, "The INTELSAT Definitive Arrangements: Ushering in a New Era in Satellite Telecommunications," European Broadcasting Union (EBU), Legal and Administrative Series, Monograph No. 9 (1973), pp. 88-96.

¹⁰From 1973 through 1983 the following coordinations were completed under Article XIV(d):

- (a) U.S. MARISAT System:
 - (i) original coordination for Atlantic Ocean Region (AOR) and Pacific Ocean Region (POR) through 1979 (First Assembly of Parties (AP), February 1974);
 - (ii) inclusion of Indian Ocean Region (IOR) and extension through 1981 (Second AP, September 1976);
 - (iii) extension through 1985 (Seventh AP, October 1982);
- (b) European Communications Satellite Network (ECS):
 - (i) original coordination of primary network through 1991 (Fourth AP, April 1979);
 - (ii) ECS EUTELSAT (the European Telecommunications Satellite Organization) 1-2 (Spare) Network through 1992 (Sixth AP, October 1981);
 - (iii) Expanded Use of ECS through 1988 (Seventh AP, October 1982);
- (c) The Indonesian PALAPA Satellite Systems:
 - (i) PALAPA B network through 1990 (Fourth AP, April 1979);
 - (ii) PALAPA A network until introduction of PALAPA B network (Fifth AP, April 1980);
- (d) The Arab Satellite Telecommunications Organization (ARABSAT) - coordination through 1990 (Fifth AP, April 1980);
- (e) Use of the Soviet-sponsored INTERSPUTNIK system by Algeria - coordination through 1985 (Sixth AP, October 1980);
- (f) Use of MARECS networks by INMARSAT (the International Maritime Satellite Organization, on behalf of INTELSAT members who are members of INMARSAT) - coordination through 1989 (Seventh AP, October 1982);
- (g) Use of U.S. RCA SATCOM domestic satellite systems for TV reception in Bermuda - coordination through 1987 (Seventh AP, October 1982);
- (h) Use of Canadian and U.S. domestic satellite systems for transborder services between Canada and the U.S. - coordination involving 20 individual satellites through 1987 (Seventh AP, October 1982).

These systems were found to be compatible with the INTELSAT system either because they are an alternative to existing terrestrial networks (ECS, ARABSAT), or they will carry a very small amount of international traffic originating or terminating in remote areas (PALAPA), or the international traffic to be carried is a very minor addition to a domestic system already in existence and will not require additional investments in

In short, it was "expected" that INTELSAT would provide virtually all of the long distance facilities needed to carry public international telecommunications services to all parts of the globe with the exception of certain "spillover" from domestic satellites and certain rationalized "regional" systems generally established for reasons other than telecommunications requirements, including such reasons as industrial development, cultural, pan-ethnic integration and the like.¹¹ No overt "challenge" to the exclusive role of INTELSAT for long distance international, transoceanic and intercontinental purposes had emerged until 1983.

In the first quarter of 1983, an application was filed before the United States Federal Communications Commission (FCC) which proposed that a communications satellite system separate from that of INTELSAT be author-

space segment facilities (U.S./Canadian transborder traffic, RCA-SATCOM traffic to Bermuda), or the amount of traffic that might be diverted from INTELSAT is extremely small (22 circuits in 1985 in the case of Algeria's use of INTERSPUTNIK). All of these instances of favorable coordination with INTELSAT have in common the fact that the separate system was not established with the main purpose of carrying traffic already carried, planned to be carried, or reasonably anticipated to be carried by INTELSAT on routes already served by INTELSAT. It should also be noted that, in considering the question of whether a particular system will or will not cause significant economic harm to INTELSAT, the Assembly of Parties — the principal organ of INTELSAT, in which every member country is represented — has taken the position that in the case of any future use of the INTERSPUTNIK system, the question of economic harm should be considered not only with respect to the specific request for coordination, but also from the long-term perspective of the economic harm that would be done by a series of similar cases. (AP-6-3 ¶24b). See Board of Governors (BG) documents BG-60-69, August 22, 1984, and BG-60-63, August, 1984.

¹¹See *Hearings Before the Subcommittee on Arms Control, Oceans, International Operations and Environment of the Senate Committee on Foreign Relations*, 98th Cong., 1st Sess., October 19, 1983, S. Hrg. 98-483 p. 154-164 (Testimony of Abbott Washburn); *Hearings Before the Subcommittee on Commerce, State, Justice and Related Agencies of the House Committee on Appropriations*, April 18, 1985 (statement by Abbott Washburn); Mr. Washburn noted that the type of regional systems now in existence (EUTELSAT, ARABSAT and PALAPA) were contemplated from the beginning but that transoceanic, intercontinental systems which siphon traffic and revenues from the heavy duty North Atlantic streams were *never* contemplated at the time of the negotiation of the INTELSAT Agreements. (See p. 9). Ambassador Washburn served as chairman of the international negotiating conference that drafted the INTELSAT Agreements. See also statement of France at the Ninth Assembly of Parties (Extraordinary) held in Washington January 29-31, 1985, which noted that although INTELSAT "must accept regional systems as demonstrated by the number of such systems already coordinated under Article XIV(d). . . transoceanic satellite systems must be provided by INTELSAT and continue to be provided by INTELSAT." Assembly of Parties (AP) document AP-9-3, ¶120. See also "The Report of the Board of Governors to the Assembly of Parties Pursuant to Article XIV(d) Concerning Coordination of the European Communications Satellite System". Assembly of Parties doc. AP-4-7, at p. 6 (March 16, 1979).

ized to permit the provision of certain international services between the United States and Europe.¹² This application raised some fundamental questions of law and policy which various branches of the United States Government were obliged to address and caused other governments, their telecommunications administrations and various bodies of the INTELSAT organization to face issues which by and large had been dormant for more than a decade, i.e., during the negotiation of the definitive arrangements. This article endeavors to trace these developments, primarily from a procedural perspective, to the adoption of a decision of the FCC on July 25, 1985, its issuance of a Report and Order on September 3, 1985,¹³ and actions taken by the U.S. Congress which resulted in President Reagan signing two pieces of legislation, on August 15 and 16, respectively, which address these issues.¹⁴

The INTELSAT Background

INTELSAT owns and operates the space segment of the global commercial communications satellite system consisting of satellites and related equipment required to maintain and operate the satellites. This unique international organization is run on business principles as it exploits high technology but is essentially a non-profit cooperative.¹⁵

INTELSAT was formed on August 20, 1964, when representatives of 11 nations signed interim agreements establishing the International Telecommunications Satellite Consortium.¹⁶ At that time, the commercial application of satellite communications technology was more of a theoretical possibility than a practical reality and, as noted in Article I of the Interim Agreement, communications satellites located in geosynchronous orbit were deemed "experimental."¹⁷ As commercial viability was proven and the global satellite communica-

¹²Application of Orion Satellite Corporation, File No. CSS-83-002-P, March 11, 1983.

¹³Report and Order in the Matter of Establishment of Satellite Systems Providing International Communications, CC Docket No. 84-1299, FCC 85-399.

¹⁴1985 Supplemental Appropriations Act, Pub. L. No. 99-88, 99 Stat. 293 (1985); State Department Authorization Act, Pub. L. No. 99-93, §146 (1985) (to be codified at 22 USC §2651).

¹⁵See Colino, *supra* n. 9, at 22-24 and 27-31.

¹⁶TIAS No. 5646. See *supra* n. 4.

¹⁷Article I stated in pertinent part:

"(a) The Parties to this Agreement shall cooperate to provide, in accordance with the principles set forth in the Preamble to this Agreement, for the design, development, construction, establishment, maintenance and operation of the space segment of the global commercial communications satellite system to include (i) an experimental and operational phase in which it is proposed to use one or more

tions system established over the next few years, many more countries joined the Consortium, and by the end of 1968 the number of member countries had reached 63.¹⁸ As called for by the Interim Agreement, a Plenipotentiary Conference was held in Washington, D. C. during the 1969-1971 period to determine a permanent charter for INTELSAT. This Conference resulted in the conclusion of two agreements that came into effect in 1973: the INTELSAT Agreement and the Operating Agreement.¹⁹

As of August 31, 1985, INTELSAT had 110 members and provided services to more than 170 countries and territories.²⁰ Its satellite system comprises a network of sixteen satellites in geosynchronous orbit over the Atlantic, Indian and Pacific Ocean Regions, and provides two-thirds of the world's international telephone service and virtually all international television.²¹

INTELSAT and other Satellite Systems

Article XIV of the INTELSAT Agreement addresses various rights and obligations of INTELSAT members. Subsection (d) specifically addresses the establishment of space segment facilities separate from INTELSAT for the provision of international public telecommunication services. Article XIV(d) states:

To the extent that any Party or Signatory or person within the jurisdiction of a Party intends individually or jointly to establish, acquire or utilize space segment facilities separate from the INTELSAT space segment facilities to meet its international public telecommunications services requirements, such Party or Signatory prior to the establishment, acquisition or utilization of such facilities shall furnish all relevant information to and shall consult with the Assembly of Parties, through the Board of Governors, to insure technical compatibility of such facilities and in their operation with the use of the radio frequency spectrum and orbital space by the existing or planned INTELSAT space segment and to avoid significant economic harm to the global system of INTELSAT. Upon such consultation, the Assembly of Parties, taking into account the advice of the Board of Governors, shall express, in the form of recommendations, its findings regarding the considerations set out in this paragraph, and further

satellites to be placed in synchronous orbit in 1965. . ."

¹⁸See "Report of the Interim Communications Satellite Committee on Definitive Arrangements for an International Global Communications Satellite System," Doc. ICSC-36-58 at p. 4 (Dec. 1968). See also Colino, *supra* n. 9, at 15.

¹⁹See *supra* n. 8.

²⁰See *INTELSAT News*, vol. 1, no. 1, p. 5 (Summer 1985).

²¹See INTELSAT doc. AP-10-13. See also INTELSAT Report 1984-1985, March 31, 1985, at 1.

regarding the assurance that the provision or utilization of such facilities shall not prejudice the establishment of direct telecommunication links through the INTELSAT space segment among all the participants.

The INTELSAT Agreement, including Article XIV(d), reflects a carefully balanced compromise between the INTELSAT members supporting a single global system designed to provide all international public telecommunications services,²² with a corollary prohibition of other international systems (the position strongly argued by the United States), and those countries which desired the latitude at some future time to construct and operate other international satellite systems. The result is that the Parties to the INTELSAT Agreement are committed to "the aim of achieving a single, global, commercial telecommunications satellite system."²³ However, the existence of international satellite systems separate from the INTELSAT system is permitted under certain conditions.

Article XIV(d) establishes a mechanism to balance the rights of its member nations to establish and use other international systems with the protection of INTELSAT from certain negative effects that may be caused by the establishment, acquisition or utilization of other satellite systems carrying public, international services. Each proposed separate satellite system is to be co-ordinated with INTELSAT following a procedure which requires that, prior to its establishment, acquisition, or utilization, each separate system be ex-

²²"Public telecommunications services" are defined by the Agreement (Article I(k)) to mean:

[F]ixed or mobile telecommunications services which can be provided by satellite and which are available for use by the public, such as telephony, telegraphy, telex, facsimile, data transmission, transmission of radio and television programs between approved earth stations having access to the INTELSAT space segment for further transmission to the public, and leased circuits for any of these purposes; but excluding those mobile services of a type not provided under the Interim Agreement and the Special Agreement prior to the opening for signature of this Agreement, which are provided through mobile stations operating directly to a satellite which is designed, in whole or in part, to provide services relating to the safety or flight control of aircraft or to aviation or maritime radio navigation;

²³TIAS No. 5646, Preamble to the INTELSAT Agreement. The main purpose of INTELSAT is described as "to continue and carry forward on a definitive basis the design, development, construction, establishment, operation and maintenance of the space segment of the global commercial telecommunications satellite system," INTELSAT Agreement, *Id.* at Article II(a). Its prime objective is declared to be "the provision, on a commercial basis, of the space segment required for international public telecommunications services of high quality and reliability to be available on a non-discriminatory basis to all areas of the world."

amined: (i) to ensure the *technical compatibility* of the system and its operation with the use of the radio frequency spectrum and orbital space by the existing or planned INTELSAT space segment; (ii) to avoid *significant economic harm* to the INTELSAT system; and (iii) to ensure that the provision or utilization of the separate system *shall not prejudice the establishment of direct telecommunications links* through the INTELSAT space segment among all the participants.

The Assembly of Parties, the principal organ of INTELSAT, implements these provisions.²⁴ Under established procedures, the analysis of whether or not a separate system meets these three tests is undertaken by the Director General and given to the INTELSAT Board of Governors with recommendations, and the Board in turn tenders advice to the Assembly of Parties. The Assembly, taking into account the advice received, expresses its "findings" in the form of recommendations to the interested Parties. It is the responsibility of each INTELSAT Party or Signatory to carry out the obligation to coordinate separate systems under Article XIV(d).

The coordination process under Article XIV(d) was used on thirteen occasions between 1973 and 1983 and always resulted in a positive recommendation.²⁵ However, every case presented a situation in which the separate system was not established with the main purpose of carrying public international traffic of the type already carried by INTELSAT on the same routes currently served by INTELSAT.

The Orion Application

On March 11, 1983, Orion Satellite Corporation (Orion) filed an application²⁶ with the FCC for authority to construct and operate an international communications satellite system linking the United States and Europe. Orion proposed a "private" international satellite facility which would not provide a common carrier service, but would sell or lease transponder capacity on a non-

²⁴INTELSAT consists of four organs (INTELSAT Agreement, Article VI): the Assembly of Parties, in which each Government Party to the Agreement has an equal voice and a single vote (Article VII); the Meeting of Signatories, composed of all who have signed the Operating Agreement — either the States which are Parties to the Agreement or their designated telecommunications entities, each having one vote (Article VIII); the Board of Governors, composed of approximately 20 Governors representing the Signatories or groups of Signatories with the greatest investment shares and no more than five Governors representing regional groups (of at least five Signatories each) which are not otherwise represented on the Board, each Governor voting on substantive issues in proportion to the investment shares he represents (Article IX); and the staff called the Executive Organ, headed by a Director General who is the chief executive officer and legal representative of INTELSAT (Article XI). *See also* Colino, *supra* n. 9 at 36-59.

²⁵*See supra* n. 10.

²⁶*See supra* n. 12.

tariffed basis to users on both sides of the Atlantic. Its system would consist of two in-orbit satellites and one ground spare with the in-orbit satellites positioned in the mid-Atlantic region of the geostationary orbit. Each satellite would carry 22 Ku-band transponders with footprints covering most of Europe and the eastern half of North America.²⁷

The INTELSAT Agreement requires coordination for "public" international telecommunications services under Article XIV(d) and "specialized" domestic and international services under Article XIV(e). Orion argued that since its system would be used to sell or lease space segment capacity rather than provide any "service," it was not subject to any coordination under Article XIV. In the alternative, Orion argued that its proposed activities could, at most, be classified as specialized telecommunications, since they would not constitute any common carrier offering to the public. Under Article XIV, the distinction between subsection (d), relating to public international telecommunications services, and subsection (e), relating to specialized telecommunications services, is very significant. As explained previously, subsection (d) requires coordination on three separate grounds: technical compatibility, significant economic harm, and prejudice to the establishment of direct telecommunications links. Subsection (e) requires only coordination on the basis of technical compatibility. Finally, Orion argued that its privately operated facilities would advance important public policy objectives by meeting specialized needs of users and serving as a complement to existing common carrier networks, and, even if its operations were to be held to the test of Article XIV(d), it would satisfy such requirements.

Orion's arguments demonstrate recognition of the limitations placed on separate systems by the INTELSAT Agreements, and an attempt to circumvent those restrictions.²⁸ The classification of Orion's system was ultimately resolved by a State Department memorandum of law which analyzed both the Orion and the ISI²⁹ separate system applications under the terms of the INTELSAT Agreement and concluded that "the proposals would appear to contemplate providing public international telecommunications and require coordination with INTELSAT both to avoid economic harm and for technical

²⁷As a point of reference, the INTELSAT V and V-A satellites carry 27 and 32 transponders, respectively.

²⁸See Cowhey & Aronson, *The Great Satellite Shootout*, REGULATION: ADJ. Gov. & Soc. 27, 30-31 (May/June 1985).

²⁹International Satellite, Inc. (ISI) filed its application with the Federal Communications Commission (FCC) on August 12, 1983, for authority to construct, launch and operate a North Atlantic Regional satellite system for the provision of international satellite service between the U.S. and Europe. ISI proposed to provide satellite capacity on a common carrier basis as well as sell or lease capacity. Its 32-transponder 11-12/14 GHz satellites would be designed to provide video, audio and data transmission services. File No. CSS-83-004-P(LA) I-O-C-83-073 (August 12, 1983).

compatibility."³⁰

FCC Treatment of the Orion Application

In view of the fact that the Orion application presented the FCC with a new and unique proposal for international satellite services which presented the possibility of a conflict with U.S. obligations under the INTELSAT Agreements, it might have been expected that such a federal agency would react in a slow, circumspect manner. Instead, the FCC acted with remarkable speed in placing the Orion application on public notice. Within three business days, the FCC had released its public notice requesting comments from interested parties.³¹ The shortened time frame was extremely unusual when compared to FCC actions in other cases. For example, in *Transponder Satellite Video Services* (FCC 81-492), the time between filing dates and public notice dates for eleven separate applications ranged from 10 days to 37 days. In another docket, the FCC accepted applications to operate space stations in the domestic fixed satellite service. In August, 1983, the FCC took actions which established a November 7, 1983, cut-off date for filing applications. Despite the filing cut-off, the public notice was not issued until March 12, 1984, more than four months later.

The unusual speed with which the FCC placed the Orion application on public notice indicated, at a very early state, a policy predisposition on the issue. As observed by Cowhey and Aronson, in their article entitled "The Great Satellite Shootout," Orion's strategy ". . . is a textbook example of how to play the regulatory game in the United States."³²

Deregulatory Predisposition of the FCC

The FCC, under its current Chairman, Mark Fowler, has established a reputation throughout the communications community, both domestic and international, for its deregulatory zeal. Mr. Fowler has been quoted as defining his mission as FCC Chairman as one of "pruning, chopping, slashing, eliminating, burning, and deep-sixing" long-established regulations involving the business over which the FCC has power.³³ The results have been profound, in some cases altering the entire environment of certain elements of the communica-

³⁰Memorandum of Law regarding Orion and ISI Applications for International Satellite Communications Facilities, prepared by the Legal Adviser, Department of State, p. 8 (undated).

³¹FCC Public Notice, Rept. No. I-2051 (March 16, 1983). See generally C.F.R. §25.166 (1984) (FCC may receive public comments concerning communications satellites).

³²See Cowhey & Aronson, *supra* n. 28, at 30.

³³Bus. Wk. at p. 48 (August 4, 1985).

tions community. The circumstances governing domestic tariff regulations, licensing procedures, programming rules, ownership regulations, connection rules, equipment manufacture, long-distance servicing and other areas have all been remolded over the past few years.

FCC efforts to remold the circumstances of international communications have been equally unflagging. Among these have been the FCC's actions in opening up international record carriers to competition, freeing providers of so-called "enhanced services" from regulatory oversight (thus throwing into confusion an established process by which foreign telecommunications authorities looked on FCC oversight as a kind of certification of such providers), the elimination or major revision of circuit-loading and composite rate-making requirements, the restructuring of COMSAT, and numerous others, all under the conceptual umbrella of replacing existing international communications methods with the forces of a competitive market. However, even supporters of these efforts to deregulate domestically have sounded warnings of caution in the unilateral application of such an approach to the international communications community. For example, an extensive article by Richard Frieden in the *Columbia Journal of Transnational Law*³⁴ suggests that the FCC "temper its zeal to revamp and revise with an appreciation of the differences between international and domestic telecommunications policymaking."³⁵

As Mr. Frieden notes, "A plethora of institutional, behavioral, structural and economic limitations prevent the development of a fully deregulated, unsupervised international telecommunications marketplace. The pervasive nature of government participation in either the regulation or actual provision of telecommunications services stems from legitimate political, social and financial concerns."³⁶

INTELSAT Director General Expresses Concern

On April 5, 1983, the Director General of INTELSAT, Santiago Astrain, sent a letter to the Deputy Secretary of State, Kenneth Dam, which warned that favorable U.S. action on the Orion application to construct and operate a transatlantic satellite system would result in a proliferation of such systems, the eventual undermining of the single global system and the potential relegation of INTELSAT to a thin-route system.³⁷ Astrain stated that "Orion's application challenges the fundamental underpinnings of the INTELSAT Agree-

³⁴Frieden, *International Telecommunications and the Federal Communications Commission*, 21 COLUM. J. TRANSNAT'L L. 423 (1983).

³⁵*Id.* at 481.

³⁶*Id.*

³⁷See *Hearing on S.999 Before the Senate Subcomm. on Communications of the Senate Comm. on Commerce, Science, and Transportation*, 98th Cong., 1st Sess. 24, at 81-119 (1983) (testimony of S. Astrain, Director General, INTELSAT).

ment and puts to a test the U.S. Government's will to continue to support the existence of a single, global, commercial satellite system."

The letter explained that INTELSAT's basic commercial, financial and technical principles were derived from the concept of a single global system: systems planning on the basis of worldwide traffic forecasts, achieving the advantages of economies of scale, rate averaging to allow all users affordable access, etc. Accordingly, the establishment of other systems would entail serious financial consequences for INTELSAT. If transatlantic traffic were diverted from the INTELSAT system, INTELSAT's revenues would decrease while its capital costs would remain the same. Consequently, the rate-averaging system used by INTELSAT would be directly affected, and INTELSAT's rates would increase for users throughout the world. The adverse impact of such a worldwide rate increase would be felt most intensely by Third World countries.

Further, the letter reminded the State Department that the United States Government was the principal proponent of the INTELSAT system and, through successive Administrations since 1962, has been a key supporter of the basic concept of a single global telecommunications system. With such support, the INTELSAT cooperative has grown and constitutes the primary means by which developing countries communicate with the rest of the world. Thus, the letter questioned whether this major international cooperative effort should be needlessly jeopardized.

The letter was never responded to directly.

NTIA and State Department Officials React to the Separate Systems Issue

On April 6, 1983, David J. Markey, Assistant Secretary-Designate for Communications and Information of the Department of Commerce, and Diana Lady Dougan, Coordinator, International Communications and Information Policy of the Department of State, jointly signed and sent a letter to the FCC Chairman urging the FCC to take no action on the Orion proposal pending review of the national interest and foreign policy issues it raises.³⁸ Explaining that the Orion proposal raised complex issues and that the Executive Branch wished to review the proposal in light of national needs and priorities, treaty obligations, and relations with other countries, the letter stated that the Executive Branch should complete its review of national and foreign policy before the FCC proceeds with a public interest determination on the application. The letter expressed an expectation that the review would be completed promptly.

INTELSAT Meeting of Signatories, April 1983

As noted earlier in the text and at footnote 24, under the INTELSAT Agreements, the organizational structure of INTELSAT contains four tiers: (i) the Assembly of Parties; (ii) the Meeting of Signatories; (iii) the Board of Governors; and (iv) the Executive Organ, headed by the Director General. The

³⁸49 TELECOM. REP. 18-19 (Apr. 18, 1983).

Meeting of Signatories is composed of representatives of all Signatories (governments or their designated telecommunications entities) to the Operating Agreement. Generally, it considers resolutions, recommendations or views put to it by either the Assembly of Parties or the Board of Governors, and also considers matters relating to the financial, technical and operational aspects of the system.³⁹

In April, 1983, INTELSAT held its thirteenth Meeting of Signatories in Bangkok, Thailand. At that meeting, INTELSAT members from around the world unanimously adopted a resolution⁴⁰ which expressed deep concern over the possibility of international transoceanic satellite communications systems separate from INTELSAT. The resolution stated that such separate systems challenge the underlying purpose for which the INTELSAT system was created. Furthermore, "the establishment of one or more competitive satellite systems diverting international transoceanic or other heavy route traffic from the INTELSAT system would have a fundamental impact on the viability of the single, global, commercial telecommunications satellite system, and would entail serious financial consequences for all INTELSAT users." The resolution concluded by requesting the INTELSAT Director General, Mr. Astrain, to convey these concerns to the United States Government, the INTELSAT Board of Governors, all INTELSAT members, and the INTELSAT Assembly of Parties.

In accordance with the INTELSAT resolution, the Director General wrote a second letter to the Department of State on April 27, 1983, informing the U.S. Government that the issue of separate systems had been discussed at length at the Meeting of Signatories held in Bangkok, Thailand and explained that the INTELSAT Signatories shared the concerns expressed previously by the Director General.

This letter, as was the case with the earlier letter to Mr. Dam, never received a direct response from the Department of State.

Comments Filed on ORION's Application at the FCC

In mid-April, 1983, comments on Orion's application were received by the FCC from COMSAT, AT&T and RCA. All three agreed that favorable consideration by the FCC would require a change in current U.S. policy on the provision of international satellite services, but they differed in their recommendations for FCC action. COMSAT asked the FCC to deny Orion's application on

³⁹An ordinary meeting of the Meeting of Signatories is held every calendar year, with extraordinary meetings as required, and each Signatory is entitled to one (1) vote. Decisions on procedural matters are taken by an affirmative vote cast by a simple majority of the Signatories whose representatives are present and voting. Decisions on matters of substance are taken by an affirmative vote cast by at least two-thirds of the Signatories whose representatives are present and voting. (See Article VIII of the INTELSAT Agreement.)

⁴⁰INTELSAT Meeting of Signatories (MS) document MS-13-16.

the grounds that its proposed services would duplicate services already provided by INTELSAT, or planned to be provided by INTELSAT. Thus, Orion's proposal would not satisfy the provisions of the Satellite Act which permit the establishment of systems only where such systems meet unique government needs or otherwise are required in the national interest.⁴¹ COMSAT further argued that the Orion application failed to address not only the Satellite Act standards, but also the tests laid out in a State Department letter of July 23, 1981 on transborder services. That letter, signed by James L. Buckley, Under Secretary of State for Security Assistance, Science and Technology, indicated certain exceptional circumstances justifying the use of space segment (usually domestic facilities) separate from INTELSAT for the provision of international public telecommunications services: (i) where the global system could not provide the service required, and (ii) where the service would be clearly uneconomical or impractical using the INTELSAT system.⁴² Based on these standards, COMSAT concluded that a grant of the Orion application would be contrary to existing national and foreign policy.

AT&T commented that it was reliant upon INTELSAT to meet a substantial portion of its global circuit needs and that, whatever action the FCC took regarding the Orion application, the FCC should assure that the vitality of INTELSAT is not eroded or endangered.⁴³

RCA Global Communications commented that favorable FCC action on the Orion application would require the FCC to modify its policies on international satellites and that a broad rule-making proceeding would be in order.⁴⁴

U.S. Senate Actions: S.999

In early April, 1983, there was introduced in the Senate a bill called the International Telecommunications Act of 1983, S.999.⁴⁵ This bill was introduced by Senator Barry Goldwater (R.-Arizona), Chairman of the Commerce, Science and Transportation Committee's Subcommittee on Communications. Co-sponsors of the bill were Senator Ernest F. Hollings (D.-South Carolina) and Senator Larry Pressler (R.-South Dakota). The bill's aim was to deregulate international telecommunications services.⁴⁶ S.999 provided the same in-

⁴¹See Satellite Act, *supra* n. 6, at §102d.

⁴²49 TELECOM. REP. 27 (Apr. 25, 1983)

⁴³*Id.*

⁴⁴*Id.*

⁴⁵See Hearing on S.999 Before the Senate Subcomm. on Communications of the Senate Comm. on Commerce, Science and Transportation, 98th Cong., 1st Sess. 24, §1 at 3.

⁴⁶*Id.* §2(2) at 4. Not only was competition to be preferable to regulation, but competition with INTELSAT would have been encouraged. *Id.* §2(3) at 4.

structions to the FCC to deregulate services wherever competition existed as were contained in a previous Senate bill, S.2469, but S.999 contained new language which reflected events since that time, including a government agency's report criticizing current policy coordination efforts and both regulatory and competitive moves affecting the communications satellite industry. S.999 incorporated a recommendation made by the National Telecommunications and Information Administration (NTIA) to establish a White House Special Representative for Telecommunications and Information, who would have all the policy power then held in the State and Commerce Departments and the International Communication Agency; the Special Representative would be appointed by the President and would hold the rank of Ambassador.

There were various provisions in the bill which were germane to INTELSAT and which may be categorized as: (i) new provisions not in existence in the current legislation; (ii) provisions amending the Communications Act of 1934; and (iii) provisions amending the Communications Satellite Act of 1962. New provisions included the proposed finding by Congress in Section 2(3) of the bill that "it is essential to encourage the entry of new carriers in the offering of international telecommunications services and facilities." Section 202(b) of the bill also proposed that the policy of the United States be "to encourage and assist the competitive provision of telecommunications and information goods and services in international commerce" and "to ensure the existence of effective non-political international telecommunications organizations and other entities."

Among those provisions which would amend the Communications Act of 1934 was a section which would introduce a new Title VI, "International Telecommunications," into the Communications Act. The "statement of policy" provided in Section 602(a) of the bill stated:

It is the policy of the United States to rely whenever and wherever possible on marketplace competition and on the private sector to provide international telecommunications services and to reduce unnecessary regulation and to encourage entry by new carriers into the international telecommunications marketplace. Marketplace competition will result in technological innovation, operating efficiencies, and availability of a wide variety of telecommunications technologies that are new or may become available in the future, and will promote the equitable and efficient use of such technologies to provide international telecommunications services. Where effective competition does not now exist, it is the policy of the United States to encourage the development of such competition. Whenever the Commission finds it necessary to regulate international telecommunications services or facilities which are not subject to effective competition, such regulations shall be the minimum needed to accomplish the purposes of this Act. It shall be presumed that there are no basic technological, operational, or economic factors which would necessarily preclude the provision of any international telecommunications service under conditions of competition.

However, recognizing the importance of coordination with foreign telecommunications entities, the bill declared that the interests of sovereign nations were to be considered in the implementation of United States policy. The bill went on to state that it should also be the policy of the United States to promote the deregulation of the resale or shared use of any international telecommunications service, and to seek to implement this policy through meetings with foreign telecommunications entities.

Provisions amending the Communications Satellite Act of 1962 were perhaps the most significant to INTELSAT. Section 304(a) would have modified Section 102(d) of the Satellite Act. This amendment would have made it clear that it was not the intent of Congress to preclude the creation of additional international communications satellite systems "if required to meet unique governmental needs or if otherwise required in the national interests *or if such other communications satellite systems will otherwise serve the public interest, convenience and necessity.*" (Emphasis added). Enactment of this provision would have permitted competing international satellite facilities if those facilities could meet the basic FCC standards for any authorization (public interest, convenience and necessity). It is interesting that the sponsors of the bill evidently thought it necessary to codify into law enabling provisions and amendments to the Communications Act of 1934 and the Satellite Act in order to permit the FCC to authorize separate systems such as that proposed by Orion.

