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STUDY OF COMMUNICATIONS BY AN
INTERDEPARTMENTAL COMMITTEE

LETTER

FROM THE

PRESIDENT OF THE UNITED STATES

TO THE

CHAIRMAN OF THE

COMMITTEE ON INTERSTATE COMMERCE

TRANSMITTING

A MEMORANDUM FROM THE SECRETARY OF COMMERCE
RELATIVE TO A STUDY OF COMMUNICATIONS BY
AN INTERDEPARTMENTAL COMMITTEE



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LETTER OF TRANSMITTAL

THE WHITE HOUSE,
Washington, January 23, 1934.

HON. CLARENCE C. DILL,
Chairman Interstate Commerce Committee of the Senate,
Washington, D.C.

MY DEAR SENATOR: Sometime ago I directed the Secretary of Commerce to organize an interdepartmental committee to make a study for me of the entire communication situation.

Such a committee was organized and has labored for several weeks in covering this important field. The result of their study is found in the report attached hereto. It is transmitted to you in the hope that it may be of assistance to you and your associates on the committee in your further study of the subject and in the construction of the needed legislation. I shall be glad to discuss this report with the committee members at the proper time.

Very sincerely yours,

FRANKLIN D. ROOSEVELT.

STUDY OF COMMUNICATIONS BY AN INTERDEPARTMENTAL COMMITTEE

WASHINGTON, D.C., *January 23, 1934.*

To: The President.

From: The Secretary of Commerce.

A STUDY OF COMMUNICATIONS BY AN INTERDEPARTMENTAL COMMITTEE

There is submitted herewith the results of a study by an interdepartmental committee which, at your request, I set up from various departments of the Government. This committee was composed of: Secretary of Commerce, chairman; Gen. C. McK. Saltzman, vice chairman; Irving J. Carr, Chief Signal Officer of the United States Army; J. H. Dellinger, Chief of Radio Section, Bureau of Standards; Capt. S. C. Hooper, Director of Naval Communications; Herbert L. Pettey, Secretary of the Federal Radio Commission; Irvin Stewart, Department of State, and E. M. Webster, lieutenant commander of the United States Coast Guard.

There were also associated with the committee, in an advisory capacity: Hon. Clarence C. Dill, chairman of the Interstate Commerce Committee of the Senate; Hon. Sam Rayburn, chairman of the Interstate and Foreign Commerce Committee of the House of Representatives; and W. M. W. Splawn, special counsel to the Committee on Interstate and Foreign Commerce.

The study, first, briefly outlines the types of electrical communication agencies in the United States, and names the most important corporations in control.

The commercial communication service can be conveniently considered in three classes: (a) Two-way telegraphy, (b) two-way telephony, (c) broadcasting. The committee has considered the status of commercial communication broadly and finds the problems of the three classes to be very different. The studies made indicate that notwithstanding these differences certain uniform conclusions can be reached. Perhaps the major conclusion is the need of effective governmental regulation of the interstate and foreign aspects of commercial communication. It is in the field of two-way telegraphy that existing problems are most acute. The problems of (c), broadcasting, are not considered in this study.

There are four major communication organizations in the United States:

(a) The American Telephone & Telegraph Co. and its associated companies with almost a monopoly in the domestic telephone service, operating 13,793,000 telephones. These companies own an immense wire system covering the United States primarily used for telephone

purposes, but which includes surplus wires and circuits which can be and are to some extent leased for other purposes including telegraphy. This company operates (an international) radiotelephone stations which communicate with radiotelephone stations in many foreign countries and through these to nearly all foreign countries. The telephone service of the American Telephone & Telegraph Co. and its associated "Bell" Co.'s reach many localities not having telegraph offices. It is a purely American company, although it owns about 30 percent of the capital stock of the Bell Telephone Co. of Canada.

(b) The Western Union Telegraph Co. engaged in telegraph and cable communication service operating approximately 23,000 telegraph offices in this country. The Western Union also operates a cable service to the West Indies, Europe, and in conjunction with a British company to South America. It is primarily an American company.

(c) The International Telephone & Telegraph Corporation operating through subsidiaries a domestic telegraph service, a domestic radio service, a marine radio service, a cable service to Europe, the West Indies, South America, and the Orient, and a radio service to the West Indies, South America, Europe, and the Orient. This company also operates telephone services in foreign countries through subsidiaries and extensive manufacturing companies in the United States and abroad. This company has a number of subsidiary companies, among which are:

(1) The Postal Telegraph Co. competing with the Western Union. The Postal operates a comparatively small system of about 2,800 offices, located principally in the larger cities, which also are served by the Western Union.

