10-1-1971

Broadcasting Satellites

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BROADCASTING SATELLITES: AN AMERICAN PERSPECTIVE*

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Concern has been expressed recently in certain circles concerning the propaganda potential of broadcast satellites and the motivation of countries possessing satellite capabilities. It is therefore appropriate to make a few observations about the United States' role in broadcasting satellite systems and its position vis-à-vis worldwide freedom of information.

UNITED STATES ROLE IN BROADCASTING SATELLITE SYSTEMS

Broadcasting Satellites in General

A broadcasting satellite system reflects signals from earth-orbiting objects for direct reception on earth. In addition to the present uses of such satellites, the future holds out the promise of broadcasting satellite systems technically capable of competing with terrestrial systems in communicating news, educational, social, cultural, political and commercial materials.

Technology alone, however, will not determine the future of broadcasting satellites, for technological advances will be little more than academic exercises without the interest and participation of the nations of the world; that interest and participation in turn will depend on many variables, such as the communications systems already extant in a given country, the relative cost of satellite versus terrestrial facilities,

*Originally presented as an address to the Institute Rio Branco, Rio de Janeiro.

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***The views expressed herein are personal and do not necessarily reflect those of the United States Government.

the area and groups to be reached, and the national resources and priorities affecting the development of such a system. Hence, an assessment of America's role in broadcasting satellite systems is made with that reservation, and with the full understanding that the relevance of broadcasting satellite systems may be radically altered by future developments.

This understood, one may proceed to comment on the United States' role in broadcasting satellites; this role is most meaningfully assessed in terms of community and individual reception, the methods of reception within broadcasting satelitte systems.

Community Reception

Community reception is the method whereby broadcasting satellite signals are received at a single location, or via a distribution system at several locations, within a limited area. Typically such a location would be a village (or a number of villages connected by a distribution system), and the transmitted materials would be available, as the name implies, to the community as a whole. Community participation in this method would be as a body, à la the cinema audience, rather than individually.

Such reception is characterized as "closed" because the receiving facilities are easily controlled by the recipient country, thereby eliminating the possibility of broadcasting without the consent, (and usually the cooperation) of the recipient country. From the technical point of view a further safeguard exists in that the characteristics and standards of community reception television systems are not likely to be compatible with those of existing terrestrial television broadcasting.

The main role of the United States in community reception appears to be as a supplier of satellites and launching services to countries desiring community reception.[1] However, if *requested* to do so, the United States can play an important role in supplying programming material and services on a commercial basis.

Community reception systems are technically feasible now, and the community of nations will follow with great interest the experimental community reception program for India, to be tested for one year beginning in 1974.

Individual Reception

Individual reception refers to the reception of broadcasting satellite signals by simple domestic installations, particularly those possessing

small antennae. Were such a system operational, a broadcasting satellite launched by one country would be capable of transmitting either voice or television programs directly into the homes of mass audiences in one or more countries. Such transmissions could be freely received, without the consent or control of the receiving country, in much the same way that international broadcasts are presently received from terrestrial transmitters operating in the high frequency bands.

In 1967 the National Aeronautics and Space Administration completed a study on the feasibility of a direct VOICE broadcasting satellite and concluded that such a satellite operating in the high frequency bands would be impractical because of technical complexity and cost. The study also concluded that it would be possible to develop and launch within the next few years a VOICE broadcasting satellite system capable of operating in the VHF-FM band which could provide a single radio channel to an area the size of Brazil, for up to twenty-four hours a day with a fair to good signal, at an estimated annual cost of between $40,000,000 and $50,000,000. By comparison, the Voice of America is presently reaching the entire Western Hemisphere with a good signal for approximately $1,000,000 a year, using terrestrial high frequency transmitters.

Because of the limited coverage and prohibitive cost, the United States does not have an interest in a broadcasting satellite capable of providing individual reception of voice broadcasts, and no further effort is planned in this area in the foreseeable future.

More significantly, however, National Aeronautics and Space Administration studies rule out the technical feasibility of individual reception of television transmissions from a broadcasting satellite operating in the VHF bands because of complexity and cost. A study is now underway for examining a full range of technical possibilities, problem areas, and cost of transmitting both monochrome and color television programs directly to conventional or slightly modified home receivers in the UHF and SHF bands. Initial results of this study indicate that television transmissions for individual reception will not be feasible in the UHF and SHF bands without major modifications.