Other proposed modifications of the Satellite Act could have had an indirect effect on INTELSAT through changes in the way INTELSAT capacity is used by the United States. Sections 301(g), (j) and (k) would have made it clear that COMSAT could provide service directly to the public and that entities other than carriers could be authorized to acquire channels of communication directly from COMSAT. Section 301(i) would have made it possible for entities other than COMSAT and the common carriers to be authorized to construct stations accessing the INTELSAT system.

Senator Goldwater said, in a prepared statement, that although the bill aimed to extend pro-competitive U.S. policies into the international arena, it recognized, nonetheless, that both international services and the facilities by which they are delivered are provided jointly with foreign nations and that the U.S. could not unilaterally deregulate the provision of services.⁴⁷

On May 10 and 11, 1983, hearings on S.999 were held before the Senate Commerce, Science and Transportation Committee's Communications Subcommittee. Among those who testified before the Subcommittee was INTELSAT Director General Santiago Astrain. According to information available, Mr. Astrain's appearance represented either the first time the head of an international organization appeared before the legislative branch of one of the organization's member countries or at the least a very rare appearance.

In his testimony, Mr. Astrain reviewed for the subcommittee the very substantial achievements of INTELSAT during its existence, including how some

⁴⁷49 TELECOM. REP. 8 (April 11, 1983).

170 countries and territories relied on INTELSAT for international services and how many of them also relied on INTELSAT for domestic services. He stated the concerns referred to earlier and, in particular, he cited Section 304(a) of the bill to amend the Satellite Act and open the door to the establishment of other satellite telecommunications systems to carry international traffic without imposing upon them any of the obligations or conditions imposed on the INTELSAT system. He stated that he recognized that the United States was then in the process of opening up its internal communications sector to competitive entry and acknowledged that that was certainly the prerogative of the United States. However, he wished to bring to the subcommittee's attention that there were many differences between domestic and international telecommunications environments and submitted that the principles and mutual obligations contained in agreements such as INTELSAT's could not be amended by legislation in one country alone. Mr. Astrain brought to the subcommittee's attention the action taken by the INTELSAT Meeting of Signatories in Bangkok the previous month.

S.999 was never approved.

However, as the issues received increasing attention, other voices were heard from within the United States. Concerns were repeatedly expressed over the fragmented approach in the U.S. Government to developing international telecommunications policy, perhaps due in part to the disbanding of the White House Office of Telecommunications Policy in 1978. Among those concerned was Senator Charles Percy (R.-Illinois), Chairman of the Foreign Relations Committee, who wrote to Secretary of State George Shultz in June, 1983, raising a number of potential problems in the areas of international communications and information policy, including the importance of the United States proceeding skillfully if it were to reap the "gains of competition and enhance the competitive position of the United States. . .while preserving important foreign policy objectives." He drew attention to the dangers of not being sensitive to the views of other governments and forcing them into rigid defenses of their preferences for governmental monopolies for telecommunications and perhaps pushing the lesser developed countries into ideological insistence on orbital slots for future satellites and radio frequency spectrum allocations as part of the "common heritage of mankind."⁴⁸

ISI, RCA, and CYGNUS Applications⁴⁹

On August 12, 1983, an application was filed before the FCC by International Satellite, Inc. (ISI)⁵⁰ for authority to construct, launch, and operate a transatlantic satellite system. The proposed system would serve primarily the

⁴⁸Letter from Senator Charles Percy, Chairman of Senate Foreign Relations Committee to Secretary of State George Shultz (June 22, 1983).

⁴⁹See Cowhey & Aronson, *supra* n. 28, at 35; see also ISI application, *supra* n. 29.

⁵⁰File No. CSS-83-004-P (LA) I-P-C-83-073.

video distribution and data markets, would sell at least half the capacity of the system, and make the remainder of the capacity available on a common carrier basis. ISI proposed services to areas covering the continental United States, Western Europe, and small areas within the continental United States and Western Europe. No service would be provided to Latin America, Africa or the Middle East.⁵¹ On February 13, 1984, RCA American Communications, Inc. (RCA Americom) became the third U.S. corporation to file an application⁵² with the FCC to provide competitive international satellite services. RCA Americom asked the FCC for permission to amend its authorization to construct and launch its existing C-band Satcom VI satellite to permit "coverage on command of portions of Europe and Africa on six transponders." It proposed generally tariffed services, leased channels and transponders providing video distribution, teleconferencing and commercial/business communications including private-leased channel voice, low-speed data, medium speed data, and high speed data.

RCA Americom addressed the question of potential harm to INTELSAT, stating, "there is no reason to believe that the service described herein will cause significant harm to the global system. There is, however, reason to believe that demand for service will increase through the stimulation of competition, and that the global system may well benefit from the increase in demand." Furthermore, RCA Americom asserted that even if INTELSAT's revenues were affected by this proposed service, "there is no longer any reason to provide a totally protected status to it, especially in a market which accounts for such a small percentage of its revenues. Indeed, we do not believe that there was ever any intent to shield INTELSAT from all competition for all services for all time. The needs of customers and the forces of the marketplace should be determinative, as they have been in the domestic market."

On March 7, 1984, Cygnus Satellite Company (Cygnus) followed with an application⁵³ to the FCC for an Atlantic regional satellite system and stated that it planned to file for a Pacific regional satellite system in the near future. While the geographic coverage proposed by Cygnus was primarily the continental United States and Western Europe, there was also specified in the Cygnus application spot beam coverage of Puerto Rico, the U.S. Virgin Islands, the Caribbean Basin and portions of Central America. The application proposed the sale or long-term lease of transponder capacity on both a preemptible and non-preemptible basis. The particular service capabilities specified were: video program distribution; video teleconferencing; other video services including teletext, videotext, captioning, stereo TV, high definition

⁵¹Public comments on the ISI application were filed with the FCC by interested parties in mid-September, 1983. Consistent with its comments on the Orion application, COMSAT urged the FCC to deny ISI's application on the ground that it duplicated services which were or would be offered by INTELSAT.

⁵²File No. I-T-C-84-085.

⁵³File No. CSS-84-002-P(LA).

TV; audio services; high speed digital facsimile; computer-to-computer communications; electronic mail; remote satellite printing; telex, TWX, batch data processing, distributed data processing; and private voice services.

The Senior Interagency Group (SIG) and NTIA Study the Issue

Under various pieces of legislation, including the Satellite Act, the Executive Branch has special responsibilities in the field of telecommunications. Among other things, during 1983, the Senior Interagency Group on International Communication and Information Policy (SIG)⁵⁴ reviewed U.S. international satellite policy to determine under what conditions separate satellite systems would be: (i) consistent with prevailing U.S. law, practice and international treaty obligations; (ii) compatible with sound foreign policy and telecommunications policy goals; and (iii) in the national interest.

In a letter to FCC Chairman Fowler, David Markey, the Assistant Commerce Secretary and NTIA Administrator, stated:⁵⁵

The Orion and ISI applications both raise novel and complex issues affecting U.S. national interest, foreign policy, and established communications policy. Applicable law and Executive Branch authority mandate our careful analysis of these proposals, in light of national needs and priorities and long-standing treaty obligations. The introduction of the ISI application will result in a more protracted review process than previously anticipated.

Officials of the Executive Branch agencies comprising the SIG continued to study the public policy issues in an attempt to reach an Executive Branch recommendation. Although it ordinarily is one of the agencies that participates in the group's deliberations, the FCC did not take part in the SIG policy review due to its *ex parte* obligations.

By December, 1983, the NTIA staff recommended that the entry of Orion and ISI be permitted, under restrictions barring use of their transponders for common carrier, public-switched voice services, after Article XIV(d) consultation had been completed. The staff concluded that such restricted authorizations would serve U.S. national interests, and would not cause significant economic harm to INTELSAT.⁵⁶ When questioned about the potential effect of a

⁵⁴The Senior Interagency Group (SIG) is composed of representatives of the Departments of State, Justice, Defense and Commerce; the Offices of Management and Budget, Science and Technology Policy, Policy Development, and the U.S. Trade Representatives; the National Security Council; the Central Intelligence Agency; the U.S. Information Agency; the Board of International Broadcasting; the Agency for International Development; and the National Aeronautics and Space Administration. The Departments of Commerce and State co-chair the SIG.

⁵⁵49 TELECOM. REP. 19 (Sept. 5, 1983).

⁵⁶49 TELECOM. REP. 11 (Dec. 12, 1983).

negative recommendation by the INTELSAT Assembly of Parties under Article XIV(d) for the Orion and ISI systems, an NTIA spokesman responded that such a finding would not be dispositive for U.S. policy⁵⁷ and by implication would not prevent the FCC from approving separate systems.

In a letter to the NTIA Administrator in late December, COMSAT commented on NTIA's staff recommendation. COMSAT's President, Irving Goldstein, expressed his belief that the NTIA staff report presented many problems and was not a basis for sound public policy. He warned that any modification in the U.S. historic policy should be considered only in the context of the broad international and commercial issues it raised, and in cooperation with other nations and INTELSAT.⁵⁸

In January, 1984, the SIG reached a unanimous decision to recommend that the Secretaries of Commerce and State support both pending applications, so long as the service they were allowed to provide was limited, and they were coordinated with INTELSAT.⁵⁹ The decision, however, had not been finalized. Nor was it clear whether a "successful" coordination need take place. Discussions continued on a number of sub-issues. The basic limitations adopted in the SIG decision were essentially the same as those adopted by an NTIA staff study, which was then nearing final endorsement by Commerce Secretary Malcolm Baldrige.

INTELSAT Assembly of Parties, October 1983

Ordinary meetings of the Assembly of Parties⁶⁰ are held every two years to consider those aspects of INTELSAT that are primarily of interest to the Parties as sovereign states, as well as the resolutions, recommendations or views put to it by either the Meeting of Signatories or the Board of Governors. Extraordinary meetings can be held at any time. The Assembly can formulate policies and long-term objectives consistent with the principles, purposes and scope of INTELSAT's activities. Each Party has one vote, and decisions on matters of substance require an affirmative vote cast by at least two-thirds of the Parties whose representatives are present and voting. Decisions on procedural matters require only an affirmative vote cast by a simple majority of the Parties whose representatives are present and voting.

In October, 1983, INTELSAT's eighth meeting of the Assembly of Parties was held. Two days of intense debate were devoted to the issues raised by the two applications filed with the FCC for the provision of separate international satellite service. After most Parties had expressed their deep concern over events in the United States, the Assembly unanimously adopted a decision to:

⁵⁷*Id.*

⁵⁸49 TELECOM. REP. 31 (Dec. 26, 1983).

⁵⁹50 TELECOM. REP. 25 (Jan. 23, 1984).

⁶⁰See *supra* n. 24 and Article VII of the INTELSAT Agreement.

(i) urge all Parties to ensure that their commitments to the INTELSAT system continue to be fulfilled; (ii) reaffirm the importance that all Parties refrain from actions that would imperil the viability of the single, global satellite system; (iii) express its fullest support to the Director General in his pursuit of the INTELSAT aim of developing the single global satellite system in the most efficient and economical manner possible; and (iv) request the Board of Governors and the Director General to review this matter regularly and report to the Parties any new developments.⁶¹

Views of U.S. Industrial Firms, Further Comments, and Infighting Among the Applicants

On February 22 and 27, 1984, Orion and ISI respectively attempted to accelerate the issuance of an Executive Branch recommendation to the FCC by submitting letters to the Department of Commerce addressing concerns that their entry into the field would prove deleterious to U.S. industry.⁶² Such concerns had been raised in January by the U.S. firms manufacturing the INTELSAT V and VI series of satellites, Ford Aerospace and Communications Corporation, and Hughes Aircraft Company, respectively, in letters to concerned government officials to the effect that, should the U.S. approve separate systems, INTELSAT could seek to shift more of its substantial aerospace procurement activities to foreign suppliers.⁶³ Ford's letter also raised national security issues. In their letters to Commerce, ISI and Orion asserted that such a concern was "completely unsustainable and deserves very short shrift." ISI noted that INTELSAT was bound by strict ground rules in its procurement policies, and dismissed Ford's national security concerns.

By this time, various applicants and other parties were beginning to trade charges. ISI attacked the Cygnus application, charging that in fact both Cygnus and Orion were controlled by the same company, M/A-Com, and urged the FCC to review the application. AT&T Communications (AT&T), in commenting on the Cygnus application, stated that the issues involving economic coordination with INTELSAT "are not easily disposed of as Cygnus suggests." Cygnus had argued that no economic coordination was necessary on the basis of domestic legal concepts of common carriage. ISI, for its part, asked the FCC to deny RCA Americom's application, while Orion opposed RCA's request to be given the same processing treatment as the original applicants.

Referring to many letters from foreign telecommunications authorities⁶⁴ to

⁶¹INTELSAT document AP-8-3, para. 21.

⁶²50 TELECOM. REP. 31 (March 5, 1984).

⁶³*Id.*

⁶⁴During January, February and March 1984, a substantial number of countries wrote letters to the FCC expressing their concerns about separate satellite systems. These included: Afghanistan, Australia, Austria, Belgium, Brazil, Cameroon, Chile, China, Colombia, Cyprus, Denmark, Dominican Republic, Ecuador, Finland, Haiti, Ice-

the FCC in preceding weeks, AT&T said that Cygnus' entry "can only exacerbate" their concerns. The "perception of harm to INTELSAT and unilateral action may not be accurate from the U.S. perspective, but in the international sphere, perceptions are as likely as reality to cause significant damage to the delicate fabric of international cooperation."

Differences Between the Departments of State and Commerce

As noted earlier, concern was expressed at various times in 1983 with respect to the absence of and the need for cohesive and coherent development of U.S. policy. By March, 1984, differences between the Departments of State and Commerce were reported to focus on the SIG recommendation.⁶⁵ Apparently, Department of Commerce attorneys were concerned over too much detailed language in the proposed determination language, preferring instead simple statements to the effect that alternative systems not connected to public-switched networks are in the national interest, with separate instructions to the State Department about Article XIV(d) coordination. Apparently, the State Department favored language to the effect that the U.S. affirm its Article XIV(d) obligations, and viewed the Commerce Department's suggestions as a significant deviation from agreed-upon language. The Commerce Department saw the language difference as a legal issue, not a policy matter, and expressed strong concern that the FCC might deviate from a detailed determination, and thereby invite an appeal to the courts.⁶⁶

On March 28, Secretary of Commerce Baldrige forwarded his Department's recommendations to the White House separately from the State Department's recommendations which followed the next day. Substantive differences were minimal; however, the two recommendations clashed on the proper manner in which the President should address the Article XIV(d) coordination process, and on the respective functions and roles of the Departments of State and Commerce.⁶⁷

These separate actions raised the specter of what was referred to as a "turf war" over telecommunications policy responsibility being waged between the two Departments.⁶⁸ The State Department viewed the Commerce Department's proposal as an attempt to seize the preeminent role in setting international policy, while the Commerce Department claimed that it was merely following the guidance of a 1978 Executive Order 12046, which transferred such

land, Japan, Korea, Madagascar, Malaysia, Netherlands, Norway, Peru, Philippines, Senegal, Spain, Sri Lanka, Sweden, Switzerland, Syria, Tanzania, United Arab Emirates, and Vatican City State.

⁶⁵50 TELECOM. REP. 29 (March 19, 1984).

⁶⁶*Id.*

⁶⁷50 TELECOM. REP. 31 (April 2, 1984).

⁶⁸*Id.* See Cowhey & Aronson, *supra* n. 28, at 33.

policy functions out of the disbanded White House Office of Telecommunications Policy, and charged the Secretary of Commerce with serving as the principal advisor to the President on "telecommunications policies pertaining to the nation's economic and technological advancement and to the regulation of the telecommunications industry." The Executive Order also stated that the Commerce Secretary "shall provide for the coordination of the telecommunications activities of the Executive Branch."⁶⁹

With the State and Commerce Departments submitting independent recommendations to the White House, the original proposal for a joint recommendation on Presidential language to incorporate the policy decisions made by SIG was abandoned. The problem of adopting a final Executive Branch position was left in the laps of the White House staff.

On April 10, NTIA Administrator Markey, addressing SATCOM '84, stated that the Executive Branch was still debating the U.S. approach to separate systems; "I think that kind of competition is inevitable," he said. Markey also said in his address that NTIA considered it important to protect INTEL-SAT, calling it an obvious foreign policy and economic success. Any decision to allow other systems, he said, "should be conditioned on the applicants coordinating their systems with INTELSAT."⁷⁰ He said that the separate systems applications were part of an evolution in competitive overseas services, including the 1981 Record Carrier Competition Act, the transborder use of domestic satellite systems, regional systems, and FCC deregulatory actions. He guessed that the White House would act "within a week or ten days."

In mid-April, as the White House considered the varying proposals before it, Representative Timothy Wirth (D.-Colorado), Chairman of the Subcommittee on Telecommunications of the House Energy and Commerce Committee, and Representative James Broyhill (R.-North Carolina), ranking minority member of the House Energy and Commerce Committee, endorsed the SIG-Commerce position.⁷¹

INTELSAT Meeting of Signatories, April 1984

In mid-April, INTELSAT held its Fourteenth Meeting of Signatories. Again, the separate systems issue was intensely debated, and the Signatories voted unanimously to urge all INTELSAT Signatories to resist efforts to estab-

⁶⁹Other language in the Executive Order, however, directed Commerce to develop policy "in coordination with" State, and to "provide advice and assistance to the Secretary of State on international telecommunications policies." It also stated that "with respect to telecommunications, the Secretary of State shall exercise primary authority for the conduct of foreign policy, including the determination of U.S. positions and the conduct of U.S. participation in negotiations with foreign governments and international bodies."

⁷⁰50 TELECOM. REP. 13 (April 16, 1984).

⁷¹*Id.* at 29.

lish such separate systems. Adopted without objection by the 73 Signatories present, after having been proposed by 49 of them, the resolution urged Signatories "to refrain from entering into any arrangements which may lead to the establishment and subsequent use of" separate systems "to carry traffic to or from their respective countries."⁷²

Further Complications in the Development of U.S. Policy

In late May, 1984, the White House, unwilling to accept either the State or Commerce proposal, instructed NTIA Administrator Markey and Under Secretary of State for Security Assistance, Science and Technology, William Schneider to coordinate their policy recommendations. Still under discussion was whether the coming determination should be a Presidential Determination, or whether it should be issued through the Secretary of Commerce. The Department of State favored the former because it felt it would be weightier and thus easier to use as a basis for dealings with foreign governments. The House Energy and Commerce Committee entered the turf fray by siding entirely with the Commerce Department under Executive Order 12046. The Committee said it was "extremely concerned with the lack of cooperation other [Cabinet] departments have shown with the efforts of the Secretary of Commerce to implement his responsibilities."⁷³ Conflict broke out again when Secretary of State Shultz on May 30, 1984, wrote a letter to Representative Dante Fascell (D.-Florida), Chairman of the House Foreign Affairs Committee, opposing the language in the NTIA authorization bill, even though the language mirrored a 1983 NTIA-State memo of understanding.⁷⁴ The White House effort to get the two agencies to develop mutually agreeable compromise language on the separate systems issue was seen not to have succeeded.⁷⁵ Procedural disagreements were cited, but a more substantive reason emerged: the State Department wanted a Presidential Determination on the issue to cover ISI and Orion only, while the Commerce Department wanted a generic approach.

At a June 13, 1984, hearing of the Subcommittee on Telecommunications and Finance of the House Committee on Energy and Commerce, Committee Chairman John Dingell (D.-Michigan), in his opening statement, said that "the FCC alone has the statutory authority to grant or deny petitions for entry into the international satellite market." "As a purely procedural matter," he added, "a general policy might best be formulated in the public forum provided by an FCC rulemaking, rather than behind closed doors in the Executive Branch." Chairman Dingell later continued to press for an FCC "public forum" in a

⁷²INTELSAT document MS-14-3, ¶22.

⁷³50 TELECOM. REP. 14 (May 28, 1984).

⁷⁴50 TELECOM. REP. 33 (June 11, 1984).

⁷⁵*Id.*

letter to Chairman Fowler.⁷⁶ At that hearing, Ambassador Abbott Washburn, a former FCC Commissioner and head of the U.S. delegation that negotiated the INTELSAT Agreements, hailed INTELSAT's spectacular success, compared it to the Marshall Plan, and stressed that the U.S. re-examination of policy "should be a very careful and thorough effort." Ambassador Washburn called for a "broad FCC inquiry."⁷⁷

Orion and ISI, on the other hand, thought that there had been enough discussion of the matter in the course of the SIG's work. They saw their opportunities eroding and feared a full-blown FCC proceeding might take several years more. Such a proceeding, said ISI's attorney, was "utterly unnecessary" because the policy issues for all applicants were the same, and the FCC had before it all necessary information.⁷⁸

PANAMSAT Application

On June 1, 1984, a somewhat different type of separate system issue arose when the Pan American Satellite Corporation (PanAmSat) asked the FCC for authority to construct and operate an international sub-regional, Western Hemisphere video and audio distribution and hemispheric domestic satellite system.⁷⁹ The system was intended to provide internal, national satellite service in various Latin American nations, and sub-regional video and audio distribution satellite service between New York and Miami and Latin American countries. "Incidental" coverage of the Iberian Peninsula was also included, and thus another transatlantic system was proposed. The types of services that the system would be capable of providing included video and audio distribution, domestic service offerings including video and radio programming; video text and teletext; telex facsimile and electronic mail; telephone service; and data and computer communications.⁸⁰

While the "international" aspects of this application raised most of the same concerns as the other applications, it added a different element in the introduction of the concept that a company sought authorization ostensibly to provide internal domestic services to countries other than the country of the authorizing country's licensing agency (i.e., the United States). Although un-

⁷⁶50 TELECOM. REP. 19 (June 18, 1984).

⁷⁷*Id.* at 19-20.

⁷⁸*Id.* at 20-21.

⁷⁹File No. CSS-84-004-P(LA)

⁸⁰*See supra* n. 50-53. On June 12, 1984, Systematics General Corporation (SGC) requested FCC authority to launch and operate international satellite systems to provide North Atlantic and Pacific service to U.S. federal government agencies. The system would use the C-band portion of the NASA east and west tracking and data relay satellites (TDRS). SGC withdrew these two applications on July 27, 1984, reserving the right to refile at a later date when "user requirements are further defined."

usual in the international community in the sense that "receiving" States had not endorsed this application to provide service within their national boundaries, the "domestic" aspect of the PanAmSat application did not raise the identical concerns for INTELSAT as did the other applications. (Should any INTELSAT member State decide to establish, acquire, or utilize the separate system for domestic purposes only, then such a country's party would be required to comply with Article XIV(c).⁸¹)

New Viewpoints and Issues Emerge

1. Foreign Policy Sensitivity

The cumulative effect of the developments described above was to stimulate interest and activity from other quarters in the United States, including a greater emphasis on examining foreign relations implications for the United States. Perhaps the implications of potential "unilateral" action by a U.S. agency to license a firm to construct, launch and operate a satellite for services to be provided primarily for *other countries'* domestic purposes (i.e., the PanAmSat application) heightened foreign policy concerns and sensitivity.

In order to help define various options available in the formulation of U.S. policy, and the repercussions for most or all INTELSAT Parties and Signatories, INTELSAT commissioned an independent study of various ways to bring about changes in international telecommunications policies and understandings. These efforts by Wiley, Johnson & Rein produced a document entitled "Implementation of a U.S. 'Free Entry' Initiative for Transatlantic Satellite Facilities: Problems, Pitfalls and Possibilities."⁸² Following the PanAmSat application, comments were filed by Philip H. Trezise and Wiley, Johnson & Rein. Trezise's paper, "Internationalism in International Trade: Will We Ever Learn?" and the paper of Wiley, Johnson and Rein both concluded that the U.S. faced two alternatives for handling the issue of separate systems: it could license new systems first and deal with other governments later, or it could

⁸¹Article XIV(c) states:

(c) To the extent that any Party or Signatory or person within the jurisdiction of a Party intends to establish, acquire or utilize space segment facilities separate from the INTELSAT space segment facilities to meet its domestic public telecommunications services requirements, such Party or Signatory, prior to the establishment, acquisition or utilization of such facilities, shall consult the Board of Governors, which shall express, in the form of recommendations, its findings regarding the technical compatibility of such facilities and their operation with the use of the radio frequency spectrum and orbital space by the existing or planned INTELSAT space segment.

⁸²Rein, McDonald, Adams, Frank & Nielsen, *Free Entry Initiative for Transatlantic Satellite Facilities: Problems, Pitfalls and Possibilities*, 18 GEO. WASH. J. INT'L L. & ECON. 3 (1985) [hereinafter cited as Rein & McDonald].

negotiate with other governments first and license in accordance with the outcome of those negotiations.⁸³ Both papers cited unsuccessful U.S. attempts to impose deregulation of international air service, 1978-1982, and argued that the license-first approach might produce inconclusive intergovernmental confrontation, and lead to negotiations in a crisis atmosphere. The negotiate-first approach was better because it was less confrontational, facilitated establishing a hierarchy of negotiating goals, and permitted post-agreement licensing on a fair, comparative basis, taking into account realistically available opportunities.⁸⁴

A negotiate-first approach, as the Wiley, Johnson and Rein paper argued, held out possibilities for increased transoceanic competition if the U.S. were sensitive to foreign interests in setting its goals, did not attempt to force open entry initiatives, had an established negotiation mechanism, adjusted its licensing policy to international reality, and was able to offer commercially meaningful concessions to other sovereigns.⁸⁵ Mr. Trezise argued that "for the FCC now to license the satellite applicants would be to announce a policy that, whatever its abstract merits, would threaten to disrupt time-honored arrangements for the conduct of transatlantic telecommunications."⁸⁶

A full airing of policy matters was "essential," Mr. Trezise argued, and neither the SIG approach nor the FCC licensing procedure represented suitable forums. He called for closer consultation with relevant Congressional committees. Mr. Trezise suggested oversight hearings "because what is at issue is the first fundamental change in U.S. international telecommunications policy since Congress passed the Communications Satellite Act in 1962." He also called for a "broad rulemaking inquiry by the FCC, in which all relevant policy considerations, including foreign policy ones, can be properly weighed."⁸⁷ NTIA Administrator Markey later responded by letter to Mr. Trezise that the Executive Branch policy review of the issues had covered every major matter.⁸⁸

⁸³Comments of Philip Trezise in File No. CSS-84-004-P(LA); See *Studies by Consultant, Law Firm Conclude Broad U.S. Policy Review, Followed by Talks with Foreign Administrators, Should Come Before F.C.C. Licensing of Private Satellites*, 50 TELECOM. REP. 33 (July 16, 1984) (hereinafter cited as *Studies*). Mr. Trezise, formerly Assistant Secretary of State for Economic Affairs, is a Fellow of the Brookings Institute.

⁸⁴*Studies*, *supra* n. 83, at 33.

⁸⁵Rein & McDonald, *supra* n. 82, at 8.

⁸⁶*Studies*, *supra* n. 83, at 10.

⁸⁷*Id.* at 13.

⁸⁸See *Markey Defends Executive Branch's Policy Review on Alternative International Satellites*, 50 TELECOM. REP. 23 (July 23, 1984).

2. *The Congressional Office of Technology Assessment*

On July 25, 1985, the Congressional Office of Technology Assessment (OTA) entered the debate with its belief that INTELSAT faced long-term economic harm if many applicants joined those already in the fray. In a report to the House Science and Technology Space Sciences and Applications Subcommittee, the Congressional Office asserted that INTELSAT, a notable example of cooperation, had already withstood "competition" from regional systems, and theorized that other countries might choose to become further involved in competition should the U.S. point the way.⁸⁹

3. *Further Congressional Hearings*

Also on July 25-26, State and Commerce officials appeared before the House telecommunications subcommittee. Attempting to downplay the appearance of a policymaking turf fight, they cited the memorandum of understanding they had co-signed; however, under questioning, they made it clear that it still left considerable room for disagreement. Notably, State Undersecretary Schneider, while agreeing that Commerce had "the lead responsibility for formulating domestic and international policy," cited the government's "pervasive interest" in telecommunications and information issues, and the important international consequences arising from the U.S. deregulation policy. "We can't have an international communications policy," he said, "that would sabotage national security or key alliances with foreign powers."⁹⁰

In the course of the hearings, Representative Al Swift (D.-Washington) expressed his concerns that the U.S. might be on the verge of a decision that would be widely opposed by developing nations who benefited from INTELSAT's global rate averaging. Representative Swift praised INTELSAT as a U.S. foreign policy success, and hoped that "at the White House level, they will make a balanced judgment and not blow one of the best moves we've ever made."⁹¹

4. *Congressional Concerns Intensify*

Concurrently, Chairman John Dingell was making efforts to involve Congress more substantively in the debate and to infuse the decision-making process with the full due process considerations that he believed a matter of this

⁸⁹"International Cooperation and Competition in Civilian Space Activities." Report to the Subcommittee on Space Sciences and Applications of the House Committee on Science and Technology, Office of Technology Assessment, July 1984. This report was expanded and published as a formal OTA document under the same title (OTA-ISC-239, July 1985). See also 50 TELECOM. REP. 16 (July 30, 1984).

⁹⁰*Id.* at 18-19.

⁹¹*Id.* at 20.

weight merited. In a June 15, 1984, letter to FCC Chairman Fowler, Dingell wrote that "the cumulative effect of many satellite systems may pose risks that need to be addressed by a general policy." He cited a number of issues that required further examination through a rulemaking proceeding by the FCC and further hearings by the Energy and Commerce Committee. Some of these issues were foreign policy considerations; the effect of unrestricted growth of alternative systems on global telecommunications and equal access by all countries to international communications; the importance of restricting traffic diversion to hold down global rates; the potential adverse effects of alternative systems on some U.S. industries; and the adverse impacts on U.S. bargaining positions in other areas such as the International Telecommunications Union (ITU) of unilateral actions by the United States in this area.⁹²

On October 9, 1984, the Chairmen of the House and Senate Commerce committees, Representative Dingell and Senator Bob Packwood (R.-Oregon), rather than pursuing a legislative amendment at that time, wrote a joint letter to the Chairman of the FCC asking him to initiate a study on the economic, trade and industrial issues pertaining to separate satellite systems. According to the letter, the study should have considered: the effects on rates and services for domestic U.S. users; the effect on INTELSAT's averaged rates; the economic impact on INTELSAT; the effects on U.S. industry; effect on the orbital arc needs of the U.S.' and the alternative mechanisms that could increase efficiency in the provision of international telecommunications services. The legislators sought concrete, factual evaluations, and asked that the study begin immediately and be completed by the next Congressional Session.⁹³ The in-depth study was never undertaken by the Commission. At about the same time more than fifty House members wrote a letter to the President asking him to defer adoption of a policy on the separate systems question until the Congress had an opportunity to study in detail the issue of separate systems. The signatures were solicited by Chairman Dingell, who continued to seek a direct role for Congress in the charting of any change in U.S. international

⁹²During this same period, the authorization bill for the National Telecommunications and Information Administration (NTIA) was moving through both Houses of Congress. Committee Chairman Dingell and several House and Senate colleagues, including Committee Chairman Packwood of the Senate Committee on Commerce, Science and Transportation, continued to feel strongly about the need to examine the potential introduction of alternative international satellite systems in the context of its full impact on various domestic telecommunications policies, including those involving interstate and foreign commerce. In this context, they sought an independent commission, jointly appointed by both Houses, to study and report on the matter. In September, Chairman Dingell's office led an attempt to reach a compromise with other key staff of the Commerce committees to include such a study commission in the NTIA authorization bill. However, joint opposition to any compromise by the offices of Subcommittee Chairman Wirth, Representative Broyhill, and Senator Ernest Hollings blocked the effort.

