THE INFLUENCE OF COMMUNICATIONS SATELLITES ON NATIONAL COMMUNICATIONS LAWS AND REGIONAL ARRANGEMENTS IN THE AMERICAS

*Katherine Drew Hallgarten**

The first specific United States legislation that gave official recognition to the fact that we had entered the Space Age was the National Aeronautics and Space Act of 1958[1] (the "NASA Act").

By February 7, 1962, space technology had advanced to the point where legislation in a particular field, the field of telecommunications, was considered necessary. On that date, President Kennedy submitted to the Congress a proposal calling for the establishment of a privately owned communications satellite corporation. The result was the Communications Satellite Act of 1962[2] (the "COMSAT Act").

Both of those laws contain provisions which evidence acknowledgement by the United States of the international responsibility it bears for its activities in the exploration and use of outer space.

The NASA Act provides that "it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind,"[3] and cites as one of the objectives of activities thereunder, "[c]ooperation by the United States with other nations and groups of nations in work done pursuant to [the] Act and in the peaceful application of the results thereof."[4]

One of the earliest of the peaceful applications of those results was in the field of communications.

The COMSAT Act provides in Section 102(a) and (b) that:

> (a) [I]t is the policy of the United States to establish, in conjunction and in cooperation with other countries, . . . a commercial communications satellite system, as part of an improved global communications network, . . . which will serve the communi-

---

*A.B., Stanford University; J.D., School of Law, University of California, Berkeley; member of District of Columbia and California Bars; Chairman, Inter-American Bar Association Section on Communications; member Council, American Bar Association Section of International Law; President, Washington Foreign Law Society; Consultant Arent, Fox, Kintner, Plotkin and Kahn, Washington, D. C.

[1] 42 U.S.C. § 2451 (1970).

[2] 47 U.S.C. § 701 (1970).

[3] Sec. 102(a).

[4] Sec. 102(b)(7).

> cation needs of the United States and other countries, and which will contribute to world peace and understanding.
>
> (b) [I]n 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 service and charges for such services.

These provisions are a reflection of views expressed in Resolution 1721(XVI) adopted by the United Nations General Assembly on December 20, 1961, "that communications by means of satellites should be available to the nations of the world as soon as practicable on a global and non-discriminatory basis."[5]

It is the purpose of this paper to demonstrate how, with respect to communications, these provisions have been put into operation as the advance in technology has permitted ever widening activities. It will also be shown, how, in turn, technological developments have given birth to a growing body of treaties and other international arrangements, and to the enactment of national legislation in the Americas.

Long before the advent of satellite communications, international telecommunications arrangements have been entered into. In 1959 an organization which had been established in Madrid in 1932, the International Telecommunication Union (ITU), had allocated frequencies for space telecommunication purposes.[6] As a result of action taken at the Plenipotentiary and Administrative Conferences of the ITU in Geneva in 1959, two new radio communication services identified in article 1 of the Radio Regulations were defined as follows:

> Space Service: A radio communication service between space stations.
>
> Earth-Space Service: A radio communication service between earth stations and space stations.[7]

At successive ITU Extraordinary Administrative Radio Conferences more and more frequency allocations for special space services have been defined to keep pace with

---

[5]G.A. Res. 1721, 16 U.N. GAOR Supp. 17, part D. U.N. Doc. A/5026 (1961). The resolution is entitled International Cooperation in the Peaceful Uses of Outer Space.

[6]See Glazer, ITU: Through Time and in Space, 60 Mich. L. Rev. 269, 285, note 56 (1962): "Delegates to the ITU Plenipotentiary and Administrative Conferences held in Geneva in 1959 did not hesitate to add to this classification (of the United Nations Charter and the Statute of the International Court of Justice as being not limited in their operation to the confines of the Earth), the law making treaties of the ITU."

[7]Radio Regulations, done at Geneva, Dec. 21, 1959, entered into force for the United States Oct. 23, 1961 [1961] 12 U.S.T. 2377, T.I.A.S. 4893.

expanded satellite communications uses.[8] Among allocations made in the "Partial Revision" in 1971 were those for "Broadcasting-Satellite Service" and for "Community reception (in the Broadcasting-Satellite Service)."[9]

These allocations are essential prerequisites for the orderly operation of the global satellite communications system envisaged by the COMSAT Act. The nature of the international arrangements which should bring that global system into being and operation was not prescribed by the Act. Thus, those arrangements were worked out through negotiations among the international participants in the enterprise, as intended. After considerable negotiation, two interrelated agreements, the "Interim Agreement" and the "Special Agreement,"[10] which established an international partnership for the financing, ownership and operation of the space segment of the system, were entered into. Early signatories to these agreements in the Western Hemisphere were Brazil, Argentina, Chile, Colombia, Canada, and the United States.