(2) Mackay Radio Telegraph Co., operating a rapidly expanding domestic radiotelegraph company with 7 stations built or building, a marine radio service with 8 stations on both coasts of the United States, and 13 overseas radio circuits to Europe, the West Indies, South America, and Asia.

(3) Commercial Pacific Cable Co., operating a cable from San Francisco to Shanghai via Honolulu, Midway, Guam, and Manila.

(4) All America Cables with an extensive network from New York to Central America, the West Indies, and South America.

(5) Commercial Cable Co., operating six trans-Atlantic cables from New York.

(6) Thirty-one manufacturing companies in Norway, Belgium, Shanghai, France, Argentina, England, Germany, Japan, Australia, Denmark, Spain, Italy, Rumania, Czechoslovakia, Austria, Poland, and two in the United States.

(7) Nineteen radiotelegraph and telephone companies in Brazil, Argentina, Chile, Spain, Cuba, Peru, Mexico, Uruguay, Puerto Rico, China, and Rumania.

It is primarily an international company, the principal ownership and management of which is American. Its principal business is in countries other than the United States, and it is on those foreign companies, officered and operated by foreigners, that it now must look for support to combat the mounting deficits incurred in recent years by its United States subsidiaries.

(d) The Radio Corporation of America engaged in radiotelegraph and radiotelephone communication service. Its principal communication subsidiaries are:

(1) RCA Communications, Inc., providing 40 circuits to the West Indies, South America, Europe, Asia, and Africa.

(2) Radio Marine Corporation operating 12 marine radio service stations, providing ship-shore and ship-ship traffic.

(3) National Broadcasting Co., operating a chain radio broadcast system.

(4) Two manufacturing companies in the United States.

In addition to those four major organizations, there are a large number of independent telephone companies, lines and associations, operating over 4,000,000 telephones, but which handle a small percentage of the telephone service of the country.

There are several smaller radio companies engaged in telegraphy, among which are:

(a) The Globe Wireless Co., a subsidiary of Robert Dollar Steamship Co., providing service between the west coast of the United States across the Pacific to Hawaii, Guam, and Asia, and to ships, and between cities on the United States Pacific coast.

(b) The American Radio News Corporation engaged in the transmission of press traffic with stations in New York, Chicago, Denver, San Francisco, Atlanta, and Cuba.

(c) The Press Wireless Co. engaged in the transmission of press traffic between stations in the United States, South America, Mexico, Canada, Hawaii, and Denmark.

(d) The Tropical Radio Telegraph Co., a subsidiary of the United Fruit Co., with a commercial service between certain points within the United States and between certain points in the United States and Central American countries.

(e) Other small domestic radio companies are:

(1) Central Radio Telegraph Co.

(2) Michigan Wireless Telegraph Co.

(3) Wabash Radio Corporation.

(4) Pere Marquette Radio Corporation.

(5) Western Radio Telegraph Co.

(f) The Government operates the following communication systems:

Under the Commerce Department, a radiotelegraph system for the airways division and marine beacons for the Lighthouse Service.

Under the Treasury Department, a system of radiotelegraph stations on both coasts of the United States for the Coast Guard for communication with their ships and for purposes of safety of life at sea.

Under the Department of the Interior, a radiotelegraph service for the Forestry section (one of several small services).

Under the Navy Department, a radiotelegraph system of communication between both coasts, between the naval districts, on both coasts to ships at sea (including radio direction-finder stations), and to Hawaii, Alaska, Manila, Panama, Puerto Rico, Guam, and Samoa.

Under the War Department, a cable and radio service to Alaska, a radio and wire telegraph network within the United States and

Alaska, and a radiotelegraph service to its overseas units and transports.

(g) Several commercial aviation communication systems operating radiotelegraph and radiotelephone service between their landing fields and between the landing fields and their planes.

This brief outline shows an interesting picture of a collection of communication agencies not working in accordance with any national plan. In the commercial field each company is a good one, but in the telegraph field each lacks certain facilities to render the greatest efficiency. The Radio Corporation, for example, is seriously handicapped through lack of system of offices throughout the country to serve as feeders for its international radio service. Consequently, it has a contract with the Western Union for pick-up and delivery service, domestically. Both the Western Union and Postal operating the domestic telegraph offices throughout the country own and operate cables to Europe. They naturally prefer to send messages originating in the interior via their own cables in preference to turning them over to the Radio Corporation for transmission by radio. (However, should the Radio Corporation establish a system of domestic offices and handle domestic service between United States cities, it would make such inroads into the revenues of the Western Union as to compel that company to close the unproductive stations in the small towns and villages now maintained out of the profits of the Western Union made in the larger cities.) ¶ One member believes that the Radio Corporation of America or any other independent radio company would hesitate to enter the domestic field against two such competitors as Western Union and Postal Telegraph-Cable Co. under present conditions. However, if Western Union and Postal Telegraph should merge, he feels that it would be necessary to permit a radiotelegraph company to enter the domestic field in order to preserve for the public the benefits of the cheaper rates and better service which competition engenders, in addition to furnishing more direct international communication. There already exists quite an extensive, though not unified, intercity radio service.