⁹³50 *TELECOM. REP.* 19 (Oct. 15, 1984).

satellite telecommunications policy.⁹⁴

The Presidential Determination

On November 28, 1984, the long anticipated Determination by the President was issued.⁹⁵ It said that "separate international communications satellite systems are required in the national interest," and that the U.S. would "consult with INTELSAT regarding such separate systems as are authorized by the FCC" in order to meet its obligations under the agreement. . . ." The full text is as follows⁹⁶

The White House
Washington
November 28, 1984
Presidential Determination
No. 85-2

Memorandum for the Secretary of State
the Secretary of Commerce

By virtue of the authority vested in me by the Constitution and statutes of the United States, including Sections 102(d) and 201(a) of the Communications Satellite Act of 1962, as amended (47 U.S.C. 701(d), 721(a)), I hereby determine that separate international communications satellite systems are required in the national interest. The United States, in order to meet its obligations under the Agreement Establishing the International Telecommunications Satellite Organization (INTELSAT) (TIAS 7532), shall consult with INTELSAT regarding such separate systems as are authorized by the Federal Communications Commission. You are directed jointly to inform the Federal Communications Commission of criteria necessary to ensure the United States meets its international obligations and to further its telecommunications and foreign policy interests.

This determination shall be published in the *Federal Register*.

/s/Ronald Reagan

Also, on November 28, 1984, the Secretaries of State and Commerce sent a joint letter⁹⁷ to the Chairman of the FCC to discharge their responsibility "to inform the Federal Communications Commission of criteria necessary to ensure the United States meets its international obligations and to further its telecommunications and foreign policy interests" and to advise that:

⁹⁴*Id.*

⁹⁵It will be recalled that this "determination" emanates from section 201 of the Satellite Act. See also *supra* n. 6.

⁹⁶20 Weekly Comp. Pres. Doc. 1853 (Nov. 28, 1984).

⁹⁷50 TELECOM. REP. 7 (Dec. 3, 1984).

Prior to final authorization by the Commission of any systems to assure that the United States meets its obligations as a Party to the Agreement Establishing the International Telecommunications Satellite Organization (INTELSAT) (TIAS 7532):

(1) each system is to be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks (except for emergency restoration service); and,

(2) one or more foreign authorities are to authorize use of each system and enter into consultation procedure with the United States Party under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm. The President's determination, its conditions, and these criteria are premised on our review of the issues prompted by the applications now before the Commission. If proposals substantially different are forthcoming, further Executive Branch review may be required.

Further, on November 30, 1984, Secretary Baldrige sent a letter to Secretary Shultz which stated:⁹⁸

There are two matters regarding the President's determination on new international satellite systems that need to be clarified. First, the White House has directed our departments to examine the scope of INTELSAT's pricing flexibility. Second, our position on the related issue of direct access to INTELSAT should be made clear.

The executive agreement establishing INTELSAT generally requires uniform pricing for each service. Prices on heavily trafficked routes may now exceed costs while those on thin routes may be below costs. It is not clear whether INTELSAT could vary its prices under the agreement. If INTELSAT's prices on busy routes are artificially inflated, inefficient entry by new systems may be induced. INTELSAT should have pricing flexibility when confronted with actual or potential competition as long as the prices it charges cover its costs.

A related issue is direct, cost-based access to the INTELSAT space segment. Allowing users and carriers in addition to COMSAT the option to deal with INTELSAT directly for competitive services would foster competition based on superior efficiency and foresight and tend to deter entry by inefficient systems.

We should express clear positions on these two important points in the filing we will soon be submitting jointly to the Federal Communications Commission. I have asked Dave Markey to work with Bill Schneider to ensure this is done.

Undoubtedly, taking into account everything that preceded these actions, the Presidential Determination, the joint letter to the FCC and the letter of Secretary Baldrige to Secretary Shultz represent a sincere attempt by Administration officials to strike a fair balance between the authorization of competi-

⁹⁸50 TELECOM. REP. 28 (Dec. 10, 1984).

tive systems and the protection of INTELSAT from significant economic harm.⁹⁹

FCC Issues a Notice of Inquiry and Proposed Rulemaking

The FCC met on December 19, 1984, and decided to issue simultaneously a Notice of Inquiry and Proposed Rulemaking (NOI-PRM). On January 4, 1985, the NOI-PRM was released.

In view of the number and complexity of the issues raised by the FCC's NOI-PRM, it came to some observers as a procedural surprise that the FCC would issue a joint Notice of Inquiry and Proposed Rulemaking without proposing a specific rule. Besides the format of a joint Notice of Inquiry and Proposed Rulemaking, the FCC also adopted an extremely short period for the parties to develop meaningful comments and reply comments. The date of release of the NOI-PRM was January 4, 1985, and comments and reply comments were initially due February 14, 1985, and March 7, 1985, respectively. Generally, in complex rulemaking proceedings, the FCC in the past has issued a Notice of Inquiry allowing for comments and reply comments which would supply the FCC with information necessary for it to formulate a proposed rule. Thereafter, the FCC has used the information received to propose a specific rule which is explained in a Notice of Proposed Rulemaking. Then, parties to the proceeding are entitled to submit comments and reply comments on the proposed rule. This two-phased approach has, in the past, guaranteed a thorough consideration of the information and opinions available on the subject raised. By issuing a joint Notice of Inquiry and Proposed Rulemaking without proposing a specific rule, the FCC combined the two phases into one and thus provided only one opportunity to submit comments and reply comments. From the FCC's point of view, this approach substantially accelerated the administrative process, but, in doing so, the FCC necessarily sacrificed the notice and opportunity for interested parties to comment on a specific proposed rule. Such an opportunity is generally granted to the public before an administrative rule is approved and is thought by some to be required to guarantee due process.

A number of members of Congress recognized that the approach adopted by the FCC had its shortcomings. Several Congressmen wrote to the FCC imploring it to extend its due dates for comments and reply comments, and to follow this procedure with adequate opportunity to consider a proposed rule.¹⁰⁰ Finally, in an order issued January 25, 1985, the FCC admitted that the estab-

⁹⁹The Administration's reliance on "service" and physical "interconnect" restrictions to protect INTELSAT from significant economic harm may not be adequate. The enforcement of the restrictions on separate systems raises significant problems, including whether the restrictions themselves are enforceable and will be enforced.

¹⁰⁰CC Docket No. 84-1299; see letter of January 28, 1985, to FCC Chairman signed by Representatives Roth, Lagomarsino, Zschau, Berman and Leach (hereinafter cited as *Letter*).

lished comment period "may not accord parties the time necessary to accurately collect the requested information and to properly prepare comments." Accordingly, the FCC Common Carrier Bureau extended the comment deadline, allowing the parties until April 1, 1985, to file comments and until June 5, 1985, to file replies.¹⁰¹

Although the FCC finally relented and adopted a more traditional deliberative time period for comments and reply comments, it was clear that the FCC did so only under a substantial amount of pressure exerted by members of the Congress. The FCC did not yield on the truncated procedural approach it had chosen.

INTELSAT Assembly of Parties, January 1985

In December 1984, INTELSAT received legal opinions from outside law firms concluding that the INTELSAT Agreement committed INTELSAT to rate averaging and universal charges. The legal opinions were sought in response to questions raised by INTELSAT Signatories and others regarding legal constraints on INTELSAT's ability to compete with separate systems for business by adjusting its rates on individual routes to be served by separate systems. This problem raised the issue of the necessity of an amendment to Article V(d) of the Agreement if INTELSAT were to be able to compete for business with potential separate system operators. As the Director General, Mr. Richard Colino, stated to the Ninth Assembly of Parties, in January 1985, in an extraordinary session convened primarily for certain Article XIV(d) intersystem coordinations: "[W]hile INTELSAT has flexibility with respect to various forms of pricing (provided they are cost based), it cannot charge different rates for the same service on the basis of the route to be served."¹⁰² During that Assembly, members discussed and expressed their concerns about the development of separate systems in the United States, and questioned the U.S. Party delegation. Questions raised during the Assembly received no particularized response from representatives of the U.S. Party.

On January 31, 1985, the full Assembly adopted a resolution reaffirming the Organization's previous expressions of concern about such systems. It urged all INTELSAT Parties to express their concerns to the U.S. Government.¹⁰³ The resolution passed by the Assembly reaffirmed an earlier resolution adopted by the Eighth Meeting of the Assembly of Parties which, *inter alia*, urged all Parties "to refrain from actions that would imperil the viability of the single global satellite system," and resolutions of the Thirteenth and Fourteenth Meetings of the Signatories which, *inter alia* (fourteenth meeting) urged Signatories "to refrain from entering into any arrangements which may lead to establishment and subsequent use of" separate international systems

¹⁰¹50 Fed. Reg. 4711 (1985).

¹⁰²INTELSAT Document AP-9-4 ¶ 106, 107.

¹⁰³INTELSAT Document AP-9-3 ¶ 13.

linking the U.S. and Europe.¹⁰⁴

Executive Branch and Congress "Speak" to FCC

1. SIG White Paper

On February 8, 1985, the Departments of State and Commerce jointly submitted to the FCC the SIG's White Paper on New International Satellite Systems¹⁰⁵ detailing the grounds for the Executive Branch determination that separate satellite systems are in the public interest, and discussing to some extent the issues arising thereunder. Basically, the White Paper followed the Presidential Determination. The White Paper also stated, in proposing limitations for such systems, that "such services involve the sale or long-term lease of transponders or space segment capacity for communications that are not interconnected with public-switched message networks."

2. Further Developments in Congress

In a letter to the FCC dated January 28, 1985, Chairmen of the House Foreign Affairs Subcommittees on International Operations and on International Economic Policy and Trade requested that the Commission delay making any final decision in the rulemaking proceeding until the Congress had had an opportunity to consider the issues and take appropriate action.¹⁰⁶

In the spirit of this letter, in mid-February these two subcommittees began a series of three hearings chaired respectively by Representative Dan Mica (D.-Florida) and Representative Don Bonker (D.-Washington) in which officials from NTIA, the Department of State and, later, the FCC were invited to present their views on introducing competition to INTELSAT. Executive Branch officials maintained their position, in the face of significant reservations expressed by subcommittee members, that separate system applicants deserved an opportunity to provide services in addition to INTELSAT and that these services could be different from INTELSAT services—a "goldplated intercom," according to Undersecretary of State Schneider—and therefore would not cause significant economic harm to INTELSAT. FCC Chairman Fowler told those subcommittees in an April hearing that while the FCC did not feel bound by the Presidential Determination, they would give it considerable weight. He further testified that there was no need for legislation to protect INTELSAT because the President had determined in accordance with his existing statutory authority that alternative satellite systems were in the national interest. After close questioning, Chairman Fowler stated that the FCC

¹⁰⁴INTELSAT Document MS-14-3 at p. 12 (April 8, 1984).

¹⁰⁵The addition of the White Paper to CC Docket No. 84-1299 was placed on public notice, Report No. I-4032, on February 11, 1985.

¹⁰⁶See *supra* n. 100.

would only issue a final operating license to separate systems after the State Department indicated that the U.S. had fulfilled its coordination obligation to INTELSAT under the Agreement. He stated that the FCC shared Congress' concern "that we not do anything to jeopardize the viability of INTELSAT." Chairman Fowler declined to answer the question of how the FCC would respond to a negative finding or recommendation by the INTELSAT Assembly pursuant to the Article XIV(d) coordination process.

The FCC Common Carrier Bureau Chief, Albert Halprin, who accompanied Chairman Fowler to the hearings, stated that the FCC staff was quite concerned about the problem of enforcing the service restrictions. Mr. Halprin also noted that INTELSAT offered its INTELSAT Business Service (IBS) with similar interconnection restrictions, relying upon its Signatories to self-enforce.¹⁰⁷

Panels of telecommunications experts were also invited by the subcommittees to testify. In the February hearing, Philip Trezise and Burt Rein presented the conclusion of their independent studies that U.S. experience in other industries, such as aviation, should demonstrate the wisdom of reaching international agreements as a prerequisite to opening or deregulating markets. They predicted that it would ultimately prove harmful to U.S. interests, for the U.S. to unilaterally decide to approve systems separate from INTELSAT and then to attempt to negotiate landing rights for those systems. At the second hearing, on March 6th, Ambassador Washburn, former NTIA Administrator Henry Geller, former Senator Harrison Schmitt and Wilson Dizard of the Georgetown Center for Foreign Studies testified that they felt that legislation to protect INTELSAT's viability should there be separate systems—an idea

¹⁰⁷See "Fowler Tells House Subcommittees He Sees No Need for Legislation to Protect INTELSAT, That FCC Will Give Heavy Weight to President's Decision, But Consider Foreign Comments," 51 TELECOM. REP. 31-32 (April 1, 1985). Mr. Halprin's comments on the INTELSAT IBS service ignore the basic distinctions between reliance by INTELSAT on an intrasystem interconnection restriction (i.e. within the INTELSAT system itself) and reliance on an interconnection restriction applicable to separate systems. See Comments of Abbott Washburn before the FCC in CC Docket No. 84-1299, April 1, 1985, in which he states: "INTELSAT possesses a limited ability to monitor compliance with its IBS interconnection restriction because all traffic is intrasystem. INTELSAT would have no way to monitor traffic carried over private systems, however, nor would it be appropriate for INTELSAT to do so. . . . INTELSAT primarily relies upon the good faith and honesty of its membership to comply with the restrictions. While relying on the good faith of its members to enforce such a restriction is acceptable for INTELSAT, separate systems present an entirely different situation. First, in the case of INTELSAT, any traffic through IBS would be intrasystem and therefore the revenue impact would be limited. Moreover, as owners of INTELSAT, the foreign Post Telephone and Telegraph Administrations (PTTs) have little incentive to 'cheat'. In contrast, any traffic diverted by separate systems will be away from the INTELSAT system. As a result, the separate systems and their customers would clearly not have the same financial incentives to minimize diversion. 'Cheating' for customers of separate systems is a 'positive sum' game with potentially high stakes." 51 TELECOM. REP. 27-28 (April 1, 1985).

for which these witnesses had little support—should contain certain provisions: (i) a tight definition of services to be permitted on separate systems; (ii) flexible route pricing for INTELSAT; (iii) direct access to INTELSAT; (iv) continuing oversight to insure that INTELSAT is not sustaining significant economic harm; and (v) enhancement of the facilities planning process of the FCC.

Ambassador Washburn, however, stated that even with these provisions, the Administration's policy on separate systems was particularly weak because it was based on the premise that INTELSAT would not be harmed economically so long as separate systems offered customized services not connected with the public-switched network. Ambassador Washburn stated that the safety net for INTELSAT "is made of cheesecloth."¹⁰⁸

The House Energy and Commerce Subcommittee on Telecommunications also held hearings to discuss separate satellite systems. Chairman Fowler testified in favor of a policy permitting separate services. In addressing subcommittee concerns about leaky PBX's, Chairman Fowler noted that leaks on any major scale could be readily detected so that diversion should not be a significant problem. NTIA Administrator Markey also testified on this subject and indicated that growth in international traffic should alleviate any diversion problems that arose. Subcommittee members, notably Representative Swift, expressed their concern about INTELSAT's ability to price its services flexibly in order to meet the proposed new competition and expressed concern about the foreign policy implications of proceeding with the proposed new systems. Representative Swift also expressed his concern about the speed with which the FCC proceedings were advancing and indicated that he, among others, was nervous about proceeding too swiftly to open up international telecommunications systems in a way which could not be repaired, should it later prove necessary to do so.¹⁰⁹

Chairman Fowler further assured the House Telecommunications Subcommittee that the FCC proceeding to implement the Administration's decision on separate systems would allow the public a fair opportunity to comment on the Administration's eventual decision. Representative Swift summarized his views about INTELSAT by stating that if it "isn't broken, it shouldn't be fixed." When Representative Swift questioned Chairman Fowler about the alarming speed of the FCC's proceeding, Chairman Fowler responded that "it's been two years since those applications were filed, and it'll be another year or eighteen months before any final authorizations. I don't think there is any rush."¹¹⁰

In mid-March, hearings were held by the House Appropriations Subcommittee to consider the FCC budget. The issue of separate international satellite

¹⁰⁸51 TELECOM. REP. 20 (March 11, 1985).

¹⁰⁹See 51 TELECOM. REP. 24-25 (Apr. 8, 1985).

¹¹⁰NTIA, *State Officials Assure House Panel Reagan Administration Won't Slack on Promises to Prevent Harm to INTELSAT; Fowler Vows FCC Proceeding Will Allow Full Public Comment*, 51 TELECOM. REP. 24-25 (Apr. 8, 1985).

systems was raised by Representative Bob Carr (D.-Michigan). Representative Carr strongly criticized the FCC for not raising in its inquiry on separate systems the matter of excess capacity which would result from failure of North Atlantic traffic to meet FCC forecasts. He also expressed his opinion that the Rulemaking Proceeding should follow the FCC Notice of Inquiry. Chairman Fowler, however, defended the inquiry as comprehensive. He further stated that in his view competition was healthy and compatible with the role of INTELSAT.¹¹¹

Throughout the period of these hearings, members of Congress also continued to express their views individually. Energy and Commerce Committee Chairman Dingell submitted a letter to the FCC Chairman suggesting that the FCC Notice of Inquiry and Proposed Rulemaking be clarified to indicate in detail exactly how the Presidential Determination would be implemented. The letter asked, "Has the Commission, in fact, adopted the broad Executive Branch recommendation as its proposed rule? If not, does the Commission intend to propose a rule setting forth its own policy formulation, and will the public be afforded an opportunity to comment on the resolution of important policy issues embodied in the Commission's proposal?"¹¹²

Also, in February, Senator Goldwater wrote to Chairman Fowler to encourage the FCC to accelerate its administrative decision-making on separate systems because of the uncertainty in the marketplace that might be caused by further delays. The Senator added that the issues involved had already "undergone unprecedented scrutiny."¹¹³

Chairman Wirth of the House Telecommunications Subcommittee voiced his concern over the FCC's Notice of Inquiry and Proposed Rulemaking. The Congressman characterized the Notice as "unclear" and stated that it ignored recommendations of the President and the Executive Branch and started *de novo*. He further stated that the FCC should neither be in the position of making foreign policy nor of interpreting what amounted to American treaty obligations. He stated, "Moreover, since it is the State Department that must coordinate the proposed alternative systems with INTELSAT, any excesses on the part of the FCC will not become U.S. policy." He added that, to the extent that the areas of responsibility between the State and Commerce Departments continued to cause problems, the Telecommunications Subcommittee would be forced to legislate an appropriate delineation.¹¹⁴

¹¹¹See *House Panel Hears of FCC Fee Project, Asks About International Satellite Competition* 51 TELECOM. REP. 25-26 (Apr. 8, 1985).

¹¹²51 TELECOM. REP. 24 (Feb. 25, 1985).

¹¹³*Id.*

¹¹⁴See *Wirth Says FCC Notices on Separate Systems 'Unclear,' Suggests 'De Novo' Review*. 51 TELECOM. REP. 21-22 (March 11, 1985).

Congress Moves Towards Legislation

As a result of these several events, the growing Congressional interest in the subject was translated into legislative action.

First, proposed legislation was adopted in the House of Representatives which would require the U.S. Secretary of State to take certain actions in connection with the establishment of separate systems. The full text of such action is set forth in the *Congressional Record* on May 9, 1985, commencing at page H3053. Two points in the legislation are particularly worth noting: (i) there was a requirement that the U.S. actively support an amendment to Article V(d) of the INTELSAT Agreement to give INTELSAT pricing flexibility to vary its charges on a per-route basis so as to be able to compete with separate systems; and (ii) before the U.S. could proceed to establish a separate system which had received an unfavorable finding from the Assembly of Parties under Article XIV(d), the President of the United States would have to determine that it was in the U.S. national interest nevertheless to proceed, and the Secretary of State would have to send a detailed report, including a plan to minimize adverse impacts on INTELSAT, after which there would be a 60-day waiting period during which the Congress would have an opportunity to take action.¹¹⁵

Second, the Appropriations Committee of the House of Representatives adopted report language to a 1985 supplemental appropriations bill which directed the FCC to take certain actions.¹¹⁶ One noteworthy provision precluded the FCC from issuing a construction permit or final authorization for a separate system until the Article XIV(d) process had been completed.¹¹⁷

Neither of the above House actions constituted final legislative action. The proposed legislation, the State Department Authorization Bill which was adopted by the House of Representatives, had to be addressed by the Senate. The second item had to be acted upon by the full House of Representatives and addressed by the Senate. Once passed by the Senate, differences between the House and Senate versions of both items had to be worked out in House/Senate conferences.

¹¹⁵State Department Authorization Bill (HR 2068) Section 123, CONG. REC. H3053 (May 9, 1985). See subparagraphs 123(c) Amendments of INTELSAT Agreement and 123(d) Congressional Consultation. See also INTELSAT document BG-63-40, June 5, 1985.

¹¹⁶See House of Representatives Report 99-142, at p. 27.

¹¹⁷*Supplemental Appropriations Bill, 1985, Report of the Committee on Appropriations, House of Representatives 99th Cong., 1st Sess., Rept. 99-142, May 22, 1985, at 27.*

FCC Proceeds with Docket 84-1299 on Separate Systems and Reaches a Decision

On April 1, 1985, numerous parties filed comments in the FCC separate systems docket 84-1299. A majority of the comments favored Commission authorization of alternative systems along the general lines recommended by the Executive Branch. A minority of the comments opposed separate systems, arguing that INTELSAT would have to raise rates to countries on thin traffic routes to compete with alternative systems. A number of parties also expressed concern about the enforceability of the Administration's interconnection restriction.

During proceedings at the FCC, 51 letters from 41 countries protesting the U.S. action were received at the State Department. Despite this, the State Department maintained that certain INTELSAT member nations had adopted a "wait and see" attitude.¹¹⁸

In June 1985, reply comments were filed in the Commission's separate systems proceeding. COMSAT stated emphatically that the White House determination on separate satellite systems was at most a starting point and that a series of explicitly detailed rules should be adopted in the event that separate systems were authorized. COMSAT also argued that all interested parties should have an opportunity to comment on the specific rules or guidelines adopted by the Commission.¹¹⁹ According to a paper submitted to the Sixty-third meeting of INTELSAT's Board of Governors in June 1985,¹²⁰ INTELSAT Executive Organ staff analyzed the comments filed in the separate systems proceeding and found the comments which supported the separate systems to be "largely self-serving, factually inaccurate or logically flawed." The INTELSAT analysis stated that "perhaps the most compelling deficiency of the present FCC proceeding is its failure to suggest how proposed changes in the current system in which large international users support the public-switched networks and earth station systems" should be negotiated, either with the sovereigns directly participating in a new system, or with other sovereigns whose cost of supporting the INTELSAT system would be affected. In addition, INTELSAT noted that ninety letters concerning the separate satellite issue had been written to the Commission by Signatories.

Claiming that a "limited injection of satellite facilities competition into international telecommunications should bring to the world some of the dynamism that characterizes the U.S. domestic data processing/telecommunications sector," the FCC on July 25, 1985, authorized three of six pending applications for private international communications satellite systems, citing the Commu-

¹¹⁸51 TELECOM. REP. 26 (April 8, 1985).

¹¹⁹Reply Comments of Communications Satellite Corporation before the FCC in CC Docket 84-1299, June 5, 1985.

¹²⁰INTELSAT document BG-63-35, May 31, 1985.

nications Act of 1934 public interest standard.¹²¹ The Commission stated that the U.S. public would be served by alternative systems that could provide "currently unavailable service, technological innovation and service development, improve network efficiencies, reduce user costs, create new business and trade opportunities and contribute to greater cultural exchange." The Commission also concluded that application of the Executive Branch service restrictions to separate systems would provide reasonable assurances that INTELSAT would not suffer significant economic harm. To enforce limitations protecting INTELSAT, the FCC¹²² determined that:

- all separate systems would be restricted to the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks, except for emergency restoration service;
- the "no-interconnection" and the "sale or long-term lease" restrictions would apply to all levels of resellers and users of separate system facilities, as well as to separate system operators; and
- licensees would be required to enforce the restrictions through contractual and other means, at risk of license loss or other appropriate sanctions, and resellers would be required to enforce these restrictions on their customers as well.

The FCC also established more detailed guidelines, consistent with the Presidential Determination, for the operation of separate satellite systems, including determinations that:

- there was no need to establish a specific minimum unit of space segment capacity which a separate system may provide, so long as the capacity was provided on a sale or long-term lease basis;
- the minimum lease period for a "long-term lease" of capacity would be one year;
- separate system operators would be prohibited from operating as

¹²¹See, FCC NEWS, July 25, 1985 "Commission Supports Presidential Determination that Alternative International Satellite Systems are in the National Interest (CC Docket 84-1299)." See also 50 TELECOM. REP. 5 (July 20, 1985). The Report and Order was not released until September 3, 1985, FCC 85-399.

¹²²Although the item was adopted by the Commission at an open meeting on July 25th by a majority vote, Commissioners Henry Rivera and James Quello withheld their votes pending acceptable editorial revisions concerning enforcement of the service restrictions to be applied to the proposed systems. Attached to the order released on September 3 were separate statements issued by Commissioner Rivera and Commissioner Quello. Commissioner Rivera restated his concern that enforceability of the proposed restrictions is critical if significant economic harm to INTELSAT is to be avoided and stated that he is satisfied with the enforcement provisions which are now significantly revised and strengthened. Commissioner Quello similarly expressed concern about the adequacy of the restrictions, but expressed his willingness to concur in the decision because of the strengthened enforcement provisions.

common carriers but they could provide space segment capacity to common carriers and enhanced service providers who could resell such capacity for communications services not interconnected with any public-switched message network;

- there was no basis to establish a "sunset" date for the Executive Branch service restrictions; and

- applicants could not begin construction until they had demonstrated certain financial qualifications by showing: 1) the estimated costs of proposed construction and launch and any other initial expenses for the proposed stations; 2) the estimated operating expenses for one year after launch; and 3) the applicant's current financial ability to meet the costs of construction and launch and operating expenses for one year after launch.

Because applicants would have to undergo the INTELSAT coordination process, the status of the application, pending this process, would be uncertain and the applicant would be unlikely to receive financial backing until this process was completed. A two-stage approach to determining financial qualifications was thus adopted. In *stage 1*, the FCC would issue a conditional construction permit if the applicant met specific minimal financial qualifications. The applicant would have to show: 1) estimated costs of expenses for one year after launch; 2) estimated operating sources of funding the system for one year—including identities of financiers and letters of financial interests. This conditional construction permit would *not* allow the applicant to begin construction but would set forth approved technical parameters for technical coordination with INTELSAT. (Para. 235) The FCC would issue an order permitting construction only after *stage 2* requirements were met. The applicant would have to show its current financial ability to meet the costs of construction and launch, along with operating expenses for one year after launch. This would include submitting: (1) a balance sheet verified by an affidavit which demonstrated applicant's financial ability for the most recent fiscal year, (2) documentation of any financial commitments reflected in the balance sheet, and (3) an exhibit demonstrating applicant's ability to meet *stage 2* requirements. Newly established entities having no balance sheet would have to submit an exhibit indicating estimated anticipated income plus other information requested by the FCC—established lines of credit, etc.

The Commission said that, consistent with the Executive Branch restrictions, it would not issue a license permitting any separate system applicant to begin operating its proposed system until it had been informed by the Department of State that the United States had fulfilled its INTELSAT Agreement obligations.¹²³

¹²³Applicants must meet the financial requirements no later than 60 days after the FCC receives the State Department's letter stating that the U.S. has fulfilled its obligations under the INTELSAT charter and may proceed with final authorization. However, the order states that the FCC will permit otherwise qualified applicants to begin construction prior to receipt of the State Department's letter if the applicant can satisfy the second state requirements prior to that time. (§ 235) Licenses permitting launch or

Authorizations would be conditioned upon one or more foreign entities having authorized use of the proposed system and having entered into consultation with the United States under Article XIV(d) of the INTELSAT Agreement. (Para. 36) This would be a precondition not to granting a conditional construction permit or construction permit, but, rather, only to issuing the final license permitting launch and operation. (Note that the order rejected International Relay Inc.'s proposal that the FCC require applicants to have operating agreements as a precondition for licensing. (Para. 128)) Licenses permitting launch or operation would not be issued until the Department of State informed the FCC that the U.S. had fulfilled its international obligations. (Para. 36) As a condition in the authorization orders, operators would be required to file with the FCC any operating agreements they entered into with foreign entities. The FCC would reconsider the authorization of systems entering agreements with satellite procurement restrictions. (Para. 215)

The FCC reached its own conclusions regarding restrictions to be applied to the proposed systems. As was the case with the Executive Branch determination, separate systems would be prohibited from interconnecting with public-switched networks. Message Telephone Service (MTS) is a switched service and separate systems could not connect with any MTS switched network, whether provided by AT&T or any non-dominant carrier or new entrant such as MCI, GTE Sprint, and SBS. Telex, TWX telegraph and teletext services are also switched, and interconnection with international relay carrier networks to access those services was banned as was interconnection with carrier switched networks providing facsimile or low/high speed switched data services and videoconferencing and associated audio. (Para. 114) These restrictions prohibiting interconnection were intended to be applied to communications which originated in a foreign country and terminated in the United States, as well as those communications which originated in the United States and terminated in a foreign country. Foreign entities were expected to enforce such restrictions.

In its order, the FCC addressed, among other provisions, the enforcement of these restrictions by requiring the following:

- Separate system operators must place the "no interconnection" restriction in all lease agreements for space segment capacity and all sales contracts for purchase of transponders, (Para. 133).
- All operating agreements with foreign authorities must contain language requiring both parties to take necessary measures to enforce the "no interconnection" restriction, (Para. 133).
- Users interconnecting separate system facilities to a PBX or similar equipment must configure such equipment by either hardware design or software features to block on-demand connections with public-switched message networks. Each user also must file with the FCC,

operation will not be issued until the State Department letter is received. Once either the condition permit or order permitting construction is issued, the applicant bears all risk and liabilities in commencing construction pending final issuance of launch authority and license to begin operation. (§ 236).

prior to actual use of separate system facilities, a written sworn certification by a corporate official:

(1) stating that it understands the "no-interconnection" restriction placed on all levels of use of separate system facilities and is aware of the sanctions for non-compliance; (2) giving assurances that it will comply with the restriction; (3) indicating that all concerned employees will be continually advised of the restrictions and that it will enforce strict compliance by its employees; (4) describing the technical measures to be employed to prevent "on-demand" interconnection with the public switched-message network; and (5) attesting that these technical measures will not be changed or overridden for any reason.