For a period of seven years, the International Telecommunications Consortium (INTELSAT), which was thus created operated under the mentioned arrangements. The Communications Satellite Corporation (COMSAT), the private corporation organized pursuant to the Comsat Act, furnished the technical and operating management services for INTELSAT. Pursuant to Article IX of the agreement establishing *interim* arrangements for a "Global Commercial Communications System," a conference was called in February 1969, for the purpose of negotiating *definitive* arrangements for INTELSAT. After a period of intensive negotiations over a period of almost two and one-half years, two agreements were produced: the *Agreement Relating to the International Telecommunications Satellite Organization "INTELSAT"* and the *Operating Agreement Relating to the International Telecommunications Satellite Organization "INTELSAT."*[11] Following

[8] Glazer, *supra* note 6, remarks in note 62 on page 287 that "The formal activities of the ITU in the area of space telecommunication, however, antedate the Geneva Conferences of 1959. During 1958, CCIR (International Radio Consultative Committee) Study Groups holding sessions in Moscow studied questions involving protection of frequencies used by artificial satellites."

[9] Partial Revision of Radio Regulations (Geneva, 1959), as amended, on Space Telecommunications, done at Geneva July 17, 1971, entered into force for the United States Jan. 1, 1973 [1973] 23 U.S.T. 1527, T.I.A.S. 7435 at 8-293.

[10] Agreement Establishing Interim Arrangements for a Global Commercial Communications Satellite System, August 20, 1964 [1964] 15 U.S.T. 1705, T.I.A.S. 5646. The *interim* arrangements consist of two separate but related agreements: Agreement Establishing Interim Arrangements for a Global Communications Satellite System (Interim Agreement) and a Special Agreement, done in Washington on August 20, 1964, and entered into force August 20, 1964. Provisions for settlement of disputes are contained in the Supplementary Agreement on Arbitration, done at Washington on June 4, 1965, and entered into force November 21, 1966 [1966] 15 U.S.T. 1705, T.I.A.S. 5646. The name "INTELSAT" was adopted on October 28, 1965, and appears in copies of T.I.A.S. 5646 (reprinted in January, 1967).

[11] Agreement Relating to the International Telecommunication Satellite Organization "INTELSAT" with Annexes, August 20, 1971, entered into force for the United States, February 12, 1973, T.I.A.S. 7532; Operating Agreement Relating to the International Telecommunications Satellite Organization "INTELSAT" with Annexes, August 20, 1971, entered into force for the United States Communications Satellite Corporation, February 12, 1973, T.I.A.S. 7532.

the pattern of the *interim* arrangements, these *definitive* arrangements consist of two separate but interrelated agreements: the Agreement, concluded among governments, and the Operating Agreement, concluded among governments or their designated telecommunications entities, public or private.

An outstanding event of the year 1973 was the entry into force of the definitive arrangements for INTELSAT on February 12. This date marked the required sixty days after December 14 when the requisite number of 54 countries had ratified the new agreements.

As of the February 12 date, 79 countries had adhered to the new agreements, and additional countries were in the process of ratification. The new organization thus superseded the partnership arrangement which had been operating since August 1964 under *interim* arrangements.

The first meeting of the Board of Governors, the governing body of the permanent INTELSAT, was held in Washington, D. C. on March 14, 1973.

No attempt will be made here to give a detailed description of INTELSAT, which has already been amply covered in legal publications, but a few remarks illustrating recent developments are in order. [12]

In addition to the Board of Governors, other components of a four tier structure of INTELSAT are the Assembly of Parties (Governments), Meeting of Signatories (Governments or telecommunications entities—investors in INTELSAT), and an Executive Organ responsible to the Board of Governors.

COMSAT is required to furnish technical and operating management services under a contract with INTELSAT which has a firm six year term from the time the agreements enter into force, or until February 1979. These services are to be performed under policies of the Board of Governors.

The Agreement calls for the Director General to be appointed no later than December 31, 1976. He will be responsible to the Board for all management services, including supervision thereafter of COMSAT's performance of technical and operating management services. After the expiration of the six-year term of the management contract with COMSAT, the INTELSAT organization will still continue to contract out to one or more competent entities, technical and operational management functions to the maximum extent practicable with due regard to cost and efficiency.

---

[12] See, for instance, Mizrack, The Impact of Communication Satellites Upon the Law: Definitive Arrangements for the International Telecommunications Satellite Organization-INTELSAT, paper submitted on behalf of the Communications Section of the Inter-American Bar Association to the XVII Conference of the IABA at Quito, Ecuador, April 24-28, 1972. Ed. note: An elaboration of the paper may be found in 1 J. Space L. 129 (1973).

The Assembly of Parties, composed of a representative of the government of each member state, is to meet every two years, unless it determines otherwise from meeting to meeting. The Meeting of Signatories, composed of representatives of Signatories, is to take place annually. The Assembly of Parties is to provide a forum for governments to consider matters of concern to them, while the Meeting of Signatories is to consider operational matters and other matters of interest to investors and participants in INTELSAT. Voting in both the Assembly of Parties and the Meeting of Signatories is to be on the basis of one member, one vote.[13]

INTELSAT, the international organization which operates the global commercial communications satellite system, today provides full-time satellite service to nearly 90 countries of the world. There are satellite earth stations owned by various national entities located in 49 countries. At present, satellites are capable of providing the standard public telecommunications services. Satellites are also capable of performing numerous other services and functions, such as communications with surface ship and airborne modes of transportation, flight and maritime safety services, as well as services for remote sensing of earth resources.[14] While INTELSAT may provide facilities for specialized telecommunications service in space segments, it may do so only if such service does not diminish the efficient and economic operation of its regular services. Furthermore, prior authorization from the Assembly of Parties is required.[15]