If these various radio companies were permitted to, and would combine, this merger would furnish competition to a unified domestic wire telegraph company which the other members seem to favor. The merged wire companies would have little to fear from a merger of radiotelegraph companies for many years, but the public would benefit by reduced rates, better and more direct service in the meantime. Research and development in the ultrashort wave field would be required to develop pick-up and delivery service and this would undoubtedly be reflected in the rapid advancement of all phases of the radio art. In nations of great area such as Brazil, Russia, and China, which could not afford landline structures like the more compact nations, radio is already being applied to connect large cities because of low costs of installation and operation, greatly to the public advantage. After radio has been developed and its application determined, consideration should be given to the advisability of unifying it with wires and cables. Not now. And when it has finally demonstrated its possibilities, the attitude toward it may have changed considerably. Because of the wise provision of Congress,

the cable companies were not permitted to engage in radiotelegraphy in the international field and rapid expansion of our international radio service followed. The same protection should be afforded radio in the domestic field.

The subsidiaries of ~~the~~ International Telegraph & Telephone Corporation with a domestic telegraph and international radio and cable service across both the Atlantic and Pacific are handicapped by having a relatively small number of domestic offices to feed their international services.

The Western Union has a large number of domestic offices and a trans-Atlantic cable service. It has no radio facilities whatever and no cable facilities on the Pacific.

One member points out that in the foreign field, our numerous United States communication companies are at a disadvantage in their competition with foreign companies. The external communications of practically every large country in the world are either private monopolies under Government control or are owned or operated by the Government itself. Our numerous companies, competing against each other and against foreign monopolies are played off, one against the other, by the foreign monopolies, are forced into positions whereby they are compelled, to save themselves, to make contracts advantageous to the foreign monopolies and disadvantageous to themselves.

Second. There are set out some arguments for and against Government ownership of communication companies, stating the conclusion of the committee that communication companies and their holding companies, at least for the present, should be privately owned and operated. In this connection, one member of the committee emphasizes that the law should be clarified to prevent control by foreigners of holding companies investing in American communication companies.

The contents of this section apply to communication companies engaged in international communications as well as those in domestic service.

Government ownership.—The proponents of Government ownership believe that such a national policy will result in—

1. Lower tolls due to (a) the elimination of the present communication company profits and excessive overhead costs; (b) the elimination of large "accounting" costs through the use of the postage stamp in prepaying telegrams; (c) the saving on interest charges upon borrowed funds.

2. Better service by the consolidation of the telegraph and telephone, both wire and radio services.

3. The prevention of discriminatory services.

4. The prevention of speculative management.

5. The extension of service to the localities not now served.

6. The ability to present a united front to foreign systems.

The opponents of Government ownership hold that such a national policy is objectionable due to:

1. The danger of political domination and interference.

2. Government "red tape."

3. The charge that the Government does not conduct its business economically.

4. The conjecture that Government ownership would discourage initiative, technical research, and advancement.

5. The belief that the communication service under Government ownership in foreign countries is inferior to ours under private ownership.

6. The belief that the people do not want Government ownership.

The committee believes that communication companies and their holding companies should be privately owned and operated, at least for the present. One member of the committee believes that this conclusion is sound as far as it goes, but does not consider that it is sufficiently explicit to be adopted as a policy by this country. For instance, such a policy could permit foreign domination of all our United States communication companies, a condition which would be unthinkable for reasons of commerce, foreign relations, and national defense. In 1927 when the Radio Act was made law, Congress was alive to this possibility and went to great length in section 12 of that act to prevent foreign influence from entering our communication system. They were unsuccessful, to some extent, as a loophole in the law permits a foreign-dominated holding company to own United States communication companies. This flaw in the law has already been utilized for that very purpose, and the one member strongly advises that now is the time to remedy the defect. He is of the opinion that all the communication companies of the United States and its possessions and their holding companies should be privately owned by American stockholders, operated and controlled by American directors, officials, and personnel. To this end, that member of the committee believes the provisions of section 12 of the Radio Act of 1927 should be amended and strengthened in order that the intent of the provisions of this section may not be evaded by setting up holding companies with foreign directors or influenced by foreign stockholders, which holding companies now may control United States communication companies under the provision of this section, although not so intended by the framers of the law. He believes that the law should go still further and prohibit any United States communication company from owning commercial facilities in foreign countries, unless provided for by treaty.