Users violating these provisions would be subject to criminal sanctions under Title 18 of the U.S. Code, (Para. 134).

- Users seeking to resell capacity on a common carrier basis must first obtain from the FCC authorizations under Section 214 of the Communications Act, which will be conditioned on compliance with the restrictions, and will require carrier tariffs to impose the restrictions on customer use of the facilities and services offered. Carrier violators will lose their Section 214 authority, and users violating tariff restrictions will be subject to loss of service, (Para. 134).

- Under the Communications Act, parties believing carriers are violating the restrictions may file complaints with the FCC under Section 208; complaints regarding non-carrier violations may be filed under Section 4(i) and 402.

- The FCC will also use civil and criminal remedies available under Title 5 of the Communications Act, including monetary fines and seizure of property for willing and knowing violators, (Para. 137).

The Commission granted conditional authorizations to International Satellite, Inc., PanAmerican Satellite Corporation and RCA American Communications, Inc. Based on a preliminary finding of failure to meet technical standards, the Commission deferred action on the applications of Orion Satellite Corporation and Cygnus Satellite Corporation, giving them 45 days to file documents addressing Commission concerns about their technical submissions.¹²⁴ The Commission indicated that Orion and Cygnus would be dismissed at that time if they failed to resolve these concerns.

Action on a sixth application, filed by FINANSAT,¹²⁵ was to be taken at a

¹²⁴The Orion application was granted on September 5, 1985. Memorandum Opinion Order and Authorization in the Matter of the Application of Orion Satellite Corporation. File No. CSS-83-002-P, 6871, released September 6, 1985.

¹²⁵On May 17, 1985, Financial Satellite Corporation (FINANSAT) filed an application with the FCC for authorization to construct, launch and operate a new international satellite system. FINANSAT was the sixth such applicant to request such authorization. FINANSAT proposed to provide on a non-common carrier basis customized point-to-point data communications services using two in-orbit C-band satellites and one ground spare. FINANSAT requested an Atlantic orbital slot at 47

subsequent date.

Congress Enacts Legislation

The State Department Authorization Bill (H.R.2068) was approved by the U.S. Senate on July 31, 1985, and by the U.S. House of Representatives on August 1, 1985. It was signed into law by President Reagan on August 16, 1985, as Public Law No. 99-93. The Authorization Bill contained an amendment affecting INTELSAT which adopted the major provisions of the House legislation. In addition, the Bill recognized and endorsed the Presidential policy on limited international satellite systems apart from INTELSAT and stated:¹²⁶

Sec. 146. INTELSAT.

(a) Policy.—The Congress declares that it is the policy of the United States—

(1) as a party to the International Telecommunications Satellite Organization (hereafter in this section referred to as INTELSAT), to foster and support the global commercial communications satellite system owned and operated by INTELSAT;

(2) to make available to consumers a variety of communications satellite services utilizing the space segment facilities of INTELSAT and any additional such facilities which are found to be in the national interest and which—

(A) are technically compatible with the use of the radio frequency spectrum and orbital space by the existing or planned INTELSAT space segment, and

(B) avoid significant economic harm to the global system of INTELSAT; and

(3) to authorize use and operation of any additional space segment facilities only if the obligations of the United States under article XIV(d) of the INTELSAT Agreement have been met.

degrees West Longitude (W.L.) and one Pacific orbital slot at 178 degrees W.L. These orbital locations would allow full interconnectivity between the regions covered by each satellite, from a central point in the United States. The Atlantic satellite would provide coverage to the continental United States, Canada, Western Europe, and the southeast portion of South America, while the Pacific satellite would provide coverage to the Far East, Australia, Mexico and the western portion of the United States. Each satellite would carry 24 transponders which would be offered for sale or long-term lease to selected customers such as large financial institutions. On June 6, 1985, the FCC ruled that until further notice no further applications for separate satellite systems would be accepted. Memorandum Opinion and Order in the Matter of Processing of Pending Applications for Space Stations to Provide International Communications Service (FCC 85-296) (Released June 6, 1985).

¹²⁶Foreign Relations Authorization Act, Fiscal Years 1986 and 1987, Pub. L. No. 99-93, §146, 99 Stat. 405, 425-26 (1985).

(b) Preconditions for INTELSAT Consultation.—Before consultation with INTELSAT for purposes of coordination of any separate international telecommunications satellite system under article XIV(d) of the INTELSAT Agreement, the Secretary of State shall—

(1) in coordination with the Secretary of Commerce, ensure that any proposed separate international satellite telecommunications system comply with the Executive Branch conditions established pursuant to the Presidential Determination No. 85-2; and

(2) ensure that one or more foreign authorities have authorized the use of such system consistent with such conditions.

(c) Amendment of INTELSAT Agreement.—

(1) The Secretary of State shall consult with the United States signatory to INTELSAT and the Secretary of Commerce regarding the appropriate scope and character of a modification to article V(d) of the INTELSAT Agreement which would permit INTELSAT to establish cost-based rates for individual traffic routes, as exceptional circumstances warrant, paying particular attention to the need for avoiding significant economic harm to the global system of INTELSAT as well as United States national and foreign policy interests.

(2)(A) To ensure that rates established by INTELSAT for such routes are cost-based, the Secretary of State, in consultation with the Secretary of Commerce and the Chairman of the Federal Communications Commission, shall instruct the United States signatory to INTELSAT to ensure that sufficient documentation, including documentation regarding revenues and costs, is provided by INTELSAT so as to verify that such rates are in fact cost-based.

(B) To the maximum extent possible, such documentation will be made available to interested parties on a timely basis.

(3) Pursuant to the consultation under paragraph (1) and taking the steps prescribed in paragraph (2) to provide documentation, the United States shall support an appropriate modification to article V(d) of the INTELSAT Agreement to accomplish the purpose described in paragraph (1).

(d) Congressional Consultation.—In the event that, after United States consultation with INTELSAT for the purposes of coordination under article XIV(d) of the INTELSAT Agreement for the establishment of a separate international telecommunications satellite system, and the President determines to pursue the establishment of a separate system, the Secretary of State, after consultation with the Secretary of Commerce, shall submit to the Congress a detailed report which shall set forth—

(1) the foreign policy reasons for the President's determination, and

(2) a plan for minimizing any negative effects of the President's action on INTELSAT and on United States foreign policy interests.

(e) Notification to Federal Communications Commission.—In the

event the Secretary of State submits a report under subsection (d), the Secretary, 60 calendar days after the receipt by the Congress of such report, shall notify the Federal Communications Commission as to whether the United States obligations under article XIV(d) of the INTELSAT Agreement have been met.

(f) Implementation.—In implementing the provisions of this section, the Secretary of State shall act in accordance with Executive Order 12046.

(g) Definition.—For purposes of this section, the term "separate international telecommunications satellite system" or "separate system" means a system of one or more telecommunications satellites separate from the INTELSAT space segment which is established to provide international telecommunications services between points within the United States and points outside the United States, except that such term shall not include any satellite or system of satellites established—

(1) primarily for domestic telecommunications purposes and which incidentally provides services on an ancillary basis to points outside the jurisdiction of the United States but within the western hemisphere, or

(2) solely for unique governmental purposes.

The 1985 Supplemental Appropriations Bill (H.R.2577) was passed by the U.S. House of Representatives on July 31, 1985, and by the Senate on August 1. President Reagan signed it into law on August 15, 1985, as Public Law No. 99-88. Of course, to the extent that the Appropriations Bill language and report are inconsistent with the above-described State Department Authorization Bill (H.R. 2068), then the Authorization Bill, which has the full status of law, governs. The Supplemental Appropriations Bill for the fiscal year ending September 30, 1985, includes a Conference Report and a Statement of Managers of H.R. 2577. These Statements resulted from an effort by the House and Senate Conferees to reconcile differences between the Report language approved by the House and the Senate. It must be noted that the Senate Report language was generally less definitive than the House and contradicted the House version by instructing the FCC to issue construction permits immediately.

The Conference Report and Statement of Managers is as follows:¹²⁷

International Telecommunications
Satellite Service

The House and Senate reports were not in agreement regarding the issue of international telecommunications satellite service. Since both bodies acted, but prior to the completion of the Conference, the FCC acted on the pending applications. (Three Commissioners voted

¹²⁷Conference Report including the Statement of Managers on the Bill H.R. 2577 making supplemental appropriations for the Fiscal Year ending September 30, 1985, H.R. REP. No. 99-236, 99th Cong., 1st Sess. 16 (July 2, 1985).

in favor, and two withheld their vote.) Some members of Congress are disturbed by this. The conferees strongly believe that the following agreed-upon language provides essential guidance to the Commission and the Executive Branch. It should be followed.

Regarding the provision of international telecommunications satellite service, the conferees strongly believe that the Executive Branch or the FCC, in any action, shall endeavor to avoid significant economic harm to INTELSAT.

In addition, with regard to this issue, the conferees agree on the following:

1. Presidential Determination No. 85-2 properly balances the U.S. commitment to INTELSAT with our commitment to develop a competitive international telecommunications marketplace. In addition, the Executive Branch and the FCC shall fully implement and enforce the criteria in that Presidential Determination. Moreover, the FCC shall not award construction permits without adopting appropriate measures and guidelines to enforce the Presidential Determination.

2. The FCC, in considering applications for alternative international satellite systems, shall be neutral and shall not show a predilection or bias to any application.

3. The U.S. should support the continued provision of telephone service by INTELSAT to developing countries at affordable rates.

4. The U.S. should support INTELSAT's ability to compete fully and fairly in all new international telecommunications services, including supporting INTELSAT's ability to price competitively and fairly on services not provided before August 1, 1985.

More specifically, if the President has not found the modification to Article V(d) of the INTELSAT Agreement to be not in the national interest, the U.S. shall support such modification so that INTELSAT may price competitively and fairly, provided that INTELSAT has adopted measures to ensure prices are cost-based and not predatory, including the release of information on revenues, costs, and allocation of such costs.

5. In the event the Secretary of State decides to proceed after an unfavorable consultation pursuant to the INTELSAT Agreement or in the event the President decides to alter the Presidential Determination, a tentative decision along with the rationale for such decision shall be sent to the Congress and a final decision shall not be made until the Congress has had 45 calendar days to review the tentative decision and the accompanying rationale.

Representative Neal Smith (D.-Iowa), Chairman of the Appropriations Subcommittee on State, Commerce, the Judiciary and Related Agencies, and cosponsor of the Conference Report and Statement of Managers, during the House floor consideration of the Conference Report, made the following statement:¹²⁸

¹²⁸Statement of Chairman Smith during House floor consideration of the Conference Report on Bill H.R. 2577 making supplemental appropriations for the fiscal year ending September 30, 1985, House Cong. Rec. pp. H6906-6907 (July 31, 1985).

I want to comment on a provision in the Statement of the Managers on INTELSAT. The INTELSAT language represents a compromise in the House and Senate reports dealing with that matter. In November of last year, the President determined that the authorization of telecommunications systems separate from INTELSAT was in the national interest so long as our legal obligations were met and, in particular, so long as the systems were sufficiently limited in their operation that they could not cause significant economic harm to INTELSAT's global telecommunications network.

Language was inserted in the Appropriations Committee report on the House side in order to emphasize the Committee's strong concern that the FCC faithfully and effectively enforce the safeguards for INTELSAT specified by the President, and in the Conference Report, there is language to that effect.

Now, last week, just prior to the completion of the Conference Committee work on this issue, the FCC acted to conditionally grant three of the six applications to create private, separate satellite systems. Two Commissioners withheld their votes out of concern that the majority had failed to impose safeguards sufficient to carry out the President's injunction against causing significant economic harm to INTELSAT. The basic purpose of the language in the Statement of the Managers is once again to underscore the fact that the conferees from both the House and Senate strongly believe that "the action by the FCC as well as the Executive Branch, relating to the international telecommunications satellite issue must adhere to the United States' obligation to 'avoid significant economic harm to INTELSAT'".

As explained in the Executive Branch White Paper released earlier this year to support the President's decision to recommend authorization of separate systems, only with safeguards for preserving INTELSAT, "The United States placed a leading role in the creation of INTELSAT in order to further political, economic, and security objectives (and it) became a centerpiece of overall U.S. space and foreign policy programs."

In order to preclude "unrestricted entry" by private satellite systems, which "could ultimately undermine the economic integrity of this important international enterprise," the White Paper explained, the President specified that the new private systems must be restricted to providing private "customized" services, as distinguished from general, public, "switched" general telecommunications service. "Customized", the White Paper went on to specify, meant "intracorporate networks and television transmission."

However, although the FCC has not yet made clear the precise terms of its decision, under the order that two Commissioners were not prepared to accept last week, it appears it may be permissible to link combinations of corporate networks or to combine numerous corporations in a single network. Such a provision in the President's safeguards would threaten to divert from INTELSAT major portions of the voice and data revenues between highly developed countries; these revenues are essential for the support of INTELSAT's global mission.

In short, under such a provision, the Commission's decision—still

preliminary and tentative—would permit the new systems to engage in skimming.

The Statement of Managers on this bill underscore Congress' concern with any decision that would permit such evasion of the President's purpose and expect that the U.S. support, in practice as well as in its formal statements, support "the continued provision of telephone service [as well as other services] by INTELSAT to developing countries at affordable rates."

Similarly, the managers emphasized, that the United States must support measures necessary to enable INTELSAT to compete "fully and fairly," especially on new telecommunications services, and in regard to any services—old or new—for which competitive challenges to its provision of services appear on this point, the managers' language refers specifically to the importance of modifying Article V(d) of INTELSAT's charter, to enable it to price on a route-by-route basis where necessary to meet competition, as it has never had to do in the past.

I do want to clarify one thing about this latter point. In referring to the need for INTELSAT to have "adopted measures to ensure prices are cost-based and not predatory," the managers of course did not imply any view that INTELSAT's prices are currently not cost-based and fair. As the Executive Branch White Paper observed on this subject, "[W]e believe that concerns about possible predatory pricing (by INTELSAT) are premature. The economic and legal literature provides very little evidence that predatory pricing has ever occurred."

Similarly, the language should not be misconstrued to support any conclusion that any new measures are needed, to ensure that INTELSAT's prices are cost-based.

And in the same vein, in referring to the "release" of information showing the cost basis of INTELSAT's rates, the report does not contemplate any departure from current methods for obtaining such information. The managers are aware that COMSAT, the U.S. signatory to INTELSAT promptly makes available to the FCC all information relating to INTELSAT operations, including services, charges, and costs, and that dissemination within the United States of such information is governed by a memorandum of understanding between the Departments of State and Commerce, the FCC, and COMSAT itself.

In addition, the managers' statement underscores the Congress' recognition of the absolute and fundamental necessity for the safeguards in the President's determination of last November in assuring the avoidance of significant economic harm to INTELSAT. As stated by Under Secretary of State William Schneider in testimony given in April of this year before the Subcommittee on Telecommunications of the Committee on Energy and Commerce, in which he rejected suggestions that the President's determination might only be a short-term protection.

This anxiety has been raised. But the intention is not to allow competitors at any time in the future to go into the public switched networks, but to instead focus on new applications.

The Statement of Managers provides that, should this Executive

Branch "intention" ever be changed, "a tentative decision along with the rationale for such decision shall be sent to the Congress and a final decision shall not be made until the Congress has had 45 days to review the tentative decision and the accompanying rationale."

Finally, the statement provides in the event there is an unfavorable coordination pursuant to the INTELSAT agreement and the Secretary of State decides to proceed that the Secretary shall provide the Congress with a report outlining the rationale for his decision in order to provide the Congress with a reasonable opportunity to decide whether to allow his recommendation to be implemented.

The Statement of Managers outlines a policy of protecting INTELSAT in its present mission while assuring that any new service not now performed by INTELSAT will be subject to competition and that procedures will not be followed and decisions will not be made which exclude a full opportunity for any applicant, including INTELSAT to bid for such service.

On the other side of the Congress, Senator Hollings made the following statement:¹²⁹

MR. HOLLINGS. Mr. President, I had no intention of offering a statement on the report language the conferees agreed upon in regard to international telecommunications satellite service, since I believed the language was clear on its face. I still believe the language is clear, however, the House Manager inserted a statement in yesterday's House debate that tries to reinterpret this language. This statement of the House Manager obviously reflects his opinions alone and not those agreed upon in the conference. The various Executive Branch and independent agencies directed to act in the report language shall follow the plain meaning of that language.

More specifically, let me make the following points in response to the House Manager's statement:

First. The managers reached no conclusion that the decision of the FCC last week did not fully enforce the conditions in Presidential Determination 85-2.

Second. The managers did not conclude that INTELSAT does not today have the ability to price flexibly.

Third. The managers only agreed to "support INTELSAT's ability to compete fully and fairly in all new international telecommunications satellite services." The managers did not conclude, as the House Manager asserts, that this support extends to "any service—old or new—for which competitive challenges to its-INTELSAT's—provision of services appear."

Fourth. In conditioning the support of the United States to a modification of article 5(d) of the INTELSAT Agreement, the managers agreed that INTELSAT had to have in place "measures to ensure

¹²⁹Statement of Senator Hollings during Senate floor consideration of Bill H.R. 2577 making supplemental appropriations, Sen. Cong. Rec. pp. S10634-10635 (August 1, 1985).

prices are cost-based and not predatory, including the release of information on revenues, costs, and the allocation of costs." The managers in no way agreed that INTELSAT already had those measures in place. In fact, if we believed that INTELSAT already had such measures in place, why did we even refer to a INTELSAT having to adopt such measures and release such information? It is clear that the managers believed just the contrary to the House manager's statement. INTELSAT does not now have such measures in place. The type of information INTELSAT releases is not sufficient for the United States to determine that prices are not predatory. The President and the executive branch are to make sure these measures are adopted prior to any support for a modification to Article V(d).

Fifth. The managers believe the current Presidential Determination is properly balanced. There was no determination by the managers that the conditions in this determination are so "absolute and fundamental" that they can never be altered. What the managers agreed to is that prior to any change the President must submit the tentative decision to Congress for 45 days review.

As I stated at the outset, the report language is clear on its face, and the comments of the House Manager are his alone.

The Statement of Managers most notably urged the U.S. Executive Branch or the FCC, in any action, to endeavor to avoid significant economic harm to INTELSAT. It also stated that the criteria in the Presidential Determination should be fully implemented and enforced. Further, it stated that the FCC could not award construction permits to the authorized separate systems applicants without adopting appropriate measures and guidelines to enforce the Presidential Determination. However, once construction permits were issued, no further requirements need be met before actual construction began.

Conclusion

Undoubtedly, even observers from a distance would view with fascination the events chronicled in this article as part of the formulation of national telecommunications and foreign policy. These events are made even more interesting by reason of the fact that, in the pursuit of deregulatory and competitive policies, the Government of the United States is reversing its long-held views with respect to the role and place of INTELSAT in the international scene. The processes and procedures which have led to the conclusions described above are themselves most interesting. One can see the division of authority and responsibility in the field of telecommunications in the structure of the U.S. Government most dramatically in this vignette. Not only is there no focal point in the Executive Branch of U.S. Government for policy formulation in telecommunications—as there is in most other governments among the family of nations—but there is a seemingly independent regulatory agency that is called upon to make a wide range of judgments, including those with sensitive foreign relations implications. One can see the tension between those committed to deregulatory objectives and those concerned with foreign relations and the consequences of tampering with a successful international institution such

as INTELSAT, which has reflected so favorably on U.S. foreign policy leadership since 1964. These differing views have been reflected primarily in Congress and in the actions of the Congress; surprisingly, there has been less of a foreign relations concern to be found among such agencies as the Department of State, the Department of Commerce, and the FCC.

At this writing, the final chapters have not been written on this subject. None of the various applicants has yet announced that it has a foreign correspondent. Although the FCC did not respect this traditional requirement before conditionally granting certain licenses, final FCC authorization for the separate systems to launch and operate would require one or more foreign authorities to authorize use of each system and enter into consultation procedures under Article XIV(d). Article XIV(d) proceedings cannot begin under the INTELSAT Agreement until two Parties commence the process.

In all likelihood, the separate systems applicants are also in the process of endeavoring to obtain appropriate financial support. As indicated earlier, the applicants will have to satisfy FCC requirements to demonstrate financial capabilities. While these may not themselves be onerous, obtaining adequate financing may not be easy. Satellite communications is still far from a risk-free activity. It can be expected that potential sources of financing will require that potential system operators obtain, at a minimum, launch and initial operating insurance. Prior to recent failures, premiums were running at rates in excess of 20%; with recent claims totalling over \$230 million in September 1985 alone, it becomes very doubtful if insurance can be obtained, leaving organizations to self-insure.¹³⁰

While the combined actions of the Congress and the President, following the FCC decision, appear to constitute efforts at balancing the introduction of possible separate systems with the protection of INTELSAT, the reaction of INTELSAT members has yet to be heard. The INTELSAT Governments (Parties) and telecommunications entities (Signatories) have steadfastly opposed any change in the policy embodied in the INTELSAT Agreements which provides for the establishment and operation of a single global communications satellite system. These member Governments and telecommunications authorities have expressed both outright opposition to the authorization of separate international communications satellite systems apart from INTELSAT, and serious reservations about the change in U.S. policy reflected in the November

¹³⁰See Dye, *Insurance Premiums Likely to Soar, Satellite Failures Stagger Communications Industry*, Los Angeles Times, Sept. 17, 1985, p. 1. The article refers to the \$149 million in insurance claims as a result of satellites lost due to the destruction on September 11, 1985 of an Ariane launch vehicle with an American domestic satellite and a Eutelsat satellite aboard and the announcement on September 16, 1985 by Hughes Aircraft Co. of the total loss of the Eutelsat satellite as a functioning satellite and insurance claims of some \$85 million. The article quotes James Barnett, President of International Technology Underwriters, and a long-time industry expert as saying (p. 21) "...the events of the past few days will probably force many of the underwriters out of the business" since \$500 million more than collected in premiums has been paid since 1968.

28, 1984 Presidential Determination. They have communicated these reservations both directly to appropriate agencies of the United States Government and through the passage of unanimous resolutions by the Assembly of Parties and the Meeting of Signatories. It is to be expected that these Parties and Signatories will continue to state their views and concerns regarding the impact on INTELSAT of potential separate systems in whatever manner they deem appropriate. Undoubtedly, the question of United States policy will be addressed at the Tenth Meeting of the INTELSAT Assembly of Parties which convenes in Washington on October 7, 1985. Amendment of Article V(d) of the Agreement is also before the Assembly, having been proposed by three nations from the developing world. In addition, the question of developing adequate criteria and procedures under Article XIV(d) will be considered by the Assembly, with proposals from two developing countries along with, in all likelihood, some materials to be submitted by the Board of Governors.

Moreover, the internal U.S. processes have yet to be exhausted with respect to the FCC decision and the Executive Branch implementation of Congressional direction. The latter would appear to be a straightforward proposition, with the Department of State indicating its views with respect to the possible amendment of Article V(d), and at the appropriate time initiating with another Party an Article XIV(d) consultation with the INTELSAT Assembly.

With respect to the former, i.e., petitions for reconsideration of or appeals of the FCC Order, it is too soon and too complex a matter to make any predictions. It should be noted, however, that COMSAT has indicated, in a press release commenting on the July 25 FCC action, that the "Commission actions raise questions of procedure and due process but, more fundamentally, that the Commission may have exceeded its authority under existing legislation by granting interim construction permits without adequately defining and implementing the President's policy determination." In addition, International Relay, Inc. (IRI) has raised some fundamental questions in its reply comments filed at the FCC in the separate satellite systems proceeding. It argued that the FCC lacks jurisdiction under either the Communications Act or the Satellite Act to authorize and license the establishment and operation of separate satellite systems. Accordingly, it stated that, should the FCC conclude that such systems are in the public interest, the proper FCC action would be to request Congressional authorization for such licensing, and hold the pending applications in abeyance in the meantime. Of course, as noted earlier, this was not the course followed by the FCC. IRI also refuted the position of other comments that the President and the FCC have authority to authorize such systems. It stated that, in enacting the Satellite Act, "Congress established a comprehensive plan for U.S. participation in international satellite communications systems and ousted the FCC from any pre-existing independent role in authorizing international satellite systems." Furthermore, IRI stated that "the power given to the President to find that alternative systems are required to serve 'unique governmental needs' or as 'otherwise. . . in the national interest' would not permit authorization of the systems now being proposed." IRI pointed out that the legislative history of the Act makes it clear that "unique governmental

needs" referred to reconnaissance satellites and national security interests, and "otherwise required in the national security interest" applied to governmental uses of a non-sensitive nature, such as meteorological services. Furthermore, IRI stated that the legislative history plainly shows that new satellites established to meet these special purposes would be *government-owned* satellites. Thus, IRI strenuously argued that neither the FCC nor the President has authority to authorize privately-owned international satellite systems to provide service to private users. IRI concluded that the FCC's proposal to license separate satellite systems is flagrantly at odds with the Congressional plan.¹³¹ IRI's legal and legislative analysis was endorsed by Ambassador Washburn in comments filed in Docket 84-1299 on July 11, 1985.¹³² It remains to be seen whether these challenges to FCC jurisdiction to decide these matters or to the procedures followed by the FCC are pursued further.

As noted in their article, Professors Cowhey and Aronson foresee other remaining issues.¹³³

In the aftermath of these decisions, aficionados of regulatory policy should watch for several other benchmark policy choices. What rules will govern pricing and access to INTELSAT? How vigorously will the United States support entry by American satellite carriers into other countries? What will these proceedings imply for entry by foreign satellite systems into those countries? Will the United States eventually decide to grant U.S. entry to new foreign common carriers—say, a French satellite system—and if so will it demand strict reciprocity for American carriers? How will new transoceanic telecommunications cables be coordinated with the international satellite system? How much supervision will the FCC exercise over the pricing agreements reached between American carriers and foreign PTTs?

Thus, certain aspects of the issues and events chronicled in this article have yet to be resolved definitively.

¹³¹Reply Comments of International Relay, Inc. in CC Docket No. 84-1299, Memorandum Attachment, p. 5 (June 5, 1985).

¹³²Additional Comments of Abbott Washburn in CC Docket No. 84-1299, (July 11, 1985).

¹³³See Cowhey & Aronson, *supra* n. 28, at 35.

AN ASSESSMENT OF PRESENT US-USSR ARMS CONTROL AND DISARMAMENT NEGOTIATIONS

*Carl Q. Christol**

I. Introduction

During the past three decades the United States and the Soviet Union have worked at creating a meaningful international legal regime for the commercial, scientific, and military uses of outer space, the Moon, and other celestial bodies, as well as for the natural resources of these areas. Multinational negotiations beginning in 1958 led in 1967 to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies.¹ Article 4 of the Treaty limited the presence of nuclear and other kinds of weapons of mass destruction in outer space, as well as on the Moon and on other celestial bodies. Pursuant to Article 4, parties are prohibited from establishing military bases, installations and fortifications, from testing any type of weapons, and from conducting military maneuvers on the Moon or other celestial bodies.

Negotiations from 1969 to 1972, known as the Strategic Arms Limitations Talks (SALT I), led in 1972 to the Treaty on the Limitation of Anti-Ballistic Missile Systems.² The purpose underlying the Treaty was set out in the preamble, namely "to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament."³

Pursuant to the Anti-Ballistic Missile Treaty (ABM Treaty) the parties agreed to limit anti-ballistic missile systems, including the non-deployment of such systems for defensive purposes in given circumstances. An ABM system was initially defined in Article 2 as one able to "counter strategic ballistic mis-

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¹Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, January 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205. Eighty-five states are bound by the treaty, including the United States, the Soviet Union, and the People's Republic of China.

²Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, United States—U.S.S.R., 23 U.S.T. 3435, T.I.A.S. No. 7503. It was accompanied by an Interim Agreement on Certain Measures With Respect to the Limitation of Strategic Offensive Arms, May 26, 1972, United States—U.S.S.R., 23 U.S.T. 3463, T.I.A.S. No. 7504. Both agreements became effective on October 3, 1972.

³Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, United States—U.S.S.R., 23 U.S.T. 3435, T.I.A.S. No. 7503.

siles or their elements in flight trajectory." However, the agreement permits the parties to deploy ABM systems in prescribed circumstances. In short, the agreement allows for the use of ABM systems within limitations rather than prohibiting such systems outright.

Article 12 of the Treaty contains two important provisions. First, it authorizes a party to use "national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law."⁴ Parties are prohibited from interfering with such technical means employed by the other party. Since reconnaissance satellites are a principal means of gathering information regarding military installations, such satellites constitute a major illustration of existing technical means. Article 12 also provides that each party is not to "use deliberate concealment measures which impede verification by national technical means . . ."⁵

Article 15 of the Treaty provides that it shall be of unlimited duration, subject, however, to the right of a party to withdraw unilaterally if it were to determine that "extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests."⁶ Further, a withdrawing party must give six month's notice prior to being released from its obligations. The notice to the other party is to include a statement of the extraordinary events regarded by the withdrawing party as having jeopardized its supreme interests.

Article 5 of the Interim Agreement adopted the same provisions set forth in Article 12 of the Treaty. The Interim Agreement was to remain in effect for five years. It could be extended by mutual agreement. The right of unilateral withdrawal was identical with the one established in the Treaty.⁷

The Treaty and the Agreement were based on the view that each of the parties was to be allowed to build and possess nuclear armaments, that the presence of national nuclear arsenals would serve as mutual deterrents against the uses by the respective parties of such weapons, and that under such circumstances there could exist a condition of real, albeit uneasy, strategic stability. This policy, known as mutually assured destruction, is frequently referred to as MAD. It is based on the proposition that the existence of offensive nuclear weapons is a more effective way to preserve and maintain strategic stability and the general peace than alternative policies.

Unfortunately, the purpose announced in the Treaty to achieve a reduction in weaponry and a more stable political environment has not been achieved. Furthermore, there has been multiplication of nuclear capabilities and attendant uncertainties. There are many more nuclear warheads in the world today than in 1972. Their constantly enlarging presence, coupled with a

⁴*Id.* at 3443.

⁵*Id.* at 3444.

⁶*Id.* at 3446.

⁷Limitation of Strategic Offensive Arms, May 26, 1972, United States—U.S.S.R., 23 U.S.T. 3462 at 3467, T.I.A.S. No. 7504.

proliferation of delivery systems, as well as their possession by an ever-increasing number of countries, is one of the factors that has induced a general and public effort to reconsider the MAD doctrine. At the heart of the current reassessment of nuclear strategy is the need for a higher and more assured degree of strategic stability among the superpowers.

2. *The Quest for Nuclear Controls and Strategic Stability*

Aside from the central concern over the dangers foreseen by the proliferation of nuclear attack weapons, a number of other considerations have influenced the current direction of arms control and disarmament negotiations between the United States and the Soviet Union. The long-lasting and highly inconclusive bilateral negotiations relating to intermediate-range nuclear forces (INF) and strategic arms reduction talks (START) were halted in November, 1983, when the Soviet Union declined further participation.