A significant development in the United States of America was seen this year in the organizational changes made in the Communications Satellite Corporation (COMSAT) to strengthen its new roles in domestic and international satellite communications. The Federal Communications Commission's Order of December 22, 1972, which authorized COMSAT to provide domestic satellite capacity to the American Telephone and Telegraph Company (A.T. & T.) and to participate in a joint venture, also required COMSAT to establish a subsidiary to carry out its domestic programs. COMSAT has thus formed a new subsidiary, COMSAT General Corporation (COMSAT General), for all of COMSAT's U.S. domestic satellite programs, including COMSAT's providing satellite capacity to A.T. & T., and COMSAT's participation with Lockheed Aircraft Corporation and MCI Communications, Inc., in a separate corporation (CML Satellite Corporation) to develop a multipurpose domestic satellite system. COMSAT has also formed a new International System Division under which COMSAT will consolidate all of its activities related to the INTELSAT global satellite system. These include the provision of services through the global system and the U.S. earth stations, COMSAT's role as manager for INTELSAT, and COMSAT's role as the U.S. participant in INTELSAT.

---

[13]For further details, see Mizrack, *supra* note 12.

[14]See statement of Arnold Frutkin, Assistant Administrator for International Affairs, National Aeronautics and Space Administration in Hearings on a General Review of International Cooperation in Science and Space Before the Subcommittee on International Cooperation in Science and Space of the House Committee on Science and Astronautics, 92d Cong., 1st Sess. 72 (1971).

[15]Definitive Arrangements Art. 111 (c); *supra* note 11.

In 1972 the INTELSAT IV series established a vastly expanded, global system. From the single satellite pathway linking experimental earth stations in four countries at the time of INTELSAT I, the network of earth stations around the world by the end of 1972 included 80 antennas at 75 station sites in 49 countries which provide for more than 225 satellite pathways. These satellite pathways carry more than two-thirds of all long-distance international communications; provide high quality telephone service to many countries not reached by cable; and make it possible for one out of every four people on earth to see an important event on TV as it happens, live via satellite.

Before discussing the extent of participation by the countries of the Americas in the use of communications satellites and the accompanying legal developments, it may be well to take a backward glance.

Shortly before the commencement of the Space Age, certain events were taking place in the Americas that, unwittingly or not, were creating an organizational structure which was to facilitate the participation of the Americas in satellite communications. Those events culminated in the First Meeting of the Inter-American Telecommunications Commission (CITEL) convoked upon the invitation of the Executive Secretary of the Inter-American Committee on the Alliance for Progress. One of the resolutions adopted at that First Meeting was concerned with exploring the possibilities for regional cooperation within the Latin American countries for the establishment and financing of ground stations that would be used with the communications satellite system to serve the communications requirements of Central and South America.[16]

The extraordinary technological development in communications media in the Americas, as exhibited in the increasing use of satellites for communications in Latin America, has been paralleled by the continued activities of the Inter-American Telecommunications Conference (CITEL), the successor to the temporary Commission mentioned above.[17] The first meeting of the Permanent Executive Committee of that body (COM/CITEL) in Caracas, Venezuela, February 2-4, 1972,[18] was followed by a second period of sessions in Mexico City, Mexico, October 23-27, 1972,[19] and a third, in Rio de Janeiro, Brazil, July 9-13, 1973.[20] At the same time, the first meetings were held of the Permanent Technical Committee IV on Special Services and Radioelectric Spectrum, and

[16]CITEL resolution 13/65 of the First Meeting of the Inter-American Telecommunications Commission (CITEL).

[17]The First Inter-American Telecommunications Conference was held concurrently with the VI (and last) Meeting of the Inter-American Telecommunications Commission in Caracas, Venezuela, in 1971.

[18]Final Act, OEA/Ser. L/XII COM/CITEL/12 rev. (28 febrero 1972; original in Spanish).

[19]Final Report, OEA/Ser. L/XII COM/CITEL/39 rev. 2 (18 enero 1973; original in Spanish).

[20]Final Act, OEA/Ser. L/XII COM/CITEL (30 agosto 1973; original in Spanish).

of the Permanent Technical Committee II on Radio Broadcasting.[21]

The following countries are members of COM/CITEL: Argentina, Brazil, Costa Rica, Chile, Ecuador, Guatemala, Panama, the United States of America, and Venezuela.[22]

The ITU has actively cooperated with CITEL throughout the years. For example, the ITU Seminar on the Planning of Broadcasting Systems opened on Monday, June 11, 1973 at Sao Paulo, Brazil.[23] There were participants from 28 countries of Latin America and the Caribbean. This Seminar was the first concrete result of the work of Committee II of CITEL. The Seminar took place at a most appropriate time, when the Latin American and Caribbean countries, after several years of experience, were feeling the need to examine the structures of their broadcasting services. Joint efforts are required to provide broadcasting in Latin America with the technical conditions needed to function more and more efficiently as a means of information and *rapprochement* between countries. The main objective of the Seminar was the dissemination of information and the improvement of techniques.[24]