International experts who have reported to the United Nations Committee on The Peaceful Uses of Outer Space on the feasibility of satellite broadcasting concluded that:

> (a) While it is considered that satellite techonology has reached the state at which it is possible to contemplate the future development of satellites capable of direct broadcasting to the public at large,

direct broadcasting of television signals into existing, unaugmented home receivers on an operational basis is not foreseen for the period 1970-1985. This reflects the lack of technological means to transmit signals of sufficient strength from satellites.

Direct broadcast of television into augmented home receivers could become feasible technologically as soon as 1975. However, the cost factors for both the earth and space segments of such a system are inhibiting factors. For example, the cost to the home owner/consumer who wishes to augment his home receiver (and antenna), while not precisely measurable at this time, appears to be at least $40 (not including cost of installation) and may be considerably more expensive, depending in part, for example, on the frequency employed. Many other factors enter into the cost equation, and in countries lacking large numbers of existing conventional television receivers completely different cost figures apply. As to the space segment, the development and launching of the powerful — therefore heavy — transmitters, which are not yet within the state-of-the-art, involve considerable expenses, which cannot be estimated at this time; the development costs might run as high as $100 million. Therefore, it is most unlikely that this type of system will be ready for deployment on an operational basis until many years after the projected date of feasibility;[2]

What then are the United States' international interests in a broadcasting satellite capable of individual reception? Since the feasibility of such a satellite is so much in doubt, the United States' interest at present cannot extend beyond vigilant curiosity.

Barring the extremely unlikely occurrence of a major technological breakthrough within the next decade, the question of broadcasting satellites for the individual reception of radio and television broadcasts will remain largely academic. Should such a broadcasting satellite become operational, United States interests would be considerable. Present estimates of the United States' employment of such a satellite, except to note the many worthwhile uses for such a satellite in such fields as education and international goodwill and understanding, would be of little value.

FREEDOM INFORMATION vs INTRUSION BROADCASTING

Related to the technological development of broadcasting satellites is the question of the legal regime in which they are to operate which in turn raises the freedom of information issue.

The technological and economic resources required to place a broadcasting satellite in orbit can be supplied by only a few nations in the foreseeable future. Concern has been expressed that broadcasting satellites, particularly television satellites, may be used as a means of "intruding" into the internal affairs of nations by disseminating political propaganda, misguiding public opinion, introducing customarily proscribed materials, fomenting strife, and imposing different cultural, political, and social systems on others.

In the Working Group on Direct Broadcast Satellites of the United Nations Committee on The Peaceful Uses of Outer Space, and in other international fora, Russia, France, several Latin American and other countries have urged that dramatic steps be taken to guard against the possible misuse of broadcasting satellites. France at the 1963 Space Conference suggested a complete prohibition of broadcasting from satellites in the same manner that the Radio Regulations of the International Telecommunication Union (ITU) presently prohibit broadcasting from objects outside national territories. Recently France has suggested a detailed code governing program content. Other suggestions would prohibit international satellite broadcasting without the explicit prior consent of the recipient governments, and urge the formation of a new international regulatory body.

The United States respects the concern of these nations regarding possible abuses by broadcasting satellites, but takes issue with those solutions which abridge the freedom to transmit and receive information. It does so, not only because the United States has traditionally championed this principle among nations, but because this freedom has achieved international recognition. It exists in the organic law of many countries, in the Declaration of Human Rights of the United Nations, and in major United Nations recommendations and resolutions.[3]

The United States must oppose the proposed prohibitions, limitations, and controls on the free flow of information for at least the following reasons:

1. The United States is constitutionally and traditionally wedded to the principle of the free flow of information. It would require a drastic change in the traditional United States position with respect to international freedoms, and raise serious constitutional questions as well, if this country were to set aside satellite broadcasting for some special restrictive consideration.[4]

2. Although the proposed controls may relieve those concerned about "intrusion" broadcasts, they would also frustrate the develop-

ment of broadcasting satellites, thus denying the world the potential benefits of such satellites.[5]

3. An abridgment of this principle in the case of satellite broadcasting would represent a major political setback in the continuing struggle between open and closed societies. In addition, a dangerous precedent for controlling the flow of information in all its forms and restricting the free flow of information on an even wider scale would be created thereby.