The United States in the 1970's began to take official notice of the extended activities of the Soviet Union relating to the deployment and testing of anti-satellite satellites (ASATS).⁸ More recently the United States has begun to express official concern over indicated violations by the Soviet Union of the 1972 ABM Treaty and Interim Agreement with specific reference to the construction of a phased-array radar possessing defensive characteristics at Krasnoyarsk in central Siberia.⁹ The view has been expressed that the Krasnoyarsk case is not an isolated one relating to treaty violations.¹⁰

Prior to the increasingly heightened concerns during the past several years regarding the militarization of space, efforts had been made during 1978 and 1979 to obtain a measure of strategic stability concerning ASAT weapons. During this period three well-prepared negotiating sessions on ASAT control took

⁸*Subcomm. on Space Science and Application of the House Comm. on Science and Technology*, 97th Cong., 2nd Sess., "Space Activities of the United States, Soviet Union and Other Launching Countries/Organizations, 1957-1981" (Comm. Print 1982) (Report by C.S. Sheldon II and M.S. Smith).

⁹BUREAU OF PUBLIC AFFAIRS, DEPT. OF STATE, Security and Arms Control: The Search for a More Stable Peace, 23-26 (Sept. 1984); R. Reagan, Message to the Congress, "Soviet Noncompliance With Arms Control Agreement", (Feb. 1, 1985) (available in BUREAU OF PUBLIC AFFAIRS, DEPT. OF STATE, SPECIAL REPORT No. 122, at 1-6. The unclassified report was accompanied by a White House release entitled "The President's Unclassified Report to the Congress on Soviet Noncompliance with Arms Control Agreements", February 1, 1985.

¹⁰According to Senator F.H. Murkowski of Alaska, "the Soviets have violated the Anti-Ballistic Missile Treaty, SALT I, SALT II, the Biological Weapons Convention, the Helsinki Accords, and the Thresholds Test Ban Treaty. They are currently constructing an anti-ballistic missile radar at Krasnoyarsk, testing two new land-based nuclear missiles (SS-24 and SS-25), and encoding test data which makes it difficult for the U.S. to verify their compliance with arms agreements." Murkowski, *Curb Soviet Cheating*, Christian Sci. Monitor, Apr. 3, 1985, at 15, col. 1.

place. They were suspended by the United States to indicate its disapproval of the Soviet intervention in Afghanistan.¹¹

In an effort to open the door to negotiations which might be responsive to all of the wide-ranging and critical strategic arms issues, an attempt was made in 1983-84 to set a meeting date for ASAT negotiations. The Soviet Union, through the public pronouncements of President Andropov, in initiatives taken at the Conference on Disarmament and in proposals at the United Nations, expressed the view that there should be no further ASAT testing or the creation of new anti-satellite systems.¹² On June 29, 1984, President Chernenko invited the United States to participate in talks "to prevent the militarization of outer space."¹³ He added that "[t]he question of the complete mutual renunciation of anti-satellite systems should be resolved within the framework of those talks."¹⁴ On the same day the United States unconditionally accepted the Soviet offer.

The United States, while attaching no preconditions to the Soviet invitation, indicated that it viewed the offer as including the following purposes:

1. To discuss and define mutually agreeable arrangements under which negotiations on the reduction of strategic and intermediate-range nuclear weapons can be resumed; and
2. To discuss and seek agreement and feasible negotiating approaches which could lead to verifiable and effective limitations on anti-satellite weapons; be prepared to discuss any other arms control concerns or other matters of interest to both sides.¹⁵

This response was treated by the Soviet Union as "totally unsatisfactory."¹⁶ It was perceived as a U.S. attempt to "advance preconditions for talks on the problem of vital importance to all countries and peoples, and thus to

¹¹*Arms Control and the Militarization of Space, Hearings Before the Subcomm. on Arms Control, Oceans, International Operations and the Environment of the Senate Comm. on Foreign Relations, 97th Cong., 2nd Sess. 44* (statement by R.W. Buchheim, 1984); Buchheim, *Anti-Satellite Weapons and Some Related Matters*, in *MAINTAINING OUTER SPACE FOR PEACEFUL USES* 270 (Jasentuliyana ed. 1984).

¹²For a detailed assessment of the international and domestic policy and legal issues relating to the 1983-84 inconclusive efforts to arrange for ASAT negotiations, see Christol, "Arms Control and Disarmament in Space: The Rough Road to Vienna 1984, Part I", 1 *SPACE POLICY* 26 (Feb. 1985); "Part II", 1 *SPACE POLICY*, 263 (Aug. 1985).

¹³*Soviet and U.S. Statements on Space Weapons Negotiations*, N.Y. Times, June 30, 1984, at A4, col. 2.

¹⁴*Id.* at col. 3.

¹⁵*Id.* at col. 5.

¹⁶Los Angeles Times, July 2, 1984, Part 1 at 1.

block its solution."¹⁷

While the U.S. acceptance of the June 29, 1984 offer was frustrated by varying Soviet views as to the existence of "preconditions", this did not minimize the critical issue of space militarization and general arms control and disarmament involving nuclear weapons. In an effort to facilitate negotiations, President Reagan, on September 24, 1984, in addressing the U.N. General Assembly, stated that "[W]e need to extend the arms control process, to build a bigger umbrella under which it can operate—a road map, if you will—showing where, during the next twenty years or so, these individual efforts can lead."¹⁸

Following the U.S.-Soviet diplomatic negotiations, ostensibly based on the view that the "umbrella" approach might serve as a means to connect nuclear and space arms, President Chernenko put forward on November 16, 1984, a policy statement that was notable in several respects. He indicated the possibility of "new" negotiations, thereby eliminating any possible embarrassment that would have resulted from a return to the previously abandoned INF and START negotiations. Four areas were cited as worthy of examination: the militarization of space, a mutual freeze on nuclear arms, the ratification by the United States of the 1974 and 1976 underground test ban treaties, and an American pledge against the first use of nuclear arms.¹⁹ Prior Soviet preconditions for negotiations, relating to a U.S. moratorium on ASAT testing or the removal from Western Europe by the United States and NATO of Pershing 2 or landbased cruise missiles, were not repeated.

Emerging from this initiative was the meeting in Geneva on January 7th and 8th, 1985, between Secretary of State Shultz and Foreign Minister Gromyko. In their joint communique they agreed that negotiations should be initiated relating to the complex questions of "space and nuclear arms, both strategic and intermediate range, with all the questions considered and resolved in their inter-relationship."²⁰ The parties were also in agreement that:

The objective of the negotiations will be to work out effective agreements aimed at preventing an arms race in space and terminating it on earth, at limiting and reducing nuclear arms and at strengthening strategic stability.

The negotiations will be conducted by a delegation from each side divided into three groups. The sides believe that ultimately the forthcoming negotiations, just as efforts in general to limit and reduce arms, should lead to the complete elimination of nuclear arms

¹⁷*Soviet Reply to U.S. Stand on Weapons*, N.Y. Times, July 2, 1984, at A9, col. 1 (Reprint of official statement from Soviet news agency, TASS July 1, 1984).

¹⁸*Reducing World Tensions*, 84 DEPT. STATE BULL. No. 2092, at 6 (1984).

¹⁹*Chernenko: U.S. Holds Key to Arms Talks*, Wash. Post, Oct. 17, 1984, at A26, col. 2.

²⁰*U.S. and Soviet Set Talks on Missiles and Arms in Space*, N.Y. Times, Jan. 9, 1985, at A10, col. 1.

everywhere.²¹

These negotiations, profoundly influenced by President Reagan's March 23, 1983, call for a research-oriented Strategic Defense Initiative (SDI) (initially described as a ballistic missile defense system) have concentrated attention on the unrivaled complexity of balanced national security systems and stabilized strategic relationships.²² At stake is the identification of a mutually acceptable long-term relationship between the United States and the Soviet Union.

Asymmetries between these two countries are striking. They exist respecting military components and force levels. Patently obvious are their differing ideologies, which will inevitably influence outlooks and condition promises which may be given in negotiated agreements. They will also govern perspectives and practices in such critical matters as the verification procedures contained in any future formal agreement relating to arms control and disarmament. The actual record of both countries relating to compliance with past and existing arms control and disarmament agreements will manifestly influence the commitments now being sought.

Also at stake, and materially influencing the expected quality of compliance, will be the actual terms employed in the agreement. In matters of space and nuclear arms control and disarmament, the degree and extent of agreement must be framed in exceedingly precise language. This is not a situation where either explicit or implicit reservations or qualifications can be accepted. By their very nature they would detract from the significance of the agreement. They would reflect lingering but manifestly real doubts as to the qualitative nature of the joint commitment to the goal of strategic stability in the context of space and nuclear arms control and disarmament.

3. *Essential Considerations Affecting Treaty Compliance*

In considering the duties of States under international law to comply with their treaty-based obligations one is confronted with the fundamental needs of States to advance both their own interests and those of other members of the world community. To the extent that this goal is achieved each State will be in a better position to protect its territorial integrity and its national sovereignty.²³ These common and traditional goals are of central significance when

²¹*Id.*

²²An assessment of the diverse ramifications of the Presidential proposal, known as the Fletcher Report, was issued by the U.S. Department of Defense in April, 1984 ("The Strategic Defense Initiative, Defensive Technologies Studies"). See generally, 9 ANNALS OF AIR SPACE L. 4 (1984); *Arms Control, Foreign Affairs*, 7 HARV. INT'L REV. (No. 4, 1985); 11, 12 J. SPACE L., (1983-1984); 27th COLLOQUIUM ON THE LAW OF OUTER SPACE (1985); MAINTAINING OUTER SPACE FOR PEACEFUL USES 170-328 (Jasentuliyana ed. 1984).

²³Pardo and Christol, *The Common Interest: Tension Between the Whole and the*

there are at stake effective agreements aimed at preventing an arms race in space and terminating it on earth, and at strengthening strategic stability. Moreover, as Secretary of State Shultz observed at the time the U.S. and the U.S.S.R. issued the joint communique of January 8, 1985, "both sides attach priority to achieving radical reduction in nuclear weapons as a first step toward their complete elimination."²⁴ This was consistent with the hope expressed by him both prior to and after the two countries agreed in January that the negotiations would lead to the complete elimination of nuclear arms everywhere.²⁵

In the foregoing remarks it was carefully noted that the ultimate elimination of nuclear weapons would result from a cooperative transitional effort. Secretary Shultz stated:

As the U.S. and the Soviet strategic and intermediate-range nuclear arsenals declined significantly, we would seek to negotiate reductions in other types of nuclear weapons. If we could develop the technologies to defend against ballistic missiles, we could then turn our energies to the perfection of defensive measures against these other nuclear weapons. Our ultimate objective would be the elimination of them all.²⁶

Can any valid reasons be advanced in support of compliance with an international agreement dealing with the critically important subjects currently under consideration at the Geneva Arms Control Meeting? Knowledgeable international lawyers regularly confirm that a vast preponderance of all international agreements are complied with routinely. Only in areas having a significant impact on international peace and national security, such as arms control and disarmament, are there paramount needs to assure that compliance be essentially total. General principles of international law governing compliance exist in both situations. Nonetheless, the quality and the meaning of such international legal principles is deserving of the most careful scrutiny when the possibility of misinterpretation or misapplication of existing norms relates to the condition of international peace and national security.

If the general influences of reason and justice are insufficient to obtain conduct fully supportive of established legal norms and expectations, forms of constraint must be countenanced. To the extent that there is compliance with an international legal norm dealing with a specific subject, there can emerge a

Parts, in *THE STRUCTURE AND PROCESS OF INTERNATIONAL LAW: ESSAYS IN LEGAL PHILOSOPHY, DOCTRINE AND THEORY*, 643 (MacDonald and Johnston eds., 1983).

²⁴*U.S. and Soviet Talks on Missiles and Arms in Space*, N.Y. Times, Jan. 9, 1985, at A10, col. 1.

²⁵Shultz, Address before the Austin Council on Foreign Relations, Austin, Texas (March 28, 1985) (available in BUREAU OF PUBLIC AFFAIRS, DEPT. OF STATE, *Arms Control: Objectives and Prospects*, CURRENT POLICY No. 676).

²⁶*Id.* at 4.

greater awareness of the interactive aspects of the international legal system. Compliance with the law in one area of behavior can lead to a heightened sense of duty in another area.

Specific reasons for compliance with international legal norms lend themselves to extended analysis.²⁷ Only an abbreviated assessment of such reasons will be attempted here. First, conventional knowledge suggests that conformity to law reduces tensions and instabilities. Through the use of law and legal systems there is a prospect for the presence of a minimum, and in some instances more than a minimum, amount of world order.

Second, when law and legal processes exist and commend themselves to international actors the prospect exists for planning for an attainable future. A certain amount of stability results from the presence of predictability and consistency.

Third, a great variety of sanctions may become operative in the event of unacceptable departures from recognized legal norms. These sanctions range from highly coercive physical conduct, such as the massive destruction of persons and property in time of armed conflict, to economic constraints. For example, the United States and other countries have adopted trade policies, known as a generalized system of preferences, which eliminate duties on a range of products imported into the United States from developing countries. These beneficial preferences may, however, be suspended if a developing country engages in conduct perceived as violative of norms of general international law.²⁸

Fourth, the possibility that sanctions may be imposed on a country which does not conform its conduct to international law generally, and to its treaty commitments in particular, may produce a variety of anxieties. States, like individuals, fear the label of "law-breaker." Such concerns can take a variety of forms beyond physical and economic detriment, such as loss of prestige, esteem, or the sense of "standing high" in the opinion of the world community. The influence of opinion was summarized over 50 years ago by Elihu Root, who stated:

. . . [T]here is an indefinite and almost mysterious influence exercised by the general opinion of the world regarding the nation's character and conduct. The greatest and strongest governments recognize this influence and act with reference to it. They dread the moral isolation created by general adverse opinion and the unfriendly feeling that accompanies it, and they desire the general approval and kindly feeling that goes with it.²⁹

²⁷Schachter, *Towards a Theory of International Obligation*, 8 VA. J. INT'L L. 301 (1968) (reference to national perspectives of fifteen writers). Compare J. STONE, *LEGAL CONTROLS OF INTERNATIONAL CONFLICT* (1954) with M. McDUGAL AND ASSOCIATES, *STUDIES IN WORLD PUBLIC ORDER* (1960).

²⁸BUREAU OF PUBLIC AFFAIRS, DEPT. OF STATE, GIST at 5 (Jan. 1984).

²⁹ROOT, "The Sanctions of International Law," 2 PROC. AM. SOC'Y INT'L L. 19-20

Governments invest a very large amount of energies and resources in creating images of their rectitude and responsibility. They rely on the influence of a world-wide media, sometimes carrying out foreign policy through this means, to explain and justify their activities. These governments have a passion to know what is being said about them. Policies are adapted to the conclusions drawn from assessments of such activities.

Fifth, conformity to law cannot be separated from moral considerations. Although it is frequently suggested that States are governed wholly by concerns over national interest, national leaders are not immune from moral considerations. To the extent that they feel a moral need to conform to the expectations of the law, they experience a sense of moral guilt in the presence of non-compliance. The theme that there is a "higher duty" to conform to law can also be attributed to ethical and religious precepts.

While it may be convenient, and superficially persuasive, to rely on the presence of police, courts, prisons, and the entire apparatus of the law enforcement process to justify conformity to law, there is more to it than that. For many individuals, and for many countries, compliance is not the result of punitive sanctions only. The belief there is "a right thing to do" will also have influence.

Sixth, national interest may derive from the international legal principle of national sovereignty. Varying assumptions have emerged from this principle. One is that a State has an enormous amount of latitude in pursuing self-centered objectives. Another is that in modern times a State's sovereign options are subject to substantial constraints. If the latter is the case, and if the constraints are founded on the central precepts of general international law, then national compliance may not be offered many alternative. Conformity to the law in these circumstances may be the norm, rather than the exception. Lawful conduct will result when it is difficult to imagine alternative forms of behavior. The presence of identifiable norms of law will, per se, contribute to compliance with it.

Finally, the vitality of law and a high measure of conformity to it will depend on a realization that common benefits and mutual advantages will result for individuals and States from the presence of established principles, rules, and standards of the law and adequate law-making and law-enforcing processes. Detriment or loss of advantage will befall a deviating State. Common benefits will flow to those which conform their conduct to the principled expectations of the world community. Order rather than chaos is expected to result from a rational assessment of benefits and disadvantages. This position has been identified by Brierly, as follows:

The ultimate explanation of the binding force of all law is that man, whether he is a single individual or whether he is associated with

(1908). This outlook has historic appeal to Americans. The founding fathers in the Declaration of Independence made due reference to "a decent Respect for the Opinions of Mankind."

other men in a State, is constrained, in so far as he is a reasonable being, to believe that order and not chaos is the governing principle of the world in which he has to live.³⁰

From this brief summary it can be concluded that compliance with international legal norms depends on considerations having a mixed moral, social, political, and utilitarian character. In an increasingly interdependent world, norms of law, particularly where the legal institution is regarded as legitimate, have the function of serving the needs of world order. Law, in the light of its substantive content and the accompanying processes, offers an orderly way to deal with disorderly problems.

Because the problem of arms control and disarmament has such a central impact on common human wants, needs, interests, and values, it is essential that relevant and community-serving legal norms be identified and measures be taken to achieve conformity with them. Reasons of the kind that have been identified should offer some confidence in the formulation of constraints designed to benefit those who seek strategic stability in a nuclear world.

4. *The Formalization of Expectations*

The bilateral negotiations that began in Geneva in March 1985 between the United States and the Soviet Union have focused on arms control and disarmament for both nuclear and space weapons. These negotiations are occurring in the presence of a most unusual phenomenon. The thesis that strategic stability would be enhanced through a policy of defense, as foreseen in the Reagan proposal for a Strategic Defense Initiative, has raised the possibility that the traditional policy of offense, as accepted in the 1972 ABM Treaty and Interim Agreement, could be modified. Added to the uncertainties and complexities of this new proposal is the problem, assuming that some form of agreement might be reached respecting the SDI in whatever form it might be cast, of effecting a stable transition from the present to a new approach respecting bi-polar stability.

Before moving toward a new strategic policy it has been noted by Ambassador P.H. Nitze, Special Adviser to the President and the Secretary of State on Arms Control Matters, that two highly exacting criteria would have to be met. In his words:

They must produce defensive systems that are reasonably survivable; if not, the defenses could themselves be tempting targets for a first strike. This would decrease rather than enhance stability.

New defensive systems must also be cost-effective at the margin—that is, it must be cheaper to add additional defensive capability than it is for the other side to add the offensive capability necessary to overcome the defense. If this criterion is not met, the defensive systems could encourage a proliferation of countermeasures and addi-

³⁰J.L. BRIERLY, *THE LAW OF NATIONS* 56 (6th ed. 1963).

tional offensive weapons to overcome deployed defenses, instead of a redirection of effort from offense to defense.³¹

These significant practical concerns fit into, and are consistent with, the four basic objectives being pursued by the United States at the current Geneva discussions. In addressing the three interrelated issues of strategic arms, intermediate-range nuclear forces, and space arms, the United States has indicated it is seeking an enhancement of strategic stability, radical reductions in nuclear weapons, the acceptance of equal or equivalent levels of forces, and effective verification of compliance with a future agreement by the parties.³²

If the final outcome of the current bilateral negotiations between the United States and the Soviet Union is to be measurably influenced by the possible relevance of SDI capabilities and utilities, it is evident that the duration of the negotiations will be quite long. The foregoing time frame must also be measured against the time during which confidence-building measures can evolve. It should be evident that it is necessary to build firmly on commonly held expectations respecting valid motivations and assured future actions if a formal agreement is to have a meaningful existence.

The expectation, of course, is that over time there will be agreement on a set of treaty provisions designed to advance the common moral, social, political, and utilitarian needs of the negotiators. Only if the seven criteria dealing with the obligation to conform to international understandings prove meritorious and persuasive will a particularized agreement relating to nuclear and space arms control and disarmament be meaningful.

In addressing the present situation, a particular political-legal strategy is as important as the substantive arms control and disarmament strategy. The two strategies are inextricably related. Negotiations must proceed on the premise that common interests can be proven to exist and that there is a political will of accommodation that insures that a perspective of common interests will take precedence over unsubstantial or less worthy localized interests. As such reciprocal necessities are unfolding, it will be necessary for the superpowers to adjust their conduct to these realities. As verifiable information is presented and accepted by both parties, and as an ultimate conviction of a sound strategic stability begins to emerge, then it will be possible to draft a viable international agreement dealing with these clearly identifiable practices.

The ultimate goal is one of assured strategic stability based on verified practices. The presence of verified practices can create that spirit of confidence which is fundamental to security-related international relations.

The present task is to clarify the basic objectives to be achieved through U.S.-Soviet arms control and disarmament. As these are more fully understood, and as concerns over national security are placed in perspective, com-

³¹Nitze, Address before the International Institute for Strategic Studies, London (March 28, 1985) (available in BUREAU OF PUBLIC AFFAIRS, DEPT. OF STATE, *The Objectives of Arms Control*, CURRENT POLICY No. 667 at 6).

³²Shultz, *supra* note 25, at 2-3.

mon practices can be allowed to grow and flourish. As the worth of these confidence-building measures comes to be appreciated, and as mutual accommodations mature in practice, it will be possible to arrive at a written agreement that will have a chance of achieving common approval. If it is to come into being, and if it is to serve the respective needs of the superpowers, and indeed, of the entire world community, it must be demonstrated that its terms will be guaranteed success. This, as has been indicated, will depend on the rational assessment of common benefits when there is conformity. It will also depend on the awareness of common disadvantage when there is non-compliance.

EVENTS OF INTEREST

A. Past Events

(a) Reports

1. The European Space Agency: Example of a Successful Regional Cooperation

Introduction

From Kourou, French Guiana, on July 2, 1985, the European launcher Ariane launches the ESA spacecraft "Giotto" into a geostationary transfer orbit from where, one day later, the spacecraft is pushed into an Earth-escape trajectory to encounter Halley's Comet in March 1986. An adventure has begun which meets worldwide interest and, as an example of remarkable international cooperation, has achieved an important milestone on a road that had begun twenty years ago.

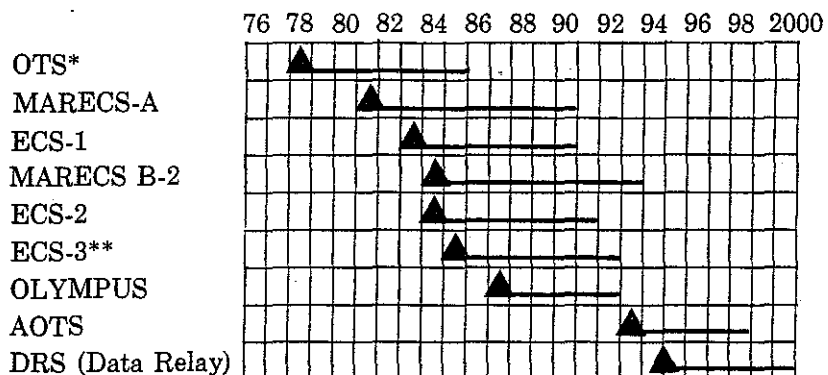
The Beginning

In 1984, ESA celebrated twenty years of European cooperation in space. It was in fact in the early sixties that space research was started in Europe, and the two organizations, the European Space Research Organisation (ESRO) and the European Launcher Development Organisation (ELDO), were created. While ESRO from the beginning successfully undertook the development of several scientific satellites, ELDO encountered difficulties in developing the European launchers "Europa I" and "Europa II". After unsuccessful flight tests this development was abandoned as it became clear that the concept chosen—development under national responsibility of the three stages and of the test satellite—was not feasible. However, definition studies undertaken during two years of a new launcher concept called Europa III, after abandonment of the Europa launchers, were continued and led to the development in ESA of the Ariane launcher family. In 1974, ESRO and ELDO were fused and the eleven member organization, ESA, was born, which now groups all European space research and technology activities in one European organization.

The Achievements

During its twenty years of existence, ESA and its predecessor organizations have developed fourteen scientific satellites (all with the exception of Giotto launched by NASA) which have considerably contributed to increasing our knowledge about the universe. Several projects are under development or are being prepared. The table below provides a survey about ESA's scientific program:

Telecommunications Spacecraft (1976-2000)



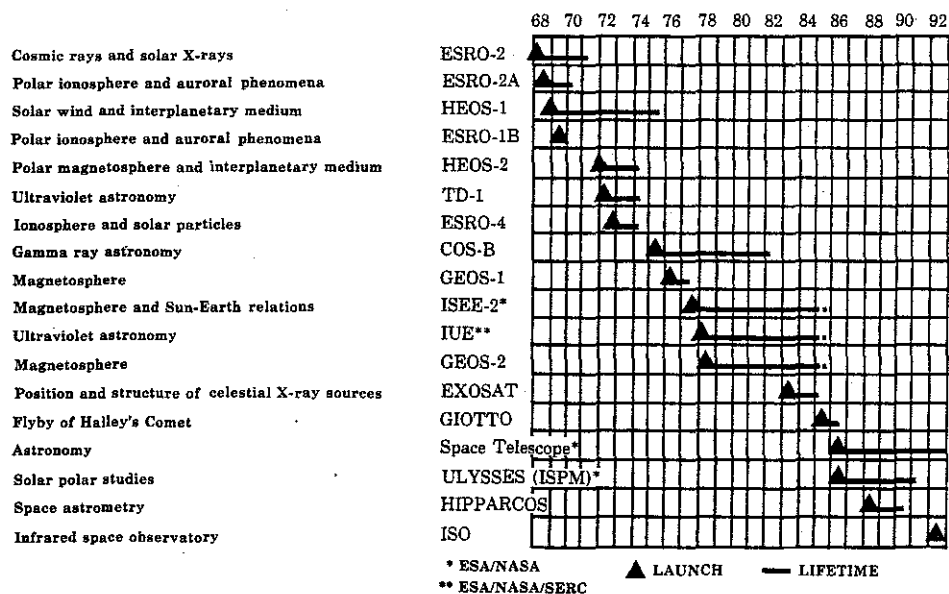
* OTS had a scheduled lifetime of 3 years

** ECS-4 and ECS-5 will be launched before 1990;
the exact launch dates have still to be fixed.

▲ launch — lifetime

In the field of telecommunications and earth observation programs, seven ESA spacecraft were developed and launched. Several other spacecraft are under preparation:

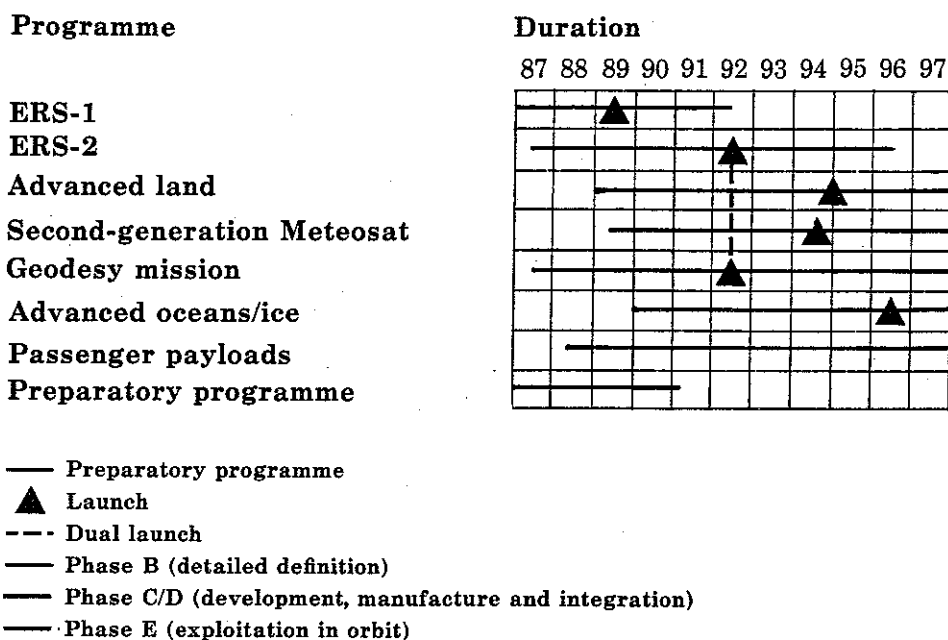
Scientific Spacecraft (1968-1992)



Amongst the successful spacecraft are also the two pre-operational meteorological satellites Meteosat 1 and Meteosat 2 which, launched respectively in 1977 and 1981, are still carrying out some of their functions in spite of the fact that they have long outlived their designed life time.

Based on the success of these spacecraft, an operational Meteosat system will be set up in the framework of the newly created international organization Eumetsat. This program foresees the launch of another Meteosat spacecraft (P2) in 1986, and three operational satellites for 1987 (M01), 1988 (M02) and 1990 (M03), plus their subsequent operation up until 1995.

The present and future earth observation activities are shown below:



The ESA Space Transportation Systems Programmes at the end of 1983 saw the successful flight with the NASA shuttle of the European Space Laboratory "Spacelab" with a European astronaut on board. NASA has planned a great number of further flights of this Laboratory amongst which figures also the German mission D1, which together with several German experiments will also carry three ESA experiments on board, namely the Biorack, the Space Sled, and the Fluid Physics Module. Also, one of the flight payload specialists comes from ESA. Since 1979 the Ariane launcher has been launched fourteen times, of which twelve were successful. The original Ariane 1 version has been further developed into an Ariane 3 version which is 49 metres high and weighs 237 tonnes at lift-off. It can place payloads of 2,580 kg in geostationary transfer orbit. An even more powerful version, Ariane 4, is under development. Started in 1982, Ariane 4 comprises six different versions, the performance of which, in transfer orbit, varies from 1900 kg to 4200 kg. The first Ariane 4 launch is planned for mid-1986.

Table: Ariane launches 1979-1985

24.12.79	LO1	AR1	Capsule Ariane Technologique (CAT)*
23.05.80	LO2	AR1	CAT - Firewheel - OSCAR 9**
19.06.81	LO3	AR1	CAT - Meteosat 2 - Apple*
20.12.81	LO4	AR1	CAT - MARECS-A*
09.09.82	L 5	AR1	MARECS-B - SIRIO-2**
16.06.83	L 6	AR1	ECS-1 - AMSAT PHASE III B*
18.10.83	L 7	AR1	Intelsat V FU 7*
04.03.84	L 8	AR1	Intelsat V FU 8*
23.05.84	V 9**	AR1	SPACENET F1*
04.08.84	V 10	AR3	ECS-2 - TELECOM 1A*
09.11.84	V 11	AR3	Spacenet F2 - MARECS B2*
08.02.85	V 12	AR3	ARABSAT F1 - Brasilsat F1*
08.05.85	V 13	AR3	TELECOM 1B - GSTAR 1A*
02.07.85	V 14	AR1	GIOTTO*

* Success

** Launch failure

**First commercial launch under Arianespace responsibility

The Future

Twenty years of European cooperation in space have led to impressive achievements. Besides successfully carrying out a large number of scientific and application satellite programs. Europe has acquired, through the Ariane program, an independent and competitive launch capability; and through the construction and flight of Spacelab also, access to manned-spaceflight technology. However, the large programs, decided in 1973, have now been successfully completed and the time has come to decide on the future orientation of the European space plans. In addition, the President of the United States of America has invited Europe to participate in the US Space Station Program, which requires a reply from the European governments.