One of the principal duties of CITEL is to promote or undertake studies for organizing the orderly development of telecommunications networks. (Art. 3, subpar. c, CITEL draft regulations).[25]

The important role which the ITU plays in the development of communications of the Americas was made manifest by a resolution adopted at the Third Meeting of COM/CITEL, the permanent executive committee of CITEL.[26] In the resolution it was recommended that all the member countries of CITEL support, at the conference of Plenipotentiaries of ITU in Málaga-Torremolinos, Spain, in September 1973, replacement of the present ITU Convention with a Charter which sets forth basic principles that meet the needs of the member countries, particularly the developing countries.[27] That conference ended on October 25, 1973 and a report on the final action taken there has not yet

---

[21] Final Report, OEA/Ser. L/XII, CITEL/COM. IV/19 rev. (11 enero 1974; original in Spanish). Final Report, OEA/Ser. L/XII, CITEL/COM. II/18 rev. 2 (21 enero 1974; original in Spanish).

[22] Res. CITEL-41/71. For text, see Final Act of the First Inter-American Telecommunications Conference, OEA/Ser. K VI 7-1 CITEL/57 rev. (28 enero 1972; original in Spanish).

[23] Press Release, ITU/73-24 (June 18, 1973).

[24] *Id.*

[25] Art. 3 subpar. (c) of CITEL draft regulations, see OEA/Ser. K/VI. 7.1 CITEL/5 (July 19, 1971; original in Spanish).

[26] Res. COM/CITEL 14/73. For text, see Final Act of the Third Meeting of COM/CITEL, *supra* note 20.

[27] *Id.*

become generally available.[28]

Another agency of the ITU in Latin America is the Regional Plan Committee for Latin America which is charged with the responsibility of assisting the development of telecommunications in Latin America. It met in Brasilia from June 25 to July 6, 1973. This Plan Committee is a joint committee of the International Telegraph and Telephone Consultative Committee (CCITT) and the International Radio Consultative Committee (CCIR), which are permanent organs of the International Telecommunication Union.[29]

Some 150 delegates, representing the countries of Latin America, and other administrations as well as recognized private operating agencies particularly interested in the region's network, attended the meeting. The purpose of the meeting was to draw up the outline of a General Plan for the Latin-American telecommunications network covering the years 1974, 1976, and 1982. The Plan is intended to help telecommunication administrations and recognized private operating agencies to improve international services.[30]

Consideration was given at the meeting to requests from the World Meteorological Organization (WMO), the International Civil Aviation Organization (ICAO), and the International Air Transport Association (IATA) concerning their leased circuit requirements.[31]

The ITU has also collaborated actively with UNESCO in the implementation of a project for studying the possibility of a regional educational telecommunication network for certain South American countries.[32] The legal basis for the use of satellites for such purposes was laid at the World Administrative Radio Conference on Space Telecommuni-

---

[28]The ITU Plenipotentiary Conference is the supreme organ of the Union responsible for revising the International Telecommunication Convention and making such changes in the structure of the Union as may prove necessary in the light of telecommunication developments. In this connection, see Leive, The Future of the International Telecommunications Union, in American Society of International Law, Studies in Transnational Legal Policy, No. 3 (1972). Among the recommendations made in that study, at 4, are that "the 1973 Plenipotentiary Conference should adopt a permanent Constitution, but it should not do so before making basic changes in the Union structure," that "Measures should be taken to enhance the participation of the developing countries in the ITU," and that "Deficiencies in the law-making process of the Administrative Conference and in the comprehensibility and usefulness of the resulting product should be corrected."

[29]Press Release, ITU/73-24 (June 15, 1973).

[30]*Id.*

[31]*Id.*

[32]*See* "Report by the United Nations Educational, Scientific and Cultural Organization" (UNESCO) to the Committee on the Peaceful Uses of Outer Space, Working Group on Direct Broadcast Satellites, Fourth Session, U.N. Doc. A/AC.105/W6.3/L.5 at 6 (1973).

cations (WARC) in Geneva, Switzerland in 1971.[33] Among the legally binding rules adopted by participating states to which WARC gave approval was the allocation of narrow bands for distribution of radio/television programs to community type earth stations for educational and public service functions in remote regions. The educational and public service is to be limited to domestic or regional uses, and is required to be coordinated with adjacent countries if there could be interference with their terrestrial radio links.[34]

The principle that "Each country has the right to decide on the content of the educational programmes broadcast by satellite to its people, and, in cases in which such programmes are produced in co-operation with other countries, to take part in their planning and production on a free and equal footing" is expressed in Article VI of the UNESCO "Declaration of Guiding Principles on the Use of Satellite Broadcasting for the Free Flow of Information, the Spread of Education and Greater Cultural Exchange." This Declaration of Principles was proclaimed by the General Conference of UNESCO at its seventeenth session (October-November 1972).[35] Also of importance are Article X of the Declaration which states the principle that "In the preparation of programmes for direct broadcasting to other countries, account shall be taken of differences in the national laws of the countries of reception," and Article IX, par. 1, which states: "In order to further the objectives set out in the preceding articles, it is necessary that States, taking into account the principles of freedom of information, reach or promote prior agreements concerning direct satellite broadcasting to the population of countries other than the country of origin of the transmission."[36]

The adoption of principles such as that stated in Article IX, par. 1, has been proposed as a step toward solving the problem of protecting broadcast signals transmitted by satellite against unauthorized retransmission. This matter has been the subject of active and thorough scrutiny by UNESCO since 1971. This question is closely linked to the interrelated problems of copyright and of the so-called "neighboring rights" (the rights of performers, record producers, and broadcasters).