Conversely, the absence of restrictions of the type proposed by France does not lay the world open to the wanton and capricious use of broadcasting satellites. Even in the absence of such restrictions very real limitations, of both a technological and a legal nature, affect the operation of broadcasting satellites.

Technological Limitations

Technological limitations deny broadcasting satellites the present capability of performing the very functions for which fear has been expressed. Broadcasting satellites, from the present until 1985 and probably until long after then, means systems for community reception, and these are essentially "closed," making moot question of intrusion broadcasting. When, and if, broadcasting systems capable of individual reception are feasible the matter will be ripe for definitive steps. Until then the opportunity exists for the development of empirically valid and meaningful standards of conduct which would be infinitely preferable to the andabatism of premature regulation.

Limitations of a Legal Nature

The freedom of information, like the freedom of speech, is not without limitation. Just as the right to free speech does not license the false cry of "fire" in a crowded theater, so too the principle of freedom of information cannot license pernicious communication.

The texts which most dramatically proclaim the freedom of information incorporate limitations in its exercise. For example, the United Nations Charter prohibition against meddling in the internal affairs of a sovereign state is an implicit limitation on Article 19 of the Universal Declaration of Human Rights. That article provides:

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive, and import information and ideas through any media

regardless of frontiers.[6]

Article 19 of The International Covenant on Civil and Political Rights provides for the universal right to hold opinions without interference, and to seek, receive and import information and ideas of all kinds regardless of frontiers, either orally, in writing or print, in the form of art, or through the media of his choice. These rights, however, are

> "... subject to certain restrictions, but these shall only be such as are provided by law and are necessary."

Article 20 of that same Covenant provides:

> 1. Any propaganda for war shall be prohibited by law.
>
> 2. Any advocacy of national, racial or religious hatred that constitutes incitement to discrimination, hostility or violence shall be prohibited by law.[7]

Article 2 of the draft Convention on Freedom of Information as adopted by the Third Committee does not extend this freedom where to do so would threaten national security; jeopardize the community of nations; incite civil or international strife; pillory the founders of religion; instigate crime; threaten public health, morals, or personal rights, honor and reputation, and the proper administrative of justice.[8]

Various United Nations resolutions condemn propaganda that undermines rapport between nations. For example, Resolution 110 (II) of the United Nations General Assembly (1947) which condemns propaganda likely to provoke a threat to or breach of the peace, or acts of aggression, was incorporated into the Outer Space Treaty, thereby setting at least an outside limit on the scope of satellite broadcasting.

While not exhaustive, the foregoing are indicative of coercive material already in existence. Against such a background one notes that the United Nations Working Group on Direct Broadcast Satellites (2nd Session) reported that those laws and regulations already in existence form the basis of a customary law of satellite broadcasting, which take into account the free flow of information, the freedom of space, and the rights of recipient nations.

In fine, the advent of satellite broadcasting need not abridge the time-honored principle of the free flow of information. In the case of community reception, the rights of recipient countries are protected by the technical nature of the system and by the control maintained over the receiving installations. In the case of individual reception, should it ever

become technically economically feasible, existing international law and regulations can form the basis for respecting the rights of recipient countries.

FOOTNOTES

[1]The role of the United States in the development of domestic (U.S.A.) community reception systems is not considered here.

[2]Official Records of The General Assembly, Twenty-Fourth Session, Supplement No. 21 (A./7621), pps. 87-88.

[3]For a discussion of the need for the freedom of information principle, see D. C. Smith *International Telecommunication Control* (The Hague, 1969), p. 11 *et seq.* Dr. Smith's work is a comprehensive and extremely valuable text on this subject generally.

[4]For a discussion of possible constitutional question, see Ruddy, "American Constitutional Law and Restrictions on the Content of Private International Broadcasting," 5 *The International Lawyer* 102 (1971).

[5]Cf. Smith, *supra*, note 4.

[6]Quoted in Smith, *supra* note 4 at 11.

[7]The foregoing appears in 61 *American Journal of International Law* 877, and is commented upon in Smith, *supra* note 4 at 15 et seq.

[8]*U. N. Document* A/8036, Annex 3.