On January 30 and 31, 1985, therefore, the Ministers of the eleven ESA member countries plus those of Austria, Norway, and Canada, who cooperate with ESA, met in Rome. At this meeting the Ministers recognized that the present scope of the Agency's programs had to be enlarged within a coherent, complete, and balanced long-term European space plan to meet the challenges of the next decade and beyond. The main aims of the policy for the envisaged period are to expand Europe's autonomous capability and Europe's competitiveness in all sectors of space activity, as well as to enhance and to strengthen

international cooperation.

With the foregoing in mind, a number of long-reaching programme decisions were taken. Of these the most important are:

(a) welcome and accept of the offer of the President of the USA to participate in the Space Station, and endorse the so-called ESA Columbus program aimed at providing a significant contribution to this international space station program. ESA and NASA, in pursuance of this decision, have concluded a Memorandum of Understanding according to which ESA will run Space Station Phase B studies during 1985 and 1986 in parallel and in close cooperation with NASA's Phase B activities. Current plans foresee studies for the development of a pressurized module, co-orbiting and polar-orbiting platforms, a resource module, and a servicing vehicle. At the end of Phase B1, which will occur in late 1985, a decision will be made on those elements to be developed immediately and those to be developed later.

(b) In the area of space transportation, it was decided to increase the launch capacity by starting the development of the Ariane 5 launcher to be equipped with the new cryogenic engine HM60, the development of which was decided in 1984. It is planned that Ariane 5, able to launch spacecraft of between 5.5 and 8 tonnes into GTO (Geostationary Transfer Orbit) and about 15 tonnes in LEO (Low Earth Orbit), should be operational in 1995. Its diameter will be compatible with the NASA shuttle cargo bay and be designed so as to allow subsequent man-rating. It will also permit a spaceplane called Hermes, destined to transport men and smaller payloads, to be launched. With regard to Hermes, the Ministers have not yet taken the decision to accept the proposal made by France. Interest, however, was expressed in the studies undertaken and in the readiness of the French Government to associate her partners in the studies of the Hermes spaceplane. These studies should lead to Europeanization of the programme in 1987. The Hermes spaceplane could have its first flight trial in 1998. It should be launched by a man-rated Ariane 5 launcher, and could put into LEO a payload of approximately 4500 kg (10000 LBS); its crew would consist of two pilots and up to four mission or payload specialists.

(c) Other key decisions taken in Rome related to areas such as science, where a yearly increase of 5% until 1989 was agreed, earth observation, telecommunications and technology, with the Ministers recognizing that the implementation of the new European Long Term Plan would require a substantial increase in the Agency's financial resources through the end of the decade.

The 1985 ESA Ministerial Council meeting has underlined again that the European states share a common vision of Europe's future in space and that there is a political will to take the required decisions. It has demonstrated that the enthusiasm and realism that led European states to join forces twenty years ago are still existing, and that the road followed together has not yet come to an end. The success of ESA, therefore, is not only the result of good organizational management and excellent industrial workmanship, but also the fruit of

excellent cooperation between governments on the political level. This common will is regarded to be a solid basis for the future and an encouragement for the ongoing international cooperation.

Dr. W. Brado
Head, Director
General's Cabinet,
ESA

2. *Work Accomplished by the First Session of the World Administrative Radio Conference on the Use of the Geostationary-Satellite Orbit and the Planning of the Space Services Utilizing It [WARC-ORB (1)], Geneva, Switzerland, August 8-Sep. 10, 1985*

a. *Purposes and Background*

Organized by the International Telecommunication Union (ITU) and in accordance with its agenda, contained in Resolution No. 895 as adopted by the Administrative Council of the ITU, the WARC-ORB (1) was called upon to accomplish essentially two purposes. The first and main purpose was to decide which space services and frequency bands should be planned and to establish the principles, technical parameters and criteria for the planning method(s) to be used. The second purpose was to consider the relevant decisions of the 1983 Regional Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service in Region 2¹ and to incorporate these decisions, through the adoption of appropriate Final Acts, in the Radio Regulations, as appropriate, revising the Radio Regulations only for this purpose as necessary.

The work thus to be accomplished by the WARC-ORB (1) has to be seen against the general role and mandate of the ITU to adopt and constantly revise and up-date the international legislation on telecommunications in general and on the radio frequencies spectrum, including that for space activities, in particular. It therefore represents a consequent follow-up to a series of administrative radio conferences for space radiocommunications, the first of which was held as early as 1963, all aimed at coping with the tremendous progress in the field of space radiocommunications and satellite telecommunications, the developments of which have resulted in an ever-increasing realization of new service applications.

Under the chairmanship of *Prof. I. Stojanović* (Yugoslavia), the WARC-ORB (1), attended by over 900 delegates and observers from 111 out of the 160 Member Countries of the ITU and from 14 international organizations, endeavored, during the five and half weeks of its work, to find a balanced solu-

¹For the purpose of ITU administrative radio conference, the world is divided into three regions: Region 1 covers Europe (including the whole of the territory of the USSR) and Africa; Region 2 covers the Americas and Region 3 covers Asia and Australasia.

tion, that would not only permit any Member of the Union to start a satellite service on a basis of equality, and to consolidate continuing equal access to satellite services, but also to avoid hampering the development on a sound basis of satellite technology aimed at improving spectrum use and economic viability, especially in view of the present rapid rate of technological advance in all fields of telecommunications.

In the following presentation of the results of the work accomplished by WARC-ORB (1), those with regard to its second purpose will be presented first and will be followed by the presentation of the results with regard to the Conference's main purpose.

b. *Partial Revision of the Radio Regulations and the Annexes thereto*

The partial revision of the Radio Regulations and the Annexes thereto, contained in the Annex to the Final Acts adopted by WARC-ORB (1), relates to:

- the provisions and associated Plan for the broadcasting-satellite service in the frequency band 12.2 - 12.7 GHz in Region 2, as incorporated into the Radio Regulations as Appendix 30 (ORB-85);
- the provisions and associated Plan for the feeder links for the broadcasting-satellite service (12.2 - 12.7 GHz) in Region 2 in the frequency band 17.3 - 17.8 GHz, as incorporated into the Radio Regulations as Appendix 30A;
- and the consequential modifications to certain Articles of the Radio Regulations and to Appendix 30 (ORB-85).

The above-mentioned partial revision will enter into force on October 30, 1986 at 0001 hours UTC (Coordinated Universal Time).

It is recalled that for Regions 1 and 3 similar provisions and associated Plan had already been adopted by the ITU's World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977, had entered into force on January 1, 1979 and were subsequently incorporated in the Radio Regulations, as Appendix 30 presently in force, by the ITU's World Administrative Radio Conference, Geneva, 1979. The incorporation by WARC-ORB (1) of the above-mentioned provisions and associated Plans concerning Region 2 in the Radio Regulations thus completes the ITU action taken for a definite world agreement for the planning and establishment of direct television broadcasting in the frequency bands concerned, apart from feeder links in Regions 1 and 3 which will be planned in 1988 by the second session of WARC-ORB on the proposals submitted to that session by WARC-ORB (1)²

The Final Acts adopted by WARC-ORB (1) contained also four Resolutions: Resolution COM 6/2 relating to the provisional application of the partial

²See under c. below, Chapter 6 of the Report and Recommendation PLEN/A adopted by WARC-ORB (1) and dealing with the draft Agenda for the second session of the Conference.

revision of the Radio Regulations as contained in the Final acts prior to its entry into force; Resolution COM 6/3 relating to the provisional application for Region 2 of Resolution No. 2 of the 1983 Regional Administrative Conference for the Planning of the Broadcasting-Satellite Services in Region 2 dealing with interim systems for Region 2; Resolution COM 6/4 relating to the recording in the Master International Frequency Register of the assignments for Region 2 contained in Appendix 30 (ORB-85) and Appendix 30A; and Resolution COM 6/5 relating to orbital position limitations for the broadcasting-satellite service in Regions 1 and 2 in the band 12.2-12.5 GHz and for the fixed satellite-service (feeder-link stations) in Region 2 for the band 17.3 - 17.8 GHz.

c. Report of the First to the Second Session of the WARC-ORB

The results of the work accomplished by WARC-ORB (1) with regard to its first main purpose are contained in the Report adopted by that Session and submitted to the Second Session of the WARC-ORB, scheduled to take place in 1988. This Report comprises some 180 pages and consists of 8 Chapters, two Resolutions and three Recommendations. It contains the findings of the First Session on the question of the use of the geostationary-satellite orbit (GSO) and the planning of space services utilizing it together with the proposals for final decisions to be taken by the Second Session on the space services and frequency bands to be planned, the technical criteria to be established and the planning method to be used.

Whereas the introductory *Chapter 1* gives account of the legal basis for holding this Conference and summarizes the decisions taken by its First Session, *Chapter 2* of the Report reviews the characteristics of typical in-service networks of the fixed-satellite service (FSS).

Chapter 3 of the Report, entitled "Planning", deals with the frequency bands and space services identified for planning (stating that "the planning shall concern only the FSS in the bands 6/4 GHz, 14/11 to 12 GHz and 20/30 GHz"), the planning principles, the planning methods and the technical parameters and criteria. The planning principles provide for equitable and guaranteed access to the GSO while keeping flexibility and efficiency in the use of this orbit. They also take into account existing systems, the technical aspects of special geographical situations, and provisions for multi-service/multi-band networks. While recognizing that a world-wide planning solution would be most suitable, the planning principles do not exclude the possibility of having different planning methods. The possibility of setting aside portions of the orbit/spectrum resource to accommodate unforeseen requirements and requirements of future Members of the Union, after all requirements have been satisfied, has also been adopted by WARC-ORB (1), together with the principle that administrations or groups of administrations are not entitled to permanent priority in the use of particular frequencies and GSO positions in such a way as to foreclose access by other administrations to the GSO and frequency

bands allocated to space services.³

Based on the planning principles adopted by it, WARC-ORB (1) decided that the planning method shall consist of two parts:

a) *an allotment plan* shall be established in the bands: 4500 - 4800 MHz and 300 MHz to be selected in the band 6425 - 7075 MHz; and 10.70 - 10.95 GHz, 11.20 - 11.45 GHz and 12.75 - 13.25 GHz. This allotment plan shall permit each administration to satisfy requirements for national services from at least one orbital position, within a predetermined arc and predetermined band(s). The plan shall be limited to national systems providing domestic services. The procedures associated to this plan should contain provisions permitting administrations with adjacent territories to combine all or part of their allotments with a view to ensure a sub-regional service.

b) *Improved procedures*⁴ that shall satisfy requirements in addition to those appearing in the allotment plan. These procedures shall be applied in the bands:

- 3 700 - 4 200 MHz,
- 5 850 - 6 425 MHz, and
- 10.95 - 11.20 GHz,
- 11.45 - 11.70 GHz,
- 11.70 - 12.20 GHz in Region 2,⁵
- 12.50 - 12.75 GHz in Regions 1 and 3,⁵
- 14.00 - 14.50 GHz,
- 18.10 - 18.30 GHz,^{5,6}
- 18.30 - 20.20 GHz,
- 27.00 - 30.00 GHz.

The principle characteristic of this method of planning by improved procedures is the convening of periodic multilateral planning meetings which shall constitute the normal process for gaining access to the GSO/spectrum resources. The multilateral planning meeting approach should be a new and separate procedure to be added to the Radio

³For a discussion of different approaches to telecommunications law, see Noll, *The Institutional Framework of the ITU and its Various Approaches with regard to Telecommunications Law and Treaty Conferences*, in THE WASHINGTON ROUND, SPECIAL SESSION, WORLD TELECOMMUNICATIONS FORUM, WASHINGTON, DC, APRIL 18-19, 1985, pp. 19-67 (ITU, Geneva, 1985).

⁴The Radio Regulations at present in force provide for procedures to be followed in the use of GSO, but they were felt inadequate to cope with the actual and future requirements in this respect.

⁵In these bands the improved procedures shall apply between networks of the FSS only.

⁶The ITU's International Radio Consultative Committee (CCIR) is asked to study the technical character of the FSS in the frequency band 20/30 GHz and to report to the Second Session of the Conference with the view of taking a decision on the future plan of these bands by a future competent conference.

Regulations. The nature of these meetings and the status of their decisions or conclusions should be considered by the Second Session of the WARC-ORB.

According to the decisions of WARC-ORB (1), both parts of the planning method will need to conform to the planning principles adopted by it and the planning method must preserve the right of other services having equal primary status in the band to which this method is to be applied, which will necessitate the adoption and application of appropriate sharing criteria.

Chapter 4 of the Report contains guidelines relating to the regulatory procedures applicable to the space services and frequency bands which have not been identified for planning by WARC-ORB (1). These guidelines concern Sections I and II of Article 11, Article 13 and Article 14 of the Radio Regulations as well as Resolution No. 4 of WARC-79 and other Resolutions relating to space services, simplified handbooks of the International Frequency Registration Board (IFRB) on regulatory procedures and the IFRB technical standards and rules of procedures.

Chapter 5 of the Report is devoted to inter-service sharing considerations, which put particular emphasis on existing sharing criteria to be reviewed or revised or on a new sharing criteria to be developed as a result of the decisions to be taken by the Second Session of WARC-ORB.

Chapter 6 of the Report deals with the feeder links (Earth-to-Space) for the 12 GHz Broadcasting-Satellite-Service (BSS) in Regions 1 and 3. Therein, WARC-ORB (1) decided to select the frequency bands 17.3 - 18.1 GHz and 14.5 - 14.8 GHz (for countries outside Europe and for Malta) for the feeder-link assignment plan to be established. It also decided not to use the frequency band 10.7 - 11.7 GHz for this plan.

Chapter 7 of the Report concerns, in connection with Resolution No. 505 of the WARC-79 relating to the Broadcasting-Satellite-Service (Sound) in the Frequency Range 0.5 GHz to 2 GHz, the satellite sound broadcasting system for individual reception by portable and automobile receivers. WARC-ORB (1), which also adopted on that subject its Recommendation PLEN/C, recommends that administrations shall continue to carry out studies on the following subjects: quality of service, frequency of operation (within, as well as outside but near 0.5 - 2.0 GHz), modulation type, band width required, receivers, antenna design, feeder links, appropriate sharing criteria (including those applicable to geographical separation), cost considerations, the ability of present and future technology to comply with No. 2674 of the Radio Regulations and multiple user satellites. It further recommends that the Second Session of WARC-ORB should consider the results of the various up-to-date studies and in reviewing the situation prevailing at that time take appropriate decisions concerning the various aspects of this system as outlined in Resolution No. 505 of WARC-79.

The preparatory work to be carried out for the Second Session of WARC-ORB is the subject of the final *Chapter 8* of the Report adopted by WARC-ORB (1). With regard to these intersessional activities, the ITU is essentially requested to carry out studies to provide the Second Session with full and ac-

curate information on various aspects of a number of issues raised during WARC-ORB (1) and to carry out planning exercises on the basis of the requirements submitted by administrations and in accordance with the Recommendations of WARC-ORB (1), including the development of the appropriate software package for the preparation of the aforementioned allotment plan.

Finally and in connection with its first and main purpose referred to above, WARC-ORB (1) adopted also two Resolutions and three Recommendations which all form part of its Report to the Second Session of WARC-ORB. Whereas Resolution PLEN/1 relates to the approval of the Report of WARC-ORB (1) itself, Resolution COM 5/1 relates to the improvement of the accuracy of the Master Register, the International Frequency List, List VIIIA⁷, and the information provided to administrations. Besides its Recommendation PLEN/C already referred to above, WARC-ORB (1) also adopted its Recommendation PLEN/A proposing to the Administrative Council of the ITU a draft agenda for the Second Session of WARC-ORB and its Recommendation PLEN/B relating to high definition television (HDTV) in the Broadcasting-Satellite-Service.

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3. *Review of United Nations Work in the Field of Outer Space in 1985*

The General Assembly at its Fortieth Anniversary session in 1985 adopted two resolutions (10/87 and 40/162) on matters relating to outer space emphasizing both the need to prevent an arms race in outer space as well as the need to promote international cooperation in the peaceful uses of outer space.

Prevention of an Arms Race in Outer Space

In 1985, the General Assembly, the Committee on the Peaceful Uses of Outer Space (UNCOPUOS) and its subsidiary bodies focused much of their attention on the question of maintaining outer space for peaceful purposes.

The General Assembly in its resolutions—which was adopted with near unanimity, with only the United States and Grenada abstaining—called upon all States to refrain from actions contrary to the observance of the relevant existing treaties or to the objective of preventing an arms race in outer space, and urged the Soviet Union and the United States to pursue intensively their bilateral negotiations in a constructive spirit aimed at reaching early agreement on preventing an arms race in outer space. The Assembly also requested the Conference on Disarmament to consider the question, as a matter of priority, and to reestablish its *ad-hoc* committee on the subject at the beginning of

⁷List VIIIA relates to space radiocommunication stations and radio astronomy stations.

1986 to undertake negotiations for the conclusion of such an agreement.

It also urged all States to contribute actively to the goal of preventing an arms race in outer space as an essential condition for the promotion of international cooperation in the exploration and use of outer space for peaceful purposes and requested UNCOPUOS to continue to consider, as a matter of priority, ways and means for maintaining outer space for peaceful purposes.

In this context, the General Assembly also received this year a proposal by the Soviet Union, which it termed a proposal for "Star Peace", urging the convening "not later than 1987 an international conference with the participation of States with major space capabilities and of other interested countries to consider in all its aspects the question of international cooperation in the peaceful exploration and use of outer space". Under the proposal, the conference would also consider setting up a world space organization to harmonize, coordinate and unite the efforts of States with respect to peaceful space activities (A/40/192). No agreement was reached on this proposal, and the General Assembly adopted a compromise proposal requesting the Secretary-General to invite Member States to submit their views on the possibility of enhancing international cooperation in the field of preventing an arms race in outer space and the peaceful uses of outer space, including the desirability of establishing relevant machinery for that purpose, and to submit a report to the General Assembly at its next session.

During the debate that preceded in UNCOPUOS on related issues, there was agreement that the Committee could make important contributions towards the peaceful uses of outer space, but there was no agreement regarding the specific role that it should play in that regard. Some Governments believed the Committee should complement the work being done in bilateral and multilateral forums toward arms control in outer space. They maintained that the Committee's two subsidiary bodies should be requested to consider specific ways and means of maintaining outer space for peaceful purposes. Other Governments, while recognizing that the Committee was not the suitable forum for arms control negotiations, maintained that it could make valuable contributions of a scientific and legal nature to the peaceful maintenance of outer space. Still others stated that the Conference on Disarmament, as the paramount multilateral disarmament negotiating forum, should have the primary role in negotiating agreements on the prevention of an arms race in outer space. The Committee should therefore concentrate on the promotion of international cooperation in the peaceful uses of outer space. A reorganization of the work of the Committee and its two subsidiary bodies would promote that objective.

International Cooperation in the Peaceful Uses of Outer Space

On the questions relating to peaceful uses of outer space, the General Assembly acted on the basis of the considerations and recommendations of UNCOPUOS which met from June 17 to 28, the Scientific and Technical Subcommittee which met from February 11 to 22, and the Legal Subcommittee which met from March 18 to April 4, 1985. The reports of these bodies are to be

found in United Nations documents A/40/20, A/AC.105/351 and A/AC.105/352, respectively. The important discussions and recommendations of these bodies are summarized below.

Remote sensing of the Earth from space

Consideration was given in the Legal Subcommittee, through its Working Group, to the provisions of draft principles on remote sensing, using as a basis the texts of those principles as they appeared at the conclusion of the twenty-third session of the Legal Subcommittee in 1984.

It also considered working papers submitted by France (A/AC.105/C.2/L.144), Brazil (WG/RS(1982)/WP.11), Chile (WG/RS(1984)/WP.1) and Kenya (WG/RS(1985)/WP.1), which it deemed to be of special relevance. The French, Brazilian and Chilean working papers were submitted at previous Subcommittee sessions, while the Kenyan paper was submitted at the current session.

Owing to time constraints, the Subcommittee was able to give detailed consideration only to the French working paper on draft principles. Some delegations felt that the French paper was constructive and useful and that the Working Group's draft principles should be considered in light of the draft principles proposed by France. Other delegations, while recognizing that the French draft was constructive and useful, drew attention to the compromise proposals considered at the 1984 session of the Working Group, which included a Brazilian draft that had received particular consideration at that time.

Intensive informal negotiations took place in the Committee in June with a view to finalizing the draft principles, and near agreement, in principle, was achieved. But some delegations needed more time to consider the new text before giving their final agreement. It was decided that the text which was worked out in informal consultations charted by Austria would be submitted to the Committee as a working document of Austria and annexed to the report of the Committee as the basis for consensus in the near future (A/40/20, Annex V). Under these principles, remote sensing is to be based on international co-operation and consultation, and is also being made available to States, particularly the sensed States for participation in remote sensing activities on equitable and mutually acceptable terms rather than on prior consent and agreements. Primary data, processed data and analyzed information concerning the territory of sensed States are also to be made available to them on a nondiscriminatory basis and on reasonable cost terms. Unless new and unexpected difficulties emerge, it is expected that these principles might indeed be finally agreed upon in 1986 to be adopted by the forty-first session of the General Assembly.

In the Scientific and Technical Subcommittee's consideration of the subject, the Subcommittee recognized the importance of free access to data for operational meteorological satellites and the necessity for guaranteeing the continuation and intensification of the systems since many countries depended on those systems. It was also reaffirmed that remote sensing should be carried out with the greatest possible international cooperation and participation, and the urgency of providing appropriate systems to meet the needs of the develop-

ing countries was emphasized.

Nuclear power sources in outer space

Acting on a proposal made by its Chairman, the Legal Subcommittee, through its Working Group on nuclear power sources, agreed that it would consider questions of assistance to States; State responsibility; notification prior to reentry of a space object with a nuclear power source on board; radiological protection measures; and protection of space objects with nuclear power sources on board.

In the time allocated to it, the Working Group was able to discuss two of the foregoing themes: notification prior to reentry and assistance to States. Tentative agreement was reached on supplementing two items contained in the notification format for the malfunctioning of a space object with a nuclear power source on board, a format that had been endorsed by UNCOPUOS at its 1983 session.

The Working Group formulated a text whereby the information outlined in item 1.4 of the notification format—data required for the best prediction of a satellite's orbit lifetime as well as its trajectory and impact region—should be updated by the launching State, commencing with the malfunction notification. Moreover, the frequency of the updates should increase as the time of the expected reentry approached. Moreover, information on the radiological risk of the nuclear power source, outlined in item 2.2 of the format, should be furnished according to the same guidelines.

The Working Group recommended that the Scientific and Technical Subcommittee consider the question of how data distributed according to item 1.4 of the notification format could be interpreted for those States which did not have their own capability for such interpretation.

The Working Group also formulated texts on some procedures for assistance to States in the event of the reentry of a space object with an on-board nuclear power source. The Working Group agreed that all States possessing space monitoring and tracking facilities should cooperate upon notification of an expected reentry in order to improve the monitoring of such malfunctioning objects. Also, any additional information and its interpretation was to be made available as promptly as possible so that affected States might assess the situation and take any precautionary measures necessary.

Following the reentry into the Earth's atmosphere of a space object with an onboard nuclear power source, the consensus of the Working Group was that the launching State should, upon request by affected States, promptly provide the necessary assistance to eliminate actual and possible harmful effects.

They also agreed that all States, other than the launching State, with relevant technical capabilities and international organizations with such technical capabilities should, to the extent possible, provide necessary assistance upon request by affected States.

While the Working Group did not discuss the three other questions before it—State responsibility, safety measures for radiological protection, and pro-

tection of space objects with nuclear power sources on board—the view was expressed that the working paper proposed by Canada, China, the Netherlands and Sweden, on radiological protection measures, would provide a useful basis for the Group's discussions. Other delegations, however, argued that safety measures for radiological protection was a matter to be resolved at the national level by launching States.

In its report, the Working Group also recommended that the title of the agenda item be changed from "The possibility of supplementing the norms of international law relevant to the use of nuclear power sources in outer space" to "Elaboration of draft principles relevant to the use of nuclear power sources in outer space."

The Scientific and Technical Subcommittee's Working Group on the Use of Nuclear Power Sources also resumed its work this year. Although some working papers were presented and an effort was made to reach agreement on technical parameters relating to notification procedures and procedures for assistance in case of disaster, there was no consensus. It was, however, agreed that more specific attention should be given to the needs of developing countries in connection with the consequences of the use of nuclear power sources in outer space. As some delegations felt that the Working Group has done all the useful work it could carry out and, although others disagreed, the item will be considered henceforth only in the Subcommittee as there was no agreement to reconvene the Working Group.

Definition and delimitation of outer space, geostationary orbit

The Legal Subcommittee's Working Group considered the two aspects of the agenda item—the definition and delimitation of outer space and the geostationary orbit, while also considering the item as a whole.

On the question of the definition and delimitation of outer space, some delegations, referring to views expressed at the present and earlier sessions of the Subcommittee, considered that a definition and delimitation of outer space was urgent because of the application of outer space law and provisions of the outer space treaties; the sovereignty, equality and territorial integrity of States; the fact that legal regimes applicable to airspace and outer space were radically different in nature; and the orderly and peaceful conduct of outer space activities. In their view, the appropriate course was a multilateral agreement which would establish a specific altitude as the upper limit of airspace and the beginning of outer space.

Some delegations considered that the working paper of the Soviet Union (A/AC.105/C.2/L.39)—which proposed that outer space should commence at an altitude not to exceed 110 kilometers above sea level and that there should be allowance for innocent passage, at lower altitudes, through the airspace of one State of a space object of another State for the purpose of reaching orbit or returning to Earth—could eventually lead to an acceptable text on defining and delimiting outer space.

Other delegations stated that a definition or delimitation of outer space was at present unnecessary, being of the view that the reasons advanced for

the necessity of such a definition or delimitation were inconclusive and that such a boundary would be arbitrary. They pointed out that the smooth relationship that had hitherto existed between activities in airspace and outer space was due, in large measure, to the absence of an artificial boundary. The view was expressed that space activities were presently conducted in a manner entirely compatible with State sovereignty and it was therefore, incorrect to consider a definition or delimitation of outer space as being necessary for securing the sovereignty of States.

Regarding the question of the geostationary orbit, some delegations stated that a special legal regime should be established for the orbit; that it was a limited natural resource, as recognized by the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82) and article 33 of the International Telecommunication Union (ITU) Convention, and that ITU arrangements on the allocation of orbital positions and related frequencies on a "first come first served" basis were unacceptable. They stated that the orbit was approaching saturation, with positions and related frequencies occupied by only a few countries. Thus, principles governing the equitable use of the orbit by all countries needed to be established by the United Nations in order that ITU may make required technical allocations of orbital positions and frequencies.

Some delegations emphasized that the equatorial countries had a special relation to the orbit, since it lay on the equatorial plane and was a unique natural resource. While recognizing that all countries should have equal and equitable opportunities for access to the orbit, they stated that the equatorial countries had special rights and responsibilities with respect to segments of the geostationary orbit superjacent to their territories.

The view was expressed that the following principles should underlie any legal regime: the geostationary orbit was an inseparable part of outer space and therefore subject to relevant international law including the 1967 Outer Space Treaty; it could not be the subject of national appropriation; the positioning of a space object in the orbit did not create rights of ownership over that particular orbital segment; utilization of the orbit should not be detrimental to the interests of other States and account should be taken of the special needs of the developing countries; and States should cooperate in placing communications satellites in the geostationary orbit with due regard to ITU decisions on utilization of frequencies allocated for space communications.

The view was expressed that it was necessary to juridically regulate the geostationary orbit in view of the fact that the regulatory framework of ITU would no longer cope with certain technological trends. Others disagreed, and drew attention to the fact that the World Administrative Radio Conferences of 1985 and 1988 were the appropriate bodies for the formulation of principles regulating utilization of the geostationary orbit and related frequencies.

The view was also expressed that access to the geostationary orbit ought not be dependent on the technological capacity or the financial means of States.

The Scientific and Technical Subcommittee noted the technical work in progress in preparation for the ITU-WARC-ORB conference in 1985 and 1988.

United Nations Program on Space Applications and UNISPACE Recommendations

The UNCOPUOS endorsed the activities proposed under the United Nations Program on Space Applications for 1986 which were later approved by the General Assembly. The Program consists of a world-wide series of space applications workshops and training courses. Under the Program, 196 persons from developing countries were trained in 1985 and a similar number was expected to be trained in 1986.

With regard to the implementation of UNISPACE recommendations, the Committee recommended that the Scientific and Technical Subcommittee consider carrying out further studies, within existing resources, in order to establish concrete international space cooperation projects with the maximum participation of experts from developing countries. It took note of the Secretariat's efforts to establish the International Space Information Service.

Other matters and future work

UNCOPUOS and its Scientific and Technical Subcommittee also considered questions relating to space transportation and noted the progress being made in this connection by the countries which are involved in building and maintaining space transportation systems.

Consideration was also given to the future role and work of the Committee and its subcommittees and it was agreed that the Scientific and Technical Subcommittee should have a special theme each year for consideration, which, in 1986 would be "Remote Sensing for Developing Countries". Other possible themes for future sessions that were proposed include sonar energy, satellite communication for educational purposes, and agricultural benefits of space technology including food preservation. The Scientific and Technical Subcommittee was also urged to continue consideration of matters relating to life sciences, including space medicine at its 1986 session.

All of the above subject areas are to receive continued consideration in 1986 in UNCOPUOS which will meet in New York from June 2 to 13, the Scientific and Technical Subcommittee which will meet in New York from February 10 to 21, and the Legal Subcommittee which will meet in Geneva from March 24 to April 11.

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4. Report on Communications Satellite Corporation v. Franchise Tax Board, 156 Cal. App. 3d 726, 203 Cal. Rptr. 779 (1984)

I. Introduction

The jurisdiction of state courts has taken one giant leap into outer space

as the result of a recent case dealing with state taxation of orbiting satellites. The United States Supreme Court has let stand a California decision holding that California may treat communications satellites operating in geosynchronous orbit as "California property" for state income tax purposes. This case was decided almost exclusively on interpretations of California tax statutes and failed to consider the broader implications that such a precedent might have on United States space operations in the future. Consequently, this case represents a dangerous intrusion of state law into the realm of transnational space. The decision not only conflicts with the supportive attitude of the Administration toward space commercialization and development, but also threatens to open a Pandora's Box by encouraging further state regulation and taxation of spaceborne activities.