The committee of governmental experts which had been convened by the General Conference of UNESCO and the Permanent Committee of the Berne Copyright Union, the Directors-General of UNESCO and the World Intellectual Property Organization

---

[33]Partial Revision of Radio Regulations and Final Protocol: Space Telecommunications, signed at Geneva, July 17, 1971, entered into force January 1, 1973, T.I.A.S. 4735.

[34]*Id.*

[35]The text of the Declaration, together with a letter of transmittal to the Secretary General of the United Nations from the Director General of UNESCO are produced in U.N. Doc. A/AC.105/109 (1973).

[36]*Id.* See also the text of the Draft Convention of Freedom of Information, Arts. 1-4 as adopted by the Third Committee of the General Assembly at its thirteenth session. U.N. Doc. A/AC.105/WG.3/L.2, Annex I (1973). (Articles 5-19, at the time not yet considered by the Third Committee were reproduced as Annex II).

(WIPO) in 1971 had a second meeting at UNESCO headquarters in Paris from May 9 to 17, 1972.[37] At the close of this session, the Committee adopted a resolution recommending that after the secretariat of UNESCO and WIPO had prepared explanatory notes on the draft convention drawn up at the first meeting of the Committee, and comments had been obtained from governments and interested organizations, a third Committee should be convened in 1973.[38]

The third Committee of Governmental Experts was convened in Nairobi in July 1973. That committee concluded that there should be a new "Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite" and that a diplomatic conference be held in 1974 to formulate such a Convention. A draft Convention was prepared by the committee at the meeting in Nairobi. The basic purpose is set forth in Article 1 which provides:

> (1) Each Contracting State undertakes to take all appropriate measures to prevent the distribution on or from its territory of any programme-carrying signal by any distributor for whom the signal emitted to or through the satellite is not intended. This obligation shall apply where the originating organization is a national of another Contracting State and where the signal distributed
>
> (i) is the emitted signal or is derived therefrom, or
>
> (ii) is derived from a fixation of the emitted signal or of a signal derived therefrom.
>
> (2) The obligation provided in paragraph (1) shall not apply to the distribution of signals derived from signals which have already been distributed by a distributor for whom the emitted signals were intended.[39]

Article 4 excepts from operation of the Convention excerpts consisting of current events or short quotations "compatible with fair practice," but only to the extent justified by the informatory purpose of such excerpts. It also makes exceptions for developing countries as applied to teaching and scientific research.

Article 6 safeguards the rights of authors. It provides:

> This Convention shall in no way be interpreted to limit or prejudice the protection secured to authors, performers, producers of phonograms, or broadcasting organizations, under any domestic law or international agreement.[40]

There is also a suggestion that the Convention may include an express provision concerning monopolies. Article 7 provides (the brackets indicate that there was a division of opinion on this among the experts):

---

[37] For the Report by UNESCO, see U.N. Doc. A/AC.105/WG. 3/L.5 (1973).

[38] *Id.*

[39] Informal report in the files of the author. Official report not available at time of writing.

[40] *Id.*

> This Convention shall in no way be interpreted as limiting the right of any Contracting State to apply the domestic law in order to prevent [international abuse of monopolies.][41]

Inasmuch as the status of cable television under domestic law is not clear in some countries, Article 11 provides in part:

> (3) (a) Any Contracting State which, on the date on which this Convention enters into force for that State, limits or denies protection with respect to the distribution of programme-carrying signals by means of wires, cable or other similar communications channels to subscribing members of the public may, by a notification deposited with the Secretary General of the United Nations, declare that, to the extent that and as long as its domestic law limits or denies protection, it will not apply this Convention to such distributions [, provided that:
>
> (i) the distribution in question takes place simultaneously with or after a distribution of the programme-carrying signals by wireless means on the territory of the State, or
>
> (ii) if the distribution in question is derived from a distribution made by the satellite itself, the signal can be received by the general public in that State, or any section of that public.]
>
> (b) Any State that has deposited a notification in accordance with sub-paragraph (a) shall notify the Secretary-General of the United Nations, within six months of their coming into effect, of any changes in its domestic law whereby the reservation under that sub-paragraph becomes inapplicable or more limited in scope.[42]

It seems that the draft convention is somewhat of a compromise among the interests of broadcasters, authors, performers, phonograph manufacturers, and performers. There was apparent unanimity to the effect that poaching on satellite signals should be condemned, but there was no unanimity as to who among the group mentioned should have what rights of enforcement. Accordingly, such remains to be done at the diplomatic conference.