The Communications Satellite Corporation (Comsat) is a District of Columbia corporation authorized to do business in the State of California. Comsat's income is apportioned and taxed under the three part formula of the Uniform Division of Income for Taxation Purposes Act (Uniform Act). The three factors are the taxpayer's real and tangible personal property, payroll, and sales. The primary issue in this case was whether personal property value attributed to the orbiting satellites should be included as California property in applying the formula.

Comsat filed California state income tax returns for 1970 through 1972 based on the assumption that the satellites were *not* California property for purposes of state income tax. California's Franchise Tax Board disagreed and filed a Notice of Proposed Assessment on May 15, 1975. By treating the apportioned value of the satellites as California property, the Board increased Comsat's tax liability by over \$300,000, plus interest. Comsat paid the tax after exhausting its administrative remedies.

Comsat filed suit for refund of income taxes in the Superior Court, for the City and County of San Francisco, on December 12, 1978. The trial court held for Comsat and the Franchise Tax Board appealed. In a lengthy decision interpreting the Uniform Act, the California Court of Appeal reversed the trial court and held that Comsat owed the additional tax.¹ The decision considered in detail the parties' conflicting theories on the application of the tax statutes. Absent from the appellate opinion were discussions of the transnational character of space, the issue of federal preemption in the field of space operations, national space policy, or the possible effects of space-related treaties.

A hearing was denied by the California Supreme Court on August 29, 1984, and the United States Supreme Court dismissed an appeal request, despite an *amicus curiae* brief filed by the Solicitor General's office which, for the first time, raised issues of federal preemption and implementation of the federal government's supportive policy toward commercialization of space.

"The United States has a strong interest in the manner in which

¹Communications Satellite Corp. v. Franchise Tax Board, 156 Cal. App. 3d 726, 203 Cal. Rptr. 779 (1984).

its states tax the federally-established corporation through which part of this Nation's space policy is pursued. California's effort to sweep extraterrestrial values into its tax base, moreover, raises serious questions about the states' power to assert jurisdiction in outer space, a realm of paramount federal concern. The decision below could presage attempts by the States to tax (or otherwise to assert jurisdiction over) other activities that may be conducted in outer space, such as manufacturing or research aboard the Space Shuttle and eventually aboard the Space Station. The decision below thus threatens to inhibit the federal government's policy of removing obstacles to successful commercial development in outer space."²

II. *The Apportionment Provisions of the California Revenue and Taxation Code*

Comsat participates in the International Telecommunications Satellite Consortium (Intelsat). The function of Intelsat is to operate the global commercial communications satellite system. The space segment of this system consists of communication satellites in equatorial orbits which at no time pass over California. The space segment also includes four earth-based command stations which monitor and control the satellites. These stations are located in Maine, Italy, Australia and Hawaii. The assets of this segment are owned by the members of Intelsat, including Comsat which has a 52.5% interest.

The ground segment consists of earth stations owned by various entities. Comsat has a 50% ownership interest in seven stations, one of which is located in California. Comsat also owns a 100% interest in an Alaskan station and maintains a small engineering office in Los Angeles County.

Comsat generates revenue by leasing "half circuits" to various communications carriers. A "half circuit" is a communication channel between an Intelsat satellite and an earth station. This channel, when combined with a second half circuit between the satellite and another earth station, creates a full circuit capable of transmitting telecommunications between two earth stations. A secondary source of Comsat's income is its 52.5% interest in Intelsat. Thus, Comsat receives 52.5% of Intelsat's gross revenues.

The California Revenue and Taxation Code (Tax Code) requires a corporation which receives income from business activity both inside and outside the state to apportion its income between California and the other states involved. The amount of income apportioned to California is determined by multiplying the corporation's net business income for the tax year by a fraction. This fraction is based upon (1) the relative value of the corporation's property used in California compared to the value of its property used everywhere; (2) the relative amount of compensation paid by the corporation to employees within California compared to the amount of compensation paid to employees everywhere; and (3) the relative sales revenue obtained by the corporation in

²Solicitor General's *Amicus Curiae* Brief at 2-3.

California compared to the corporation's sales revenue everywhere.³ The effect of applying this fraction is that as the corporation's relative activity in California increases, so will its California tax liability.

III. Application of the Apportionment Provisions to Comsat

A. Comsat's Interpretation

Comsat purposely omitted the value of its interest in the Intelsat satellites in its determination of the California portion of the property factor. Comsat did include the value of this interest in calculating the total value of its property in *all* locations. Similarly, in its determination of the California portion of the sales factor, Comsat excluded revenue received from its interest in the Intelsat satellites and included only what it refers to as a "ground percentage" of the revenue it received from leasing half circuits at its California earth station. Comsat determined the ground percentage of such revenue by dividing the value of its property comprising the eight earth stations by the value of all of its property holdings, including its interest in the satellites. Finally, Comsat included its entire California payroll in its determination of the California portion of the payroll factor. It included all payroll amounts, including those paid in California, in determining the total payroll paid in all locations.

B. The Court's Interpretation

While the court agreed with Comsat's interpretation of the payroll factor, it disagreed with Comsat's determination of the property and the sales factors. The court increased the California portion of the property factor by attributing part of the value of Comsat's satellite interest to California as if a portion of each satellite was physically located in California. As explained by the court:

"There is an invisible, but apparently continuous and very real, connection between the earth station and the satellites. The earth station has a value only because this connection exists, and it is otherwise of no value. Without the connection, the satellites function in outer space to no purpose involving this state. With it, they function in California. . . . Because Comsat owns an interest in the satellites, and because they function in California at and through the Jamesburg earth station, we conclude that they are 'tangible personal property owned. . . and used in this state.'"⁴

The court increased the California portion of the sales factor by including more of Comsat's revenue generated from the leasing of half circuits in Califor-

³Cal. Tax Code § 25128.

⁴*Communications Satellite Corp. v. Franchise Tax Board*, 156 Cal. App. 3d at 748, 203 Cal. Rptr. at 793.

nia. The court calculated the California portion based upon the number of half circuits leased by Comsat at the California earth station in relation to the number of half circuits leased everywhere. The court further increased the California aspect of the sales factor by adding a portion of the satellite revenue received by Comsat from Intelsat. Comsat, in its calculations of the California portion of this factor, had completely omitted this revenue. In including this revenue in its calculation, the court again applied the "functional relation" concept. The court reasoned as follows:

"The income producing activity which generated [Comsat's share of the Intelsat revenue] was the operation of the satellites themselves. Because they actually function at the California earth station. . .their income producing activity is also performed in this state. . .For that reason, the part of Comsat's sales representing revenue from their use was properly characterized as its sales in this state."⁵

IV. Summary

The court, through its emphasis on the functional nexus between the satellites and the California earth station, included Comsat's interest in the Intelsat satellites as a part of Comsat's California property holdings. Similarly, again focusing on this functional relationship, the court included as a part of Comsat's California revenue a portion of the revenue earned by Comsat as a result of its interest in the Intelsat satellites. Finally, the court increased Comsat's California revenue by including a greater portion of Comsat's earnings generated through its leasing of half circuits. The result of the court's determination was a significant increase in Comsat's California income tax liability.

The most unfortunate aspect of this case, which is among the first that directly pertains to activities which take place in space, is that it totally fails to consider the spaceborne point of view. It is a dangerous first step in enabling state courts to meddle in a unique and important geographic location. Space as a place must be governed by innovative, uniform laws specifically intended for space application and not by a piecemeal "trickle-up" of inappropriate state statutory and decisional law.

A more desirable resolution of this case from the viewpoint of the space entrepreneur would have been a holding that strengthens concepts such as (1) space is an area of paramount *federal* concern; (2) state taxation of value attributed to satellites in outer space is contra to a stated federal policy of promoting and assisting commercial space operations; and (3) terrestrial values are not, in many cases, appropriate standards by which to regulate events in

⁵Communications Satellite Corp. v. Franchise Tax Board, 156 Cal. App. 3d at 751, 203 Cal. Rptr. at 795.

outer space.

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5. *The 28th Colloquium on the Law of Outer Space, Stockholm, October 7-12, 1985.*

The Colloquium took place during the 36th Congress of the International Astronautical Federation. The sessions were held in the new Congress Building in Alvsjö. The Colloquium was well attended by lawyers from all parts of the world and also by several representatives of the United Nations such as *Dr. E.W. Ploman, Dr. V. Kopal and Dr. N. Jasentuliyana.*

The four official subjects were the following: (1) Legal Aspects of Maintaining Outer Space for Peaceful Purposes; (2) Comparison Between Sea and Space Law, Especially in View of Exploration and Exploitation Activities; (3) Legal Problems of Registration of Space Objects; (4) Space Activities as a Subject of Space Law.

After the opening remarks of the President of the International Institute of Space Law, *Judge M. Lachs* of the International Court of Justice kindly agreed to chair the first session. In 1984 *Judge Lachs* was one of the chairmen presiding during the symposium on "Conditions Essential for Maintaining Outer Space for Peaceful Uses" which was held in the Peace Palace in The Hague. *Dr. R. DalBello* assisted the President during this session.

The first speaker, *Prof. Christol*, was of the opinion that the search for peace was taking on a new intensity. He outlined existing international restraints on space weapons and war and stressed that strategic stability was changing with respect to space and nuclear arms. He felt that the role of the international lawyer was twofold: (1) provide options for policy, and (2) and help build confidence in the legal system. In addition to new problems there were new opportunities.

According to *Dr. Cocca*, it was necessary to preserve space for peace. Peace should not be considered as the opposite of war. Modern media technology teaches us the differences. *Dr. DalBello* considered whether or not the U.S. and the Soviet Union could agree to restrict space weapons. He felt that the international community should begin to consider "Rules of the Road" for coordinating and regulating space activities. In turn, *Dr. Emmanuel* observed that war had led to technological advances but at a great cost. If this trend continued, we might not survive. Policy must be based on more than cooperation, such as a look to our common heritage. Space peace was not only the affair of the superpowers. In *Dr. Fasan's* opinion law and peace were connected. Peace was not the absence of military personnel. However, an arms race in space could not be characterized as "peaceful." The U.N. Charter granted a right of self-defense and space should be used for peaceful purposes only.

The next speaker, *Dr. Mayorski*, presented the paper of *Dr. Piradov* and himself and stated that COPUOS had the right to investigate fully the aspects of militarization of space. The Conference on Disarmament might have primary, but not exclusive jurisdiction. No one had questioned the right of COPUOS to write the 1967 Treaty. After this statement, *Dr. Jonathan Galloway* stressed that nuclear war is illegal under current international law and the use of sufficient number of weapons to cause nuclear winter is also illegal. We had to reach a peace which was not based on arms race and it was incumbent on the Superpowers to show restraint.

After that *Prof. Gorove* summarized his paper by making some specific space arms control proposals which in his view might have a chance of acceptance by decision makers. Among them he mentioned the ban of nuclear weapons and other weapons of mass destruction on the moon and other celestial bodies and on trajectories to and from the moon, as well as the keeping or placing (not stationing) of such weapons beyond the geostationary orbit. Additionally, he suggested a ban on the establishment of military bases and fortifications in outer space, including the moon and other celestial bodies and proposed that consideration be given to the prohibition of ASAT weapons in geostationary orbit, should it appear to be verifiable.

Dr. He Qizhi was in favor of strengthening COPUOS and expanding its jurisdiction. COPUOS should not bypass or transfer its functions. However, one must work to make the committee more effective. *Dr. Kuskuvelis* suggested that nations should adopt treaties which were verifiable. Early outer space treaties did not have verification provisions. Finally *Dr. Okolie* pointed out that the ABM treaty did not ban research and that nations always had the right to defend themselves. In the remaining little time left for discussion, interventions were made by *Prof. Christol*, *Dr. Menter*, *Dr. Mayorski*, *Prof. Gorove*, *Ambassador Finch* and *Dr. Okolie*.

The second session was presided over by *Dr. Mayorski*. The first speaker, *Dr. Almond*, pointed out that the general principles of law were primarily principles of procedure and substantive law had to reflect the practice of States. Principles which could not be enforced were merely declaratory. After these remarks, *Dr. Haanappel* stated that the air and sea were partially affected by national sovereignty. Sovereignty has been extended through means such as the "exclusive economic zones." The high seas and outer space were *res communis*. The common heritage doctrine was different in the law of the sea and in the Moon Treaty.

Dr. Jasentuliyana thought that the resources of ocean and space were similar because they both were beyond national boundaries. They were new resources to be distributed. Identical demands were being made on both resources. However, not all benefits had to be shared, and the two systems did not have to be identical.

Dr. Kopal stated that science and technology were an important part of international law, but their historical developments were different. The law of the sea was mostly customary. At first the sea was only concerned with navigation and only more recently with resources. There was never before a need to discuss the rules of space war, like the rules of ocean war because the 1967

Outer Space Treaty prevented this in Art. IV.

Dr. Sloup addressed "Astrolaw". In the future, space lawyers will have to be trained. Development of national programs could eventually lead to greater cooperation between countries for the conduct of maritime, polar and outer space research, as well as the greater participation of the legal profession in such activities.

Because of the limited numbers of papers, there was ample opportunity for discussion in which *Mr. Bowman*, *Dr. Sloup*, *Dr. Okolie*, *Dr. Safavi*, *Prof. Christol*, *Dr. Almond*, *Dr. Mayorski*, *Dr. Emmanuel*, *Dr. F.R. Smith* and at another time, *Dr. Sloup*, *Mr. Arovelo* and *Prof. Gorove* participated.

The third session was chaired by Ambassador *Finch* and dealt with the registration of space objects and the discussion on this subject, whereas *Dr. Ploman* was co-chairman for the discussion on the topic of the first session, which had to be continued. The Chairman made comments on the Registration Treaty and the nuclear power sources in his paper. He was in favor of a revision of the Treaty, defending obligatory and timely registration to strengthen the convention. *Dr. Mayorski* thought that additions were not yet necessary. The treaty was based on and came out of practice, and the convention was answering its aims. Par. 3 of Art. IV could be used if new agreements on registration were needed. *Dr. Perek* drew attention to the sentence in Art. IV, par. 1 of the treaty which reads "Each State of registry shall furnish to the Secretary-General of the United Nations, *as soon as practicable*, . . . information concerning each space object carried on its registry: . . ." (italics added). He cited the U.N. G.A. Res. 1720 (XVI)B which requires that the information be furnished "promptly." The Fourth Consolidated Guide to International Data Exchange through the World Data Centres (nongovernmental channel) requires that it be given "within a few hours." In practice the information is given within four months. *Dr. Perek* proposed to amend the Registration Treaty to the effect that "as soon as practicable" would be understood to mean "within 24 hours."

Following *Dr. Perek's* remarks, *Dean Olmstead* presented the paper of *Mr. Rothblatt* and discussed the history of the treaty and the recommendations mentioned in the paper. *Dr. Safavi* made a comparison with aircraft. He was of the opinion that nationality of space objects had to be deleted and that problems had to be resolved by registration. *Dr. Müller* expressed the view that the Registration Treaty did not need to be revised and backed his opinion with many arguments. According to him the treaty has fulfilled its purpose. These papers were followed by a vivid discussion because the Chairman had put several questions to the speakers.

A question directed to *Dr. Mayorski*—whether a space station could be registered under the Registration Treaty, was answered by him as follows: The Treaty speaks about national registration. A station is composed of different elements. For registration of a space station an agreement between the respective states will be needed. Moreover, *Dr. Mayorski* was of the opinion that, in general, more than 24 hours were necessary to proceed with registration.

Joining in the discussion, *Dr. Kopal* expressed the view that (1) registration was a legal act to establish control over an object (2) this act included the

registration done within the launching state (national registration) and the furnishing of information to the Secretary-General of the United Nations, and that (3) a list of existing space objects was the aim of registration. Art. II, par. 2 of the Registration Treaty served to solve the complex problems of stations and Art. IV par. 2 provided for the possibility of furnishing additional information.

Dr. Matte felt that the Registration Convention was not satisfactory. He thought that a new register for space stations was desirable. Finally, in responding to the question of the Chairman, namely, how joint ventures in space would affect the applicability and usefulness of the Registration Convention, *Dean Olmstead* recalled the observations in *Mr. Rothblatt's* paper. He said that if the Registration Convention was viewed solely as the instrument facilitating an inventory of space objects, as suggested by *Dr. Kopal* and *Dr. Mayorski*, then to meet this narrow objective, no revision of the Convention was implicated. If, however, we examined the Preamble to the Convention, we would find that two Recallings referred to the international regimes which established the principle of international responsibility and the rules and procedures concerning the liability of states. It was clear that the Convention was established for a purpose, and that purpose was to represent and effectuate the linkage between a space object and the liable party. Therefore, for the Convention to meet its fundamental purpose in an era of joint ventures in space, the Convention had to provide for the establishment of a registry which was not merely an inventory, but represented the complexity of this linkage between liability and multistate space ventures.

After these different opinions, the discussion on the subject of the first session was continued in which among others, *Dr. Haanappel* observed that the legal material was stressed too much and that not enough attention was given to the spirit in which the ABM Treaty had been drafted.

The fourth and last session, chaired by *Dr. He Qizhi*, dealt with papers on space activities. *Dr. Böckstiegel* clarified the different terms in the treaties and observed that the term "space law" was not being used in the space treaties. The phrase "space activities" was interpreted in different ways. He came to the conclusion that a generally applicable meaning could not be established. "What we are left with is the need to interpret the definition and scope of space activities individually in the context of every treaty and most of the time even in the context of every single article referring to them."

The President spoke about the different circumstances that had to be observed for the protection of the safety of space traffic. After the President's remarks, *Dr. Dula* gave a rather technical paper and illustrated with slides materials processing in space as a subject of space law. This was followed by *Dr. Matte's* presentation which consisted of a summary of his very solid and extensive paper on space-stations, treating not only the legal regime of space stations but also the international legal regime governing military activities in space stations. His rich paper gave a survey of the problems connected with space stations. The next speaker, *Dr. Reijnen*, stressed the legal status of space activities including new constructions and the delimitation matter.

Dr. Sico singled out questions raised from the organization of activities

aboard space stations and observed that rather complex juridical relations would arise because the activities to be accomplished were not of a single purpose: each section of the station had its own purpose and the station, as a whole, had a preeminent purpose, namely the best and largest utilization of the equipment and the preservation of the personnel's life and health in a hostile environment.

Dr. Steptoe gave a very solid paper on the regulation of private commercial space transportation by the United States Department of Transportation, a very topical and interesting subject. *Dr. Tesauro* spoke about liability for space activities and international responsibility of states for acts which could damage the whole international community. In the Italian Code there was an article under which the State was liable for the damage caused. Addressing issues of remote sensing *Dr. Vereshchetin* expressed the view that both the collection of data and their dissemination fell under space law. He did not favor the idea that international responsibility depended on the place of the activity. The question of damage caused by the dissemination of collected data was left open. *Dr. Sarkar's* paper on "Effect of Fibre-Optic Communications on Space Radio Regulations" was also brought under the subject of this session. A limited discussion followed in which *Dr. Perek, Mr. Roth* and *Mrs. Komar* took part.

In conclusion, the President thanked the chairmen and the participants for the spirit of cooperation and the good-will in which the discussions took place. She also thanked the speakers on the different subjects, the participants in the discussion and all other participants for their kind attention and attendance. She announced that the next Colloquium would be held in Innsbruck, Austria during the week of October 5-11, 1986.

I.H.Ph. Diederiks-Verschoor
President, International
Institute of Space Law

6. *Roundtable on Legal and Technical Implications of Space Stations, IAF Congress, Stockholm, October 8, 1985*

The Scientific-Legal Liaison Committee of the International Academy of Astronautics (IAA) and the International Institute of Space Law (IISL) organizes during the Congresses of the International Astronautical Federation (IAF) roundtables on selected problems of current space activities which are of joint interest to scientists, technologists and lawyers. Basic information about past meetings of this kind was already given in this Journal earlier.*

Recently, the eleventh roundtable was held under the auspices of the IAF Congress in Stockholm (Sweden) on October 8, 1985. It was devoted to "Legal and Technical Implications of Space Stations," a subject that is now attracting the attention of a growing number of space researchers. According to the con-

*See 12 J. SPACE L. 201 ff. (1984).

veners, besides general aspects, scientific, technical and legal problems pertaining to communication between space objects; the danger of collisions and debris, the re-entry and other particular questions relating to the topic should have been discussed.

As on earlier occasions, a number of speakers representing different branches of space science and law were invited to present introductory papers to the discussion. Most regrettably, however, one of them, *Dr. E.A. Roth* from the European Space Operations Centre in Darmstadt, FRG, who made an excellent contribution to the previous 1984 roundtable in Lausanne, could no longer contribute in a similar way to the 1985 roundtable. He passed away shortly before the Stockholm Congress. The participants in the roundtable discussion dedicated a minute of silence to his memory.

The Roundtable on Space Stations was chaired by *Professor Manfred Lachs*, Judge of the International Court of Justice and Honorary Member of the IAA. In his introductory remarks, he outlined the purpose of the discussion and emphasized the significance of a dialogue between representatives of science and technology on the one hand and social sciences on the other hand.

The first invited speaker was *Dr. Malcolm G. Wolfe* of the Aerospace Corporation, Los Angeles. He presented a report on "Orbital Debris—Current Issues as They Impact on an Expanding Manned Presence in Space" in which he concentrated on such problems as orbital collisions, space debris, satellite control, space environment, hazard assessment and space policy in relation to space stations. Current plans to deploy an international space station and proposals for other ambitious space initiatives mean that substantial progress in co-operation in these respects must be made within the next few years, for failure to do so could possibly result in a catastrophic orbital collision that could frustrate man's goals in space for decades to come. *Dr. Wolfe* recalled the AIAA Space Debris position paper issued in 1981 and the NASA Johnson Space Center Orbital Debris Workshop held in 1982, as well as a comprehensive space debris assessment program plan for which he claimed support at the international level. He recommended that the current and future space debris should be predicted, taking into consideration objects passing through the occupied orbits, particles migrating from higher orbit and objects breaking up into a greater number of particles. Future space systems should be designed and controlled so that they do not add to the debris population. They must be designed to release no particles and must be protected to an acceptable reliability level by shielding and redundancy. However, as the speaker observed, although some spacecraft already use maneuvering for collision avoidance, it is not anticipated that large space initiatives such as the Space Station could use this technique for purposes of a collision probability reduction. In conclusion, the speaker emphasized the need for interchange of information at both national and international levels, with the ultimate goal of forming an international group to encourage and co-ordinate research in this field and to recommend and implement policy.

The second invited speaker was *Mrs. Eilene Galloway*, Honorary Director of the IISL. In her paper called "The Space Station: US Proposal and Implementation", she first examined scientific and technical features that should be

taken into account and identified existing space law applicable to space stations according to major subjects of the five space treaties. She also paid attention to the applicability of International Telecommunication Convention and Radio Regulations as well as the role of international space organizations established outside the United Nations system. The role of bilateral agreements between States undertaking to cooperate on the space station was also examined, particularly as reflected in the Memoranda of Understanding concluded between NASA, ESA, Canada and Japan.

On the basis of this analysis, the speaker suggested the following conclusions: The space station is a new tool to use in pursuing many of the space applications that have developed during the past twenty eight years. The documents establishing international cooperation will necessarily be between the States concerned, formulated outside the United Nations but consistent with the general principles of established space law. Operational imperatives demand establishment of specific organizational structures that could have some basic interests in common with the UN specialized agencies in their special field of concern. Although a fairly consistent and harmonious foundation of international space law and practice for peaceful purposes has been created, it will be more difficult to maintain this situation in the future unless international space agreement is reached on definitions which are universally understood. *Mrs. Galloway* recommended that all information required to solve problems of definition should be programmed into a computer so that we could examine basic space law and regulations to which most nations are already committed to determine whether a common term can be found to define such elements as space system, space station, ground station, launching authority, component parts, etc. The multidisciplinary tasks confronting scientists, engineers, lawyers, economists and politicians, will thus have a basis for determining efficient management for space systems.

The third invited paper was written by *Mr. A. I. Rudev* (USSR) and presented on his behalf by *Dr. Vladlen S. Vereshchetin*, Vice President of the IISL. The growing significance of manned space stations which requires a substantive examination of the space law rules in force in the light of technical peculiarities of their construction and functioning was emphasized in this contribution. The writer defined space stations as objects designated for the exploration of outer space launched into Earth or other planetary orbits, or complexes of these objects assembled in orbit, which have or can have a periodically replaceable crew and are supported by a transport system for their material and technical supplies, repairs and change of crews. In spite of some features common for stations in Earth orbit, those on the surface of Moon and those in Moon orbit, the international legal system of each of them has some specifics arising from differences in legal rules applicable in the respective parts of space.

Further in his paper the writer raised a number of points, such as the problem of registration of a module station assembled in orbit, the content of information on space station for the UN Secretary-General, the effects of space stations operations on environment, etc. He also discussed the question of establishing special security zones around space stations which should be defined

on the basis of agreed scientific and technical criteria and relevant legal considerations. Furthermore, the writer observed that a consensus was not yet reached regarding the problem of access to space stations in orbit around the Earth or to manned or automatic objects launched from these stations. He concluded by emphasizing the need for a special agreement or agreements that would deal both generally with the legal status of space stations and special questions of their construction and operations, including environmental protection, safety of flights in near space, as well as their exclusive use for peaceful purposes.

The fourth invited speaker was *Professor Josef Dvorak*, Chief of the Research Division in the Central Institute of the Railway Health Services (Prague, Czechoslovakia). In this paper, presented in the absence of the writer by *Dr. Gloria Heath*, Co-Chairperson of the IAA Committee on Space Safety and Rescue Studies, attention was drawn to some medical and legal implications of space stations and the need for developing adequate responsibilities both of astronauts and the organizations concerned. In *Dr. Dvorak's* opinion, while today spacecraft flights are mostly exploratory in character, the level of acceptable risk is relatively high, comparable to that of airplane test flights. This should be different when space stations become operational, for such stations, though situated in an exceptional environment, would not principally differ from polar, undersea or high mountain stations.

The speaker then concentrated on a problem the solution of which was in his opinion essential for ensuring the safety of spacecraft flights which depend, besides technical aspects, on the working ability of astronauts. The changes in this ability are hardly measurable during the flight conditions, and the deconditioning of an astronaut is ascertainable mostly from his feelings as reported by himself. In this connection, the writer identified, and tried to answer, the following medico-legal questions: 1. To what extent is the astronaut obliged to report about his in- or after-flight de-conditioning? 2. How far is he obliged to do so regarding any other crew member? 3. What is the nature and extent of responsibility of the medical personnel involved, particularly in the light of the principle of medical secrecy?

In the second part of his paper the writer analyzed the responsibilities of space organizations in relation to astronauts who might be disqualified for future missions on the basis of their in-flight de-conditioning reported by themselves. In his opinion no organization could be made responsible for such a change in the astronaut's evaluation. Loss of flight ability belongs to the risks of the astronaut's profession and an eventual loss of flight ability should not be reason for him to leave astronautics completely. The space organization concerned should be obliged to ensure the astronaut's further career in a related field. As to the operations of space stations, the writer recommended that they should not be allowed before it is established with reasonable certainty that no adverse effects will accrue to members of the crew. Proper medical help is to be secured, including emergency situations that are to be considered as similar to those at sea. In concluding, the writer predicted that the development of law in the field of medical problems of space stations would be rather slow; its first requirement should be to ascertain to what extent the situations during the

operations of space stations are comparable to similar terrestrial situations.

The discussion that developed after the exhaustion of the list of speakers concentrated first on the problem of debris. In this connection *Dr. Vereshchetin* (USSR) raised the following questions: "What technical means exist for preventing and eliminating space debris", and "Are there any calculations about real danger arising from debris?" The views expressed on these questions differed. Whereas attention was drawn by *Dr. Heath* (USA) to the existence of several papers giving more or less exact figures, *Dr. Wolfe* acknowledged that a complete agreement in this respect has not been reached yet. *Dr. Menter* (USA) recalled the calculations of NORAD assuming the existence of the debris of more than 4000 space objects. *Dr. Perek* (Czechoslovakia) observed that debris had a short life-time in lower orbits and smaller debris was generally not observable. He also said that the probability of one collision in 10 years in orbits between 500 and 1000 km was established. *Prof. Okolie* (USA) reminded that the first victims of debris from objects placed in GSO were equatorial countries. While *Dr. Okolie* rejected the idea of considering debris as a space object, *Professor Gorove* (USA) held the view that debris should still be considered as a space object or its component part. In this connection *Dr. Mayorski* (USSR) recalled the applicability of the 1972 Liability Convention. *Professor Böckstiegel* (FRG) opined that questions relating to space debris might become one of the topics to be considered by the Legal Subcommittee of COPUOS.

The discussion on space stations was also initiated by *Dr. Vereshchetin* (USSR) who raised a principal question whether a special agreement or agreements on their legal status were really needed. This question was then elaborated by *Dr. Mayorski* (USSR) in the light of the 1975 Registration Convention which has been based on the principle of one object—one State of registry. In the opinion of *Dr. Finch* (USA) efforts to conclude a new treaty dealing with space stations should be preceded by defining the policy goal that would make such an instrument necessary. *Professor Gorove* (USA) expressed doubts about the necessity of discussing the question of space stations on the level of the UN and *Dr. Jasentuliyana* (UN) suggested the establishment of an international technical group that would develop standards and practices relating to space stations rather than initiate a new treaty instrument. *Professor Cocca* (Argentina) brought to the attention of the audience problems of biotechnology and genetics in space stations and raised the question whether the present law is suitable for application to human society in outer space.

Unlike most of the past roundtables organized by the Scientific-Legal Liaison Committee, the session in Stockholm did not exhaust its subject matter. As stated by *Judge M. Lachs*, in his final remarks, serious problems concerning both major topics that had been discussed, namely "space stations" and "debris", persisted and the discussion could bring but an initial asset to their solution. One of the causes was a rather limited basis of discussion for due to unforeseen circumstances, some expected contributions could not be delivered and the scientific and technological background for consideration of legal aspects of the subject offered in the papers submitted was mostly oriented to special problems and additionally, the discussion concentrated only on some of

the questions involved.

Therefore the Scientific-Legal Liaison Committee decided at its meeting held after the roundtable to keep "space stations" on its agenda and recommended to convene another roundtable on this subject during the IAF Congress in Brighton (United Kingdom) in 1987. In the light of the further experience from operations of the existing orbital station or stations and with regard to further progress in the design and planning of future stations, the Committee will elaborate a list of specific questions addressed to scientists and lawyers that would provide a more comprehensive basis for a discussion during the next roundtable.

Dr. Vladimir Kopal
Co-Chairman, IAA-IISL Scientific-
Legal Liaison Committee

(b) Short Account

7. *Symposium on "Arms Race in Outer Space: Could Treaties Prevent it?", McGill University, Oct. 30-Nov. 1, 1985*

Sponsored by the Canadian Department of External Affairs (DEA), this symposium was convened by the Centre for Research of Air and Space Law, McGill University, Montreal. It consisted of five sessions. The first one, chaired by *Prof. Dr. K.H. Böckstiegel* dealt with the "Technological and Strategic Aspects". *Prof. T.J.F. Pavlasek* of the McGill Engineering Faculty opened the discussion, giving a brief historical account of the exoatmospheric nuclear testing in the 1960's, which disclosed the potentially devastating effects of Electro-Magnetic Pulse (EMP). A discussion of President Reagan's Strategic Defense Initiative (SDI) followed, which was to be a leitmotiv of the symposium.

Lt. Col. F.R. Cleminson of the Canadian Department of External Affairs concentrated on verification issues in his address, advocating the Canadian PAXSAT initiative for space-to-space remote sensing, with a corresponding international organization to administer it. Expressing his regret that we cannot control "la rage d'inventer", *General P.M. Gallois* (France) proclaimed the ineluctability of its latest creation, SDI. Perceiving a European vulnerability under a U.S. controlled SDI system, he called for the creation of a "tactical defense initiative" by and for Europe, perhaps under the auspices of the recently announced French EUREKA initiative. The last speaker during the first session, *Dr. D. Goedhuis*, was less skeptical of the ABM Treaty and, although recognizing its erosion, called for its reaffirmation by the superpowers. He further considered that international agreements can be useful in the future in outer space weapons control, by at least establishing a lowest-possible baseline of balanced militarization.

In the second session, on "Treaties and Verification", chaired by *Dr. A. Kozyrev* (USSR), *Mr. N. Jasentuliyana*, of the UN Outer Space Affairs Division defended the ABM treaty. At the same time, he called for its clarification and fortification by protocol. The latter could extend its ambit to include *inter*

alia ASAT (anti-satellite) weapons. While desiring total demilitarization, he believed that solely the prohibition or limitation of weaponization was feasible. Acknowledging that reconnaissance satellites were confidence-building measures, he nevertheless observed that they were also part of a self-fulfilling process. As to verification, he advocated the expansion of the 1975 Registration Convention to permit mechanized on-site inspection (black boxes), with the ultimate solution being an International Satellite Monitoring Agency (ISMA).

Reiterating the now familiar pragmatic approach of France towards outer space militarization, *Mr. O. de Saint-Lager* (French Ministry of International Relations) echoed *Mr. Jasentuliyana's* comment regarding a recognition of currently existing militarization. It was stated that verification is the major French concern. This involves: bans on ASAT testing and space deployment of ABM systems, and a strengthening of the Registration Convention.

The third panelist, *Mr. He Qizhi* of the People's Republic of China strongly urged that treaties continue to be used to control weapons, citing several such treaties successfully in existence. *Mr. He* then went on to join the growing caucus of opinion in favor of an ISMA being created, observing poignantly that its establishment would cost less than one per cent of the total expended annually on armaments.

In concluding the second session, *Mr. R. Rochon*, a Canadian delegate to the Geneva office of the UN and the Conference on Disarmament (CD), briefly categorized extant arms control treaties of direct and partial relevance and those which contributed to a general confidence-building climate. He further enumerated some of the modalities for outer space arms control, including total prohibition, altitude limitation, and rules of the road. *Mr. Rochon* assiduously emphasized that the CD was autonomous from the UN, was not constrained by the latter's unanimity principle, and thus was a suitable multilateral forum for negotiation of subsequent arms control treaties.

The third session on "Legal, Political and Social Implications", was chaired by *General P.M. Gallois*, *Prof. M. Mateesco-Matte* of the University of Nantes, France, commenced by admonishing the two superpowers that they did not have sole responsibility to decide upon outer space activities. Rather it was the responsibility of all States to regulate this environment, which is the province of all mankind.

The Soviet representative, *Dr. Kozyrev*, averred that the time for "megaton diplomacy" was ended, and the era of "Star Peace" could be a reality. With admirable frankness he admitted to Soviet militarization of space, together with that of the USA. He further conceded that, like the USA, the Soviet Union was creating new "strike" weapons for outer space use, acknowledged as highly destabilizing. He voiced the Soviet trepidation concerning the SDI program which, it was maintained, would enable a first-strike capability. Instead of such developments, *Dr. Kozyrev* advocated a joint Salyut-US Space Shuttle mission, under the auspices of a new international space organization.

In reply, *Mr. Kent Stansberry* enumerated, in a somewhat detailed fashion, the elements and rationales underlying the US SDI program. He maintained that it was a defensive program to protect the USA from incoming ICBMs. It was further a research program only, aimed at enabling an informed

decision "in the 1990's" on whether to deploy such a system in the field. Strict criteria for a positive decision on deployment would be: "survivability"; and "cost effectiveness at the margin". It was emphasized that SDI would protect US allies also, and that when and if such a system were in place, negotiations would be undertaken with the Soviets for their participation. SDI was, therefore, a means of making the transition from an offensive nuclear strategic balance, to a more defense-reliant one, based on nonnuclear means, with the ultimate objective of reducing the chances of war.

The concluding panelist, Mr. P.A. Comeau, a journalist from Canada, addressed some of the social issues, observing that humanity did not understand the arms race and that the ABM Treaty was unknown to the younger generation. He implored that treaties be respected, not because of the *pacta sunt servanda* principle, but because of international morality.

The last session on "What Type of Treaty Could Prevent an Arms Race in Outer Space?" was moderated by Dr. N.M. Matte. The first speaker, Mr. He, was in favor of a comprehensive ban on the testing, deployment and use of space weapons. This could be achieved by an incremental approach, commencing with the banning of all ASATs, or at least the high-altitude variety, and further, the establishment of rules of the road and the creation of an ISMA. First, Dr. Kozyrev urged strict compliance with the ABM Treaty and a multilateral approach to arms control. Four elements adduced, to be included in a prospective arms treaty, had been culled from the Soviet 1981 and 1983 drafts to the UN, and were: a prohibition of the use of force in outer space and from space against the earth; a ban on weapons of any kind launched or deployed in outer space; a comprehensive ban on testing or deployment of space strike weapons; and the destruction and perpetual ban of existing space weapons systems.

Mr. Stansberry adopted a more conservative approach, advocating a bilateral methodology, and attempting initially to rid ourselves of the most destabilizing weapons, such as the largely MIRVed ballistic missiles. The final comments of note were those by General Gallois, who proclaimed that no State can limit its defensive capability by treaty since this would obviate its security, and that of Prof. Dr. K.H. Böckstiegel, who expressed the truism that treaties cannot of themselves prevent an arms race in outer space.

The final act of the Symposium was the closing banquet, addressed by Mr. Geoffrey Pearson, Executive Director of the Canadian Institute for International Peace and Security. In his tangential description of political motivations underlying arms limitation, he observed that the political will, although a quixotic and ephemeral thing, is a *sine qua non* of a successful arms control treaty. Mr. Pearson concluded by commenting on Canada's geographical position, as one of the two great arctic powers, and on its people who harbor a strong desire to play a role in ensuring international peace and security.

The proceedings of the Symposium will be published and available from the Centre for Research of Air and Space Law in the spring of 1986.

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8. *Other Events*

The third international conference organized by Assicurazione Generali S.p.A. on "Commercial Activities in Space - Future Programmes and Insurance Requirements" was held in Rome on Sept. 26-27, 1985.

The Section of Business Law of the International Bar Association sponsored a discussion on "Commercial Activities in Outer Space" and "Issues of Space Risks" during the Association's conference held in Singapore, Sept. 30 - Oct. 4, 1985.

The purpose of the "Space Station - Gateway to Space Manufacturing" Conference (Orlando, Nov. 7 - 8, 1985) was to discuss plans for the commercial uses of the space station, including space manufacturing and space-based services.

"Legal and Values Issues Raised by Commercial and Military Uses of Space Technology" was the theme of a conference at Georgetown University on Nov. 18, 1985.

The United States Space Foundation's Second Annual Space Symposium was held on Nov. 19-22, 1985 in Colorado Springs and addressed issues of space arms control, space stations and commercialization of space.

The Section of Aviation and Space Law of the Association of American Law Schools held a panel discussion on "Interrelationships of Air and Space Law" during the Association's annual meeting held in New Orleans, Jan. 4-7, 1986.

The First Annual Conference on Satellite Communications, held on Jan. 13-14, 1986 in New York City, aimed at bringing together satellite communications system operators, carriers, broadcasters, manufacturers and users.

9. *Brief News*

NASA opposes the idea of transferring space shuttle operations to private enterprise in the immediate future. . . . China is offering launch services to interested foreign users. . . . Artificial operational intelligence and robotics systems are being developed for use on space stations. . . . Germany and France develop direct broadcast satellite services. . . . British Aerospace proposes unmanned platform for the Columbus space station project. . . . Sweden is considering the setting up of an electronic mail relay satellite system (Mailstar) as an addition to its current space programs involving Viking, Spot and Telex. . . . DOD is expected to continue purchase of expendable launchers as an option to the shuttle. . . . Proposals for the construction of a fifth shuttle orbiter are reportedly improving. . . . The FCC proposes to charge fees for communication satellite and earth station applications. . . . Satellite insurance premiums went up from 5-10 percent to 15-20 percent following the loss of several spacecraft. . . . Ariane 4, a new heavy-lift launcher, is being readied for flight in 1986, while Ariane 5 versions are being developed to provide different payload capabilities. . . . France is building Vesta, an asteroid/comet flyby spacecraft for the Soviet Union. . . . INTELSAT sells transponders for domestic use. . . . Several European firms participate in the SDI program. . . .

Atlantis carried the first self-insured commercial satellite A manned mission to Mars could take place in the 1990-s, possibly as a U.S.-Soviet endeavor or a multinational project.

B. Forthcoming Events

A Symposium on Space Commercialization and its impact on Florida will be held on Feb. 3-4, 1986 in Orlando, Florida. The Symposium's aim is to explore the vast future commercial potential offered by the space environment.

The Association of the U.S. Members of the International Institute of Space Law and the American Society of International Law are cosponsoring a panel discussion on "Treaty Law and Outer Space: Is the United Nations Playing an Effective Role?" to be held April 12, 1986 in the Mayflower Hotel in Washington, D.C.

COSPAR's General Meeting scheduled for June 30 - July 12, 1986 in Toulouse, France, expects to bring to the fore activities and projects by national and international space agencies.

The 1986 Colloquium on the Law of Outer Space will be held in Innsbruck, Austria, from Oct. 5 to Oct. 11, 1986 and the topics to be discussed will be: 1. Legal aspects of maintaining outer space for peaceful purposes; 2. Legal aspects of space communications, including the geostationary orbit and the services utilizing it; 3. Commercialization of space activities; and 4. Space law teaching and history, and space law science.

BOOK REVIEWS/NOTICES

Mezhdunarodnoe pravo (International Law), edited by G.I. Tunkin [Moskva, Yuridicheskaya literatura (Juridical Literature), 1982], 565 pp.

The book under review is a textbook of public international law for USSR universities in which law is taught. As most of the earlier works of this kind, this, too, is a collective achievement of a team of Soviet scholars. This team was led by Professor *Grigory I. Tunkin*, a corresponding member of the USSR Academy of Sciences and head of the Chair of International Law at the Faculty of Law, Lomonosov University in Moscow. He also authored several chapters of the book.

Although several treatises on international law have been published in the USSR by other authors, the growth of scholarly work in this field has been mostly connected with Professor *G.I. Tunkin*. Having collected much practical experience in international law as a long-time Head of the Treaty and Law Department of the Ministry of Foreign Affairs and as a representative of the USSR at different world legal fora, he has concentrated his interest in the last 25 years on key theoretical issues of this discipline. His principal work, *Theory of International Law*, was published in Russian in 1970 and also translated into several other languages.¹ In the early 1970's he led a team of teachers from three Soviet universities (Moscow, Leningrad, and Kiev) that produced a textbook on international law published in 1974. In 1975, Professor *Tunkin* delivered a course at The Hague Academy of International Law, entitled "International Law in the International System."² In all of these works his theoretical thinking crystallized into a complete system.

The reviewed textbook published in 1982 is neither a new nor a revised edition of any previous works. It was drafted by a different team of Soviet authors, has a different structure, and reflects new developments that have occurred both in the world and in the Soviet doctrine of international law.

A report on a synthetic work of this kind in a brief review can offer but a partial image of it. This review has been drafted in the light of the special interest of the *Journal of Space Law*. Attention will be drawn only to the main features of the book and those highlights which have a particular relation to the law of outer space.

The book consists of two parts. In the first part, general problems of international law are treated. Problems such as its notion, history, substance, sources, system, subjects, and principles, are covered. Moreover, such topics as the law of international treaties, international conferences and organizations, responsibility in international law, and the role of international law in relations

¹The English translation by E. Butler was published by Harvard University Press, Cambridge, Mass. in 1974.

²147 RECUEIL DES COURS 1-218 (1975/IV, 1978).

among Socialist States are discussed. In the second part, special branches of international law, including the law of the sea, air law, law of outer space, and legal protection of the environment are characterized in individual chapters. This part also includes two topics of a different nature: the legal means for settlement of international disputes and international law during armed conflicts.

The basic philosophy of the book is laid down in its first chapter and once again summarized in its conclusion. International law (public international law) is here presented as an independent system of law, separate from legal systems of individual nations. This law operates within an international system as its normative sub-system. The international system embraces States, international (inter-governmental) organizations, various unions of States, nations and peoples struggling for independence, and some State-like entities. It includes not only these subjects, but also relations among them, international law and other social norms, and also interactions between all these components. Therefore, international law must be considered in conjunction with them, and international relations must be studied in regard to the interaction with international law and not separately.

One of the essential features of the book, which is to be particularly praised in this Journal, is its emphasis on the impact of progress in science and technology on international system and international law. It widens the sphere of relations among States and by the same token the sphere of international law. An example of this is the emergence of space law. However, it also becomes evident through social processes that initiate and promote the growth of progressive forces in the world. Internationalization of economic and other aspects of the life of society, accelerated by the scientific and technological progress, is materialized in the growth and intensification of international economic, scientific-technological, and other ties.

Several Chapters in the first part of the book deserve closer attention; e.g., Chapter 4 dealing with interrelations between international law and domestic laws, written by Professor *I.I. Lukashuk*, and Chapter 8 written by Professor *G.I. Tunkin* and *E.A. Shibaeva*, which includes many interesting thoughts on international conferences and international organizations. In considering these conferences and organizations the writers detected a process of internationalization which is connected with the scientific and technological progress of our times. In this process a growing number of economic, scientific-technological, cultural, and other problems of international cooperation among States emerge. Their solution requires the creation of permanent institutions for this cooperation—international organizations that could effectively discharge their duties, be they of a general or local nature.

The emphasis on phenomena connected with these processes is particularly specified in several of the twelve chapters of Part two, that deal with special branches and institutes of present international law. One of them is Chapter 19, "International Space Law," which was written by Professor *V.S. Vereshchetin*. This law is described by Professor *Vereshchetin* as a special branch of international law which regulates relations between its subjects connected with their activities in the exploration and uses of outer space, includ-

ing celestial bodies.

When characterizing the development of space law the writer observes that before the conclusion of the first special treaty on outer space in 1967, a number of customary principles and norms of international space law had emerged. These included the principle of nonextension of State sovereignty to outer space or, in other words, the principle of freedom of exploration and uses thereof. It should be noted in this connection that outer space and celestial bodies (the Moon, planets, stars, satellites of planets, etc.) are qualified at another place of the book. They are qualified as "objects of common use by all States" and as "international extra-terrestrial spaces." (P.412).

Some of these principles have already been spelled out in the early resolutions relating to international cooperation in outer space, which were adopted by the UN General Assembly. Before 1967, a number of individual norms governing some aspects of space activities were also adopted, such as those included in the treaty banning the tests of nuclear weapons in the atmosphere, in outer space and under water which was signed in Moscow on August 5, 1963. However, the main part of present international space law has been delineated in a series of special international treaties elaborated in the United Nations, particularly by its Committee on the Peaceful Uses of Outer Space. These were later signed and ratified by a great number of States.

The second group of special sources of international space law consists of numerous international scientific-technological agreements governing joint activities and cooperation of States in outer space. Acts establishing international space organizations such as Intersputnik, Intelsat, Inmarsat, and ESA are among them.

In Professor *Vereshchetin's* opinion, international space law applies not only to activities of States in outer space, including celestial bodies, but also to activities on Earth and in the air space above the Earth which are connected with the exploration and uses of outer space. In a number of sub-chapters the writer then offers a condensed image of present space law. First, the legal status of outer space and celestial bodies is analyzed. It is emphasized that international space law, that has been developed with an active participation of States of the Socialist community, is aiming to establish outer space as a zone of peace and cooperation among all nations. On the other hand, treaty norms establishing a delimitation between air and outer space have not been adopted yet. However, a customary norm of international space law has already emerged, under which artificial satellites with lowest perigee are already moving beyond the limits of the aerial part of State territories. This is why a number of States, headed by the USSR, are proposing to recognize by a treaty provision that outer space begins from the altitude of 100-110 km. above ocean level, while at the same time preserving the right of passage of space objects at lower altitudes for the purpose of reaching orbit or returning to Earth.

The other parts of international space law are divided in the remaining sub-sections. They deal, respectively, with the legal status of cosmonauts and space objects; responsibility of States for space activities and liability for damage caused by space objects; and legal problems of the uses of outer space for applied purposes, such as: space telecommunications, space navigation, space

meteorology, remote sensing of Earth from outer space, and direct television broadcasting. In this way, the relevant space law instruments and initiatives developed by the USSR concerning these areas are recalled and summarized.

The final sub-section is devoted to a topic which has also been dealt with by Professor *Vereshchetin* in a monograph.³ The writer attaches to the principle of cooperation of States a great significance in the exploration and peaceful uses of outer space. In his opinion, cooperation of States in this field is one of the essential principles of international space law and should be interpreted primarily as a duty of States to mutually cooperate for the cause of strengthening international peace and security in carrying out their activities in outer space. In a more general sense this principle provides the commitment to facilitate and assist, to the highest degree, the elaboration of wide ties and joint projects in the exploration and uses of outer space for peaceful purposes. As far as specific rights and duties in this field are concerned, they originate from treaties specially adapted to this purpose by States and intergovernmental organizations taking into account their needs, interests, and capacities. As an example of such a treaty, the writer mentions the Agreement on Cooperation in the Exploration and Uses of Outer Space for Peaceful Purposes which was signed in Moscow on July 13, 1976, on the basis of which ten Socialist countries participate in joint activities under the scope of "Intercosmos programme."

In a similar manner, but *mutatis mutandis*, three additional chapters deal with other matters relating to scientific and technological progress. They are: Chapter 17 written by Professor *A.L. Kolodkin*, dealing with International Law of the Sea and reflecting the great development effected in this legal branch by the UN Convention on the Law of the Sea in 1982; Chapter 18 dealing with International Air Law, which was written by Professor *A.P. Movchan* who led a team of authors that published a two-volume treatise on international air law in Moscow recently;⁴ finally Chapter 20, which was written by *A.P. Movchan*, and *S.V. Vinogradov*, dealing with International Legal Protection of the Environment.

In general, it may be concluded that the team led by Professor *Tunkin* succeeded in drafting a comprehensive, and at the same time concise, treatise on international law of our times. Based on the Marxist-Leninist philosophy, the work goes farther than any previous textbook in elaborating main issues of present international space law and its doctrine. Although some of the problems dealt with in its different parts have been outlined only in general terms, the book as a whole is well balanced. It presents a complete report on "the state of the art" in the Soviet doctrine of international law, and as a textbook it will be used for the education of thousands of law students in the USSR for several years. For all of these reasons, it deserves full attention in all

³MEZHDUNARODNOE SOTRUDNICHESTVO V KOSMOSE (International Cooperation in Outer Space), published in Moscow in 1977.

⁴MEZHDUNARODNOE VOZDUSHNOE PRAVO (Kniga 1, 1980; Kniga 2, 1981).

parts of the world.

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Astrobusiness—A Guide to the Commerce and Law of Outer Space by Edward Ridley Finch, Jr. and Amanda Lee Moore (Paperback ed. printed by Interstate Book Manufacturers and distributed by Walden Book Co., Inc., Stamford, Connecticut, 1984), pp. 141.

In their introductory chapters, Ambassador *Finch*, a distinguished space lawyer and practicing international attorney, and *Dr. Moore*, set the stage for what they call with fitting characterization as *Astrobusiness*. They stress some of the basics for business ventures in space and identify its commercial uses, including communications, remote sensing, space manufacturing and the transmission of energy from space.

In sketching the supporting structures for space missions, including the space shuttle, space platforms and space stations, the authors review briefly available space transportation services, including government operations and private ventures to provide launch, upper stage and support services. They highlight aspects of insurance coverage associated with space activities and foresee increased competition with ensuing cost reduction for space services and an ability to cope with requirements of risk management by the insurance industry.

As to financial business in space, the authors observe that commercial space ventures "are full of promise, risk, and high rewards" (p. 54). In providing a brief overview of administration policy and the involvement of regulatory agencies, Congress, practitioners, and consultants concerned with space law, the writers intimate an expanding legal field with ever-changing legal problems. Insofar as the international space law making process is concerned, the authors believe that it is important for space entrepreneurs to become part of the process (p. 81).

In the author's view, the best answer to verification of arms control agreements is in visitation and inspection rights which belong in all future space treaties" (p. 92). As to next steps, the authors believe that the time for space commercialization is now, and that the opportunities for private enterprise are unlimited (p. 100).

In this nutshell paperback on *Astrobusiness*, the authors succeed in providing a very informative and easily understandable guide which should be of particular value, especially to students interested in the status and prospects for the commercialization of space.

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Chairman, Editorial Board
JOURNAL OF SPACE LAW

Space Law In The United Nations, Marietta Benkö, Willem de Graaff, and Gijsbertha C.M. Reijnen (Martinus Nijhoff Publishers, 1985) pp. 256.

This book consists of four chapters, each pertaining to a major area of debate in the United Nations concerning the international law of outer space. The initial chapter, written by *de Graaff* and *Reijnen*, deals with remote sensing activities by satellites. It is divided into sections covering the physical aspects of use of remote sensing platforms in space, the types of functions for which they are used, the legal problems, and the internationalization of remote sensing satellites.

Chapter two, written by *de Graaff* and *Benkö* concerns the use of nuclear power sources (NPS) on satellites. It covers accidents of the recent past, types of nuclear satellites and their use, safety measures, accident probabilities, and the deliberations of the United Nations on the subject. The third chapter, by the same writers, discusses the definition/delimitation of outer space and the use of the geostationary orbit. It first elaborates upon the scientific and technical aspects of the delimitation question and then provides information on the present state of the legal debate and its alternative approaches to the issue. A similar, albeit abbreviated, treatment is given to the geostationary orbit. The final chapter, by *Reijnen*, concerns the prevention of an arms race in outer space. The current state of affairs is described, followed by a discussion of existing and proposed international agreements on the subject.

It is unfortunate that the book's title was not more carefully chosen. As it is, the title is somewhat misleading since the authors did not set out to cover space law in the United Nations in *toto* but only some selected areas. The Annexes include a number of relevant international legal instruments.

Space 2000, Selection of Papers Presented at the 33rd Congress of the International Astronautical Federation, edited by Dr. Luigi G. Napolitano (American Institute of Aeronautics and Astronautics, New York, New York, 1983), pp. 709.

The volume is a compilation of forty of the papers given at the 33rd Congress of the International Astronautical Federation held in Paris, in 1982. The volume consists of five chapters: "Space Transportation Systems and Space Stations", "Earth Oriented Application of Satellite Systems", "Scientific Satellites and Space Exploration", "Supporting Technologies", and "Prize Winning Student Papers."

A presentation by *Yash Pal* entitled "Towards UNISPACE '82 and Beyond" introduces the work setting out the policies of the conference in three main areas: increased use of space; more equitable distribution of the benefits of space exploitation; expansion the existing type of exploitation and developing new uses of space. After an organizational statement, *Pal* outlines the recommendations of the group; an international satellite system for weather data, remote sensing and navigation; involvement of developing-country personnel in human resource programs; general international cooperation in space; international space information clearing house; reorganization and expansion of the

UN space committees; and a study of the effects of the militarization of space.

Of the papers three address matters relating to space law. The first, entitled "The International System of Space Telecommunication 'INTER-SPUTNIK'—Its State and Main Directions" by V. *Romantsov* and Z. *Chalupsky*, is a discussion of the INTERSPUTNIK system. An organizational statement of the system and a description of its physical components (location of satellites and ground stations) follows. The article ends with a proposal for future developments and improvements of the INTERSPUTNIK system.

Two papers on INMARSAT were selected for review. The first is "Evolution of the INMARSAT Mobile Satellite Communications System into the Coming Decade" by O. *Lunberg*. This paper is a general discussion of the history, policies, organization and financing of the system. *Lunberg* discusses the characteristics, components of the system, the life expectancy of the present network, the need for future expansion of the system, intergration of the maritime and air traffic systems, and the requirement of polar coverage. In the second INMARSAT paper, "INMARSAT Distress and Safety Services Present and Future", *Konstantin Ivanov* gives a brief history explaining the need for communication with ships at sea and the present commitment of INMARSAT to the improvement of this communication.

The Case for Mars II, edited by Christopher P. McKay (American Astronautical Society, San Diego, California, 1985), pp. 716.

This volume is a collection of papers presented at the Case for Mars II conference held by the Planetary Society, July 10-14, 1984 in Boulder, Colorado. Most of the work discusses the scientific and technical aspects of the human exploration of and use of Mars. The book is introduced by two papers giving a historical background and proposed timetable for such exploitation.

Four papers presented in the book may be of interest to those involved in the legal aspects. *Leonard David's* paper, "Political Acceptability of Mars Exploration—Post-1981 Observations", gives a short history of the "stepping stone" approach which the exploration of space has taken. Further, *David* expresses the need for long term planning and international cooperation in the continued "stepping" toward the use of space. Along a similar theme, *Nathan C. Goldman*, in "The Mars Base: International Cooperation", outlines the desirability and the practicality of international efforts in space exploration with regards to the cost and the complexity of endeavors. Aspects specific to the Mars question include: political problems with few immediate benefits, the cost of redundant US and USSR competition, the likelihood of western cooperative venture, and the prospects of general international cooperation.

On a different line, *James E. Oberg*, in "Russians to Mars?", discusses the likelihood of the Russians already planning a manned mission to Mars. *Oberg* points to the Soviet hardware and tests which could be used in such an effort. One general reason for the exploitation of Mars, which may be the underlying reason for the efforts, *Oberg* speculates, is the natural resource of Mars. Contrasting *Oberg*, *Christopher P. McKay* in "Antarctica: Lessons for a Mars Exploration Program," points out the similarities of the exploration of Antarctica

and Mars. McKay outlines specific analogies regarding: "Continued Presence", "Scientific Activities", "Risk Assessment and Logistics", "Political and Strategic Motivation", and "International Cooperation/Competition".

Arms In the 80's, by John Turner and SIPRI (Stockholm International Research Institute, 1985), pp. 118.

This book is divided into three sections and is accompanied by an index. The first section deals with the issues and trends in the arms race. It discusses Star Wars and the hopes for disarmament. Included in this section is a discussion of public opinion with charts of the results of the polls taken. Section two is devoted to nuclear weapons, space weapons, chemical and biological warfare, world military expenditure, arms production, the trade in conventional arms, and arms control. Illustrations and charts accompany these topics. The last part of the book consists of reference materials to the text adopted from the *SIPRI Yearbook 1985*.

Spectrum Management and Engineering, edited by Fredrick Matos (The Institute of Electrical and Electronics Engineers Press, New York, 1985), pp. 493.

This book is a collection of reprints designed to be useful not only to those who professionally engage in spectrum management and engineering but also to those who have any interest at all in spectrum management.

Part I of the book deals with the legal and regulatory aspects of spectrum management both from the international and domestic standpoints. Briefly set out are the various international and U.S. agencies and committees that have dealt with spectrum regulation over the years. Following this introduction to the spectrum regulatory structure are several articles that highlight international and domestic developments in the field of spectrum management. The articles in Part II are designed to aid the spectrum manager in having better overall control over the spectrum, whereas those in Part III deal with spectrum engineering.

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Resolution III.43 adopted by the Third Meeting of Ministers of
Transport, Communications and Public Works of the Countries
Signatories of the Cartagena Agreement +

Equitable use of the radio-
frequency spectrum and the
geostationary orbit, a
composite resource

THE THIRD MEETING OF MINISTERS OF TRANSPORT, COMMUNICATIONS
AND PUBLIC WORKS OF THE COUNTRIES SIGNATORIES OF THE
CARTEGENA AGREEMENT

Having regard to the resolution adopted by the sixteenth Board of Governors of
ASETA,

Considering:

That the WARC-ORB-85* will afford the developing countries an opportunity to defend the principle of the equitable use of the composite resource made up of the radio-frequency spectrum and the geostationary orbit against the acquisitive position of the industrialized and technologically advanced countries;

- That the administrations of the countries signatories of the subregional agreement, through the co-ordination of ASETA, have become aware in time of the above-mentioned aim and that, accordingly, a series of steps must be taken in order to achieve the proposed objectives;

- That, despite the fact that some developed countries have expressed their willingness to discuss planning only with respect to the already congested bands of 6.4 and 11.14 GHz, the equitable distribution of the resource which the geostationary orbit and the radio-frequency spectrum comprise must be achieved in all present or future services;

- That the right of access to that resource must be guaranteed in any frequency band which technology makes practicable to utilize in the future;

- That our countries should not defer decisions concerning higher frequency bands since that would be to commit the same error which has led to the present inequitable use of the geostationary orbit in the 6.4 and 11.14 GHz bands;

- That there is a trend towards the use of hybrid satellites, i.e., satellites which combine several frequency bands;

+ Taken from U.N.Doc. A/40/99 (1985).

* World Administrative Radio Conference on the planning of space services using the geo-stationary orbit.

- That, for their satellites already in service and those planned, North American countries have taken up the largest part of the orbital axis available above the Pacific Ocean and the continent and that they intend to obtain additional positions;

- That the principle of "first come, first served" has resulted in the inequitable use of the geostationary orbit and the radio-frequency spectrum,

HEREBY RESOLVES:

1. That the telecommunications administrations of Bolivia, Colombia, Ecuador, Peru and Venezuela will present a united front in the deliberations of the WARC-ORB-85;

2. That they shall make joint proposals for the establishment by the Conference of advance planning for the orbit and spectrum, rejecting the principle of "first come, first served";

3. That the administrations should consider the adoption of one of the planning methods set out in the report of the preparatory meeting for the WARC-ORB-85 held from 24 June to 20 July 1984 by the study groups of the International Radio Consultative Committee (CCIR) in Geneva, Switzerland;

4. That the WARC-ORB-85 should decide to carry out advance planning for the geostationary orbit and the radio-frequency spectrum in bands of special interest to our countries, in particular those used in fixed-satellite service, bearing in mind the special geographical situation of the equatorial and Andean countries and giving due consideration to the sharing of those frequency bands and orbital axes for other space services of general interest;

5. That a working group should be established with the assistance of ASETA, to co-ordinate the implementation of the foregoing policies.

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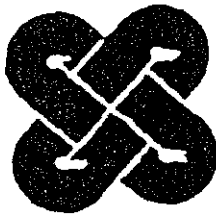
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