The need for preparation of an international convention on principles governing the more general subject of the use by states of artificial earth satellites for direct television broadcasting was the subject of Resolution 2916(XXVII), adopted on November 9, 1972, by the General Assembly of the United Nations. The recorded vote showed 102 States for the Resolution, 1 against (the United States of America), and 7 abstentions. American countries voting in favor of the Resolution were Argentina, Bolivia, Brazil, Canada, Chile, Costa Rica, Cuba, El Salvador, Guatemala, Jamaica, Mexico, Panama, Paraguay, Peru, Uruguay, and Venezuela. Nicaragua was the only American country abstaining. Absent were Colombia, the Dominican Republic, Ecuador, Haiti, and Honduras.[43]

---

[41] *Id.*

[42] *Id.*

[43] U.N. Gen. Ass., Off. Rec., Report of 2081st plenary meeting, Nov. 9, 1972; agenda item 37 (1972).

Resolution 2916 requests the Committee on the Peaceful Uses of Outer Space to undertake "as soon as possible" the elaboration of "principles governing the use by States of artificial earth satellites for direct television broadcasting with a view to concluding an international agreement or agreements."

The United States gave its reasons for being opposed to Resolution 2916, among which were its opinion that the Resolution as drafted did not put sufficient emphasis on the central importance of the free flow of information and ideas in the modern world. It noted lack of the Resolution's mention of the Universal Declaration of Human Rights, among the international legal instruments referred to, as forming a basis for the Resolution. The United States expressed its willingness to have the matter studied in the Outer Space Committee, but stated that it was not ready "at this juncture" to agree that the goal of the study ought to be either principles or a treaty.[44]

A related resolution, 2917(XXVII), also adopted on November 9, 1972, noted that "the work done on the draft Convention on Freedom of Information and deliberations thereon in the General Assembly may be useful in the discussions and elaboration of international instruments or United Nations arrangements relative to direct television broadcasts" with the use of artificial earth satellites. The vote on this resolution was 65 in favor, 9 against, and 32 abstentions.[45]

The technical feasibility of communication by direct broadcast from satellites and the current and foreseeable developments in this field, including comparative user costs and other economic considerations, as well as implications of such developments in the social, cultural, legal, and other areas, was studied at the fourth session of the Working Group on Direct Broadcast Satellites of the Committee on the Peaceful Uses of Outer Space at the United Nations Headquarters, New York, between June 11 and 22, 1973, under the chairmanship of Ambassador Olof Rydbeck of Sweden.[46] The countries of the Americas represented at that meeting were Argentina, Canada, Mexico, and the United States of America. Representatives of the Food and Agriculture Organization (FAO), the International Telecommunication Union (ITU), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the European Space Research Organization (ESRO) also attended the session. Among the views expressed by the Working Group was the view that further studies and experimentations were required in the technical and economic aspects of direct broadcast satellites, with particular reference to their use on a regional basis, so that this newly emerging technology could be of the widest possible benefit to the international community.[47]

---

[44]U.N. Doc. A/PV 2081 (1972).

[45]U.N. Gen. Ass., Off. Rec., Report of 2081st plenary meeting Nov. 9, 1972; agenda item 37

[46]U.N. Doc. A/AC.105/117 (1973).

[47]*Id.*

Certain delegations at the meeting expressed the view that international legal norms regarding illegal programs already existed and that they stemmed from principles contained in United Nations and other international agreements; other delegations expressed the view that States may utilize the means at their disposal in order to counteract direct broadcasts from satellites which are considered illegal. Still other delegations took the view that settlement of differences should, in all cases, be sought through established procedures for settlement of disputes, such as conciliation, mediation, arbitration, or judicial settlement.[48]

At a general level, the Working Group reaffirmed the applicability to satellite broadcasting of such binding instruments as the United Nations Charter. They concluded that the Outer Space Treaty, the Liability Convention, the International Telecommunication Convention, and Radio Regulations are applicable also. Account should also be taken of the Declaration on Friendly Relations, the United Nations Declaration of Human Rights, the UNESCO Declaration on Guiding Principles on the Use of Satellite Broadcasting for the Free Flow of Information, Spread of Education and Greater Cultural Exchange, and General Assembly Resolution 1721(XVI).[49]

In light of the various views expressed, the Working Group recognized that, in the elaboration of principles governing direct television broadcasting by satellites, it would be essential to harmonize the various interests involved and establish an appropriate and realistic balance between the protection of sovereign rights of States, the principle of the free flow of communications, and the facilitation of other obvious benefits for all countries which this important new technology could offer.[50]

The discussions of the Working Group with regard to further elaboration of legal norms were summarized as follows in the Group's report:

—international principles of a binding character should, in the opinion of some delegations, be formulated and adopted as soon as possible before satellite broadcasting has come into extensive use;

—referring to Resolution 2916(XXVII), other delegations felt that it would be timely to adopt fundamental legal principles at the international level to be supplemented by specific agreements at the bilateral or regional levels as may be required;

—the view was also advanced that it would be premature at this stage to elaborate and adopt globally applicable principles; also, further study was needed concerning regional approaches which might involve States and broadcasting agencies or unions; and further analysis of basic assumptions underlying future principles was required;

---

[48] *Id.*

[49] *Id.*

[50] *Id.*

—in the discussion, a further view was advanced according to which action might best be undertaken in distinct phases: in a first stage, principles should be adopted in an appropriate form, and, in a second stage, these principles might form the basis for the elaboration of later binding agreements in a form to be decided.[51]

As far as the Americas are concerned, it is interesting to note that in a paper submitted by the Governments of Canada and Sweden to the Working Group, there was a description of the Brazilian educational satellite system, designed to provide educational and communications services.[52] There was also a description of an experimental project begun in 1971 by the Canadian Department of Communications in cooperation with NASA.[53]

Canada now has the first communications satellite system solely for domestic needs, with two satellites making it possible for the whole country, including remote Arctic regions, to have a 24-hour dial telephone service and to watch national television programs. Canada is also active in the use of satellites for remote sensing.[54]

There are many legal problems still to be solved in connection with the use of remote sensing satellite surveys of earth resources.

In 1970 Argentina submitted to the Legal Sub-Committee of the United Nations Committee on the Peaceful Uses of Outer Space a "Draft International Agreement on Activities Carried Out Through Remote-Sensing Satellite Surveys of Earth Resources."[55] This draft noted that surveys using such satellites raised urgent legal problems. The draft agreement provides for the "internationalizing" under an international body of such surveys and the establishment of a data bank to that end. The information stored in the data bank would be disseminated on a worldwide basis, with special reference to the interests and needs of developing countries. At the same time, in recognition of the right of each nation to freely distribute its own natural resources, the draft provides that the exploitation of the natural resources of each State in "its territory and jurisdictional waters" shall be governed by national laws and regulations. Provision is made for efforts to be made by means of international agreements to improve the distribution of the resources.[56]

The Argentine proposal was followed in April 1973, by a proposal made by the Union of Soviet Socialist Republics. The U.S.S.R. submitted a Model Draft of Principles

[51] *Id.*

[52] U.N. Doc. A/AC.105/W.G.3/L.4 (1973).

[53] U.N. Doc. A/AC.105/115 at 3-4 (1973).

[54] U.N. Press Release OS/537 (May 8, 1973).

[55] U.N. Doc. A/AC.105/C.2/L.73 (1970).

[56] Id.

Governing the Use of Space Technology by States for the Study of Earth Resources.[57] The fourth principle provides that a State which makes use of space technology for the purpose of studying the natural resources of the earth shall be required to transmit the information so obtained to the State from which it was obtained. The fifth principle provides that a State so obtaining such information shall not be entitled to make it public or transmit it to third States or international organizations without the "clearly expressed consent" of the State to which the natural resources belong, "nor shall it be entitled to use the information in any other manner to the detriment of the latter state."[58]

Bilateral arrangements with Mexico and Brazil have been used by the United States National Aeronautics and Space Administration (NASA) for its Earth Resources Satellite (ERS) program in the aircraft phase of its program. Provisions in these arrangements follow NASA guidelines which recognize the interests of United States and foreign scientists, establish a basis for sound programs of mutual value, and contribute substantively to the objectives of international cooperation. The guidelines provide for:

(1) Designation of each participating government of a central civilian agency for the negotiation and supervision of joint efforts;

(2) Agreement upon scientific projects rather than generalized programs;

(3) Acceptance of financial responsibility by each participating country of its own contributions to joint projects.

(4) Projects of scientific validity and mutual interest;

(5) General publication of scientific results.[59]

The legal aspects of remote sensing were considered when the Scientific and Technical Sub-Committee of the U.N. Committee on the Peaceful Uses of Outer Space held its Tenth Session in May 1973. Members of the Sub-Committee represent the following countries of the Americas: Argentina, Brazil, Canada, Mexico, and the United

---

[57] Proposal Relating to the Activities Carried Out Through Remote Sensing Satellite Surveys of Earth Resources, U.N. Doc. A/AC.105/C.2/L.88 (1973). In its Report of February 14, 1973, on the work of its Second Session, the Working Group on Remote Sensing of the Earth by Satellites declared *inter alia* that the many unknowns still existing in experimental scientific and technical development made the formulation of concrete suggestions or recommendations on the substance of legal matters at this stage difficult. However, a number of delegations considered that broad and systematic examination of the legal implications of remote sensing by satellites was necessary, and documents such as the Soviet preliminary draft were submitted. See U.N. Doc. A/AC.105/111 (1973).

[58] U.N. Doc. A/AC.105/C.2/L. 88 (1973).

[59] Senate Comm. on Aeronautical and Space Sciences, "International Cooperation in Outer Space: A Symposium," edited by E. Galloway, S. Doc. No. 92-57, 92nd Cong., 1st Sess. 25 (1971). NASA's international programs are listed on pages 26-50.

States of America.[60] A highlight of the discussions at this meeting was the Soviet Model Draft mentioned above.[61]

On the legal aspects of remote sensing of the earth by satellites, the French representative said that this new technology could be dangerous and could create tensions between states if it were developed without control or international regulation, and that remote sensing should be carried out in accordance with legal principles.[62] He recalled that in the Working Group his delegation had spoken in support of the principles proposed by the Soviet Union to govern the activities of states in this field. Since then, he said, his delegation had formulated additional principles which it would present as an extension of the Soviet proposal.[63] Among the points covered were prior notification to the "sensed" states and information to the Secretary-General of the United Nations on sensing activities. The French draft also referred to the sensing of areas not under any national sovereignty.[64]

Other views expressed at this meeting may be summed up as follows: existing legal instruments are not sufficient to deal with this new technology. It is essential to ensure that sovereign rights of states are not infringed upon (Austria). It is absolutely necessary to obtain the prior consent of the "sensed" state. Moreover, the "sensing" state has an obligation to communicate the results to the other state (Morocco). In addition to the need for prior consent of the "sensed" state, the "sensed" state should be in charge of the interpretation of the data on its own territory, although it could agree to joint or regional interpretation (Argentina).[65]

Another issue referred to in the discussion at the Tenth Session was the question of establishing a task force to study the alternatives for the dissemination and use of environmental and resource data, with special reference to the needs of the developing countries.[66]

At the conclusion of the Tenth Session of the Outer Space Scientific and Technical Sub-Committee a report to the Outer Space Committee was adopted. The report recom-

---

[60]U.N. Press Release OS/535 (May 7, 1973).

[61]See note 57 *supra.*

[62]U.N. Press Release OS/541 (May 10, 1973).

[63]*Id.*

[64]*Id.* The United States Representative saw the prospect of a gap of a year or more between ERTS-1 and a second earth resources technology satellite now planned for launching in 1976 by the United States. After a second one, he said, there were no further plans relating to ERTS satellites for an operational system.

[65]U.N. Press Release OS/542 (May 11, 1973).

[66]*Id.*

mends endorsement by the parent Committee of the proposal by the Working Group on Remote Sensing of the Earth by Satellites that a task force of the Working Group be established to study and report on the alternatives for dissemination and optimum use of environmental and resources data from remote sensing, keeping in mind the data requirements of the developing countries.[67]

Annexed to the report is the text of a questionnaire recommended for circulation to Member States, along with background material, seeking information on their present use of remote sensing data, their potential uses of such data, and their views on the organizational and legal aspects of remote sensing.

From the studies and arrangements that have been discussed, we already have some hint of the views which may be expressed as to such organizational and legal aspects.

As we have seen, international bodies concerned with satellite communications, particularly when used for educational and remote sensing purposes, have concluded that in many instances, for technical as well as economic reasons, regional arrangements are advisable. There are instances, however, as we have seen from examples cited, when bilateral arrangements are preferred for the execution of certain scientific programs.

Technological advances in communications have fostered not only international and regional arrangements, but also the revision of or enactment of new national laws by the countries of the Americas. In the United States, to name but one instance, we have the COMSAT Act. In other countries of the Americas the establishment of earth stations for satellite communications has brought forth new laws. Satellite communications operations have, in turn, prompted expansion of terrestrial communications with an accompanying influence on national laws.

Canada, for example, has a "Telesat Canada Act" under which a company with share capital is incorporated as "Telesat Canada." The objects of the company are to establish satellite telecommunication systems, providing telecommunication services on a commercial basis between locations in Canada.[68]

In Brazil, pursuant to legislation enacted in 1962, there was established within the Ministry of Communications an autonomous entity known as EMBRATEL (Empresa Brasileira de Telecomunicaeoes). One of its purposes is to facilitate participation by Brazil in the global communications satellite system.[69]

To cite but one more example, in Bolivia, there was created in 1965, an organization known as ENTEL (Empresa Nacional de Telecomunicaciones), whose purpose is to

---

[67]U.N. Press Release, OS/550 (May 18, 1973).

[68]Telesat Canada Act, c. T-4 Revised Statutes of Canada (1970).

[69]Lei No. 4.117 (Codigo Brasileiro de Telecomunicacoes), de 27 de agosto de 1962.

provide Bolivia with an efficient and modern telecommunications system.[70] The Director General of Telecommunications is the President of ENTEL. Under an agreement between Bolivia and Argentina known as "ACTA DE SALTA" (the Act of Salta), Bolivia, acting through ENTEL, enjoys worldwide communications through the Balcarce earth station in Argentina.[71] Thus, in May 1971, Bolivia inaugurated international telegraph services via satellite.[72]

Because of limitations of space, no attempt has been made to consider these laws in detail. Such laws are, however, being given detailed study by the Communications Section of the Inter-American Bar Association's Committee VII. Under the sponsorship of the Inter-American Bar Foundation the Section is carrying out a project for preparing digests of the communications and related laws of the Americas. It is hoped eventually that these digests will be published in a looseleaf service to be kept up to date periodically.

Man's ingenuity in outer space constantly challenges the law to match that ingenuity here on Earth.

---

[70]Decreto Supremo, No. 07441 de 22 deciembre 1965, as amended.

[71]Informe de "ENTEL—BOLIVIA" a la Sexta Conferencia Interamericana de Telecomunicaciones (CITEL), OEA/Ser. H/XIII, CIES/Com X/465 at 471 (8 septiembre 1971; original in Spanish).

[72]*Id.* at 53.