Third, under the heading "Regulation", the committee recommends the transfer of existing diversified regulation of communications to a new or single regulatory body, to which would be committed any further Federal control of two-way communication and broadcasting.

Although the cable, telegraph, telephone, and radio are inextricably intertwined in communication, the Federal regulation of these agencies, in our country, is not centered in one governmental body. The responsibility for regulation is scattered. This scattering of the regulatory power of the Government has not been in the interest of the most economical or efficient service. (In this connection, the following is quoted from the report of the standing committee on communications of the American Bar Association adopted at the annual meeting Aug. 30-Sept. 1, 1932:)

In this connection it should be borne in mind that there is now no Government agency authorized to deal with communication problems as such. The Interstate Commerce Commission has certain jurisdiction over the rates and charges of both wire and wireless companies engaged as common carriers in transmitting messages for hire in interstate and foreign commerce (49 U.S.C.A.L.). The executive branch of the Government has jurisdiction over the granting of licenses for the landing of commercial cables (47 U.S.C.A., 34-19) * * *. The Federal Radio Commission has authority to license and to regulate the operation but not the rates and charges of wireless communication agencies engaged in interstate and foreign commerce (47 U.S.C.A. 81-119). That the communication problem is worthy of serious consideration by Congress and those in authority cannot be doubted. Division of authority over subject matter not readily susceptible of division has continued too long. Communication problems are communication problems whether the agency employed be telephone or telegraph, wire or wireless. All communication systems of any magnitude own and operate or by arrangement use facilities of both types. The reasons are readily apparent. * * *

We submit that it is hardly consistent with economy or maximum efficiency to have the regulation of wireless-communication agencies under one body and such relation of wire-communication agencies as exists under another, while the question of rates for such service, frequently involving both types of facilities, are largely governed by the conditions of competition prevailing at a particular time and place. The situation created thereby is not only contrary to the public interest, but is contrary to the interests of the communication companies themselves.

In addition to the regulatory powers over communication exercised by different agencies of the Government mentioned above, the committee also finds that certain rate-making powers are vested in the Postmaster General by virtue of section 3, title 47, United States Code.

The most far-reaching regulatory power over rates and practices of telegraph, telephone, cable, and radio companies is vested in the Interstate Commerce Commission. This important body already burdened with its great responsibilities on railroad regulation has never been very active in the regulation of communication agencies. The activities of the Commission in connection with communication were the subject of review in hearings held by the Senate Committee on Interstate Commerce in the second session of the Seventy-first Congress, the Honorable Joseph B. Eastman appearing for the Commission. The testimony showed that the Commission had no departments, bureaus, or divisions that dealt exclusively with radio, telephone, telegraph, or cable matters (p. 1566), that few such cases had ever been heard by the Commission, and that there were no employees in any of the departments or bureaus who dealt exclusively with communication matters, with the exception of one clerk and certain engineers (p. 1575). The testimony indicated that the regulation of communication agencies was a minor activity of the Commission. Commissioner Eastman testified, "In my opinion—and I think this opinion is shared by other members of the Commission—the telephone, telegraph, and cable are more closely connected with radio than with railroads. And while I have given no great amount of study to the question, I am inclined to believe that the supervision of communication companies by one commission would be preferable to the present method of divided control."

The committee realizes that the communication traffic of the United States exceeds that of any other country. It realizes that the coun-

try's technical communication facilities are as good as those of any other country (but it is of the opinion that they are not of the greatest possible use to the people under the present conditions, particularly as regards organization, extent, and rates).

One member particularly urges that these facilities have been developed through competition. He also believes that the continuation of a policy of enforced limited competition in the wire and radio telegraph field under the guidance of a policy regulatory body, whose duty it would be to determine the number and types of telegraph companies competing in various areas, will continue to develop our telegraphic communication service and facilities to a greater extent and at far less cost to the Government than would occur through rigid regulation of rates and services.

The domestic telephone service of the country is mainly provided by the American Telephone & Telegraph Co. and its associated companies. The service rendered by this company is technically the best in the world, but there are many complaints that it is too expensive. Recently the company has introduced over its wires a rented "teletype" service which the telegraph companies feel is an invasion of the field of telegraphy. Both those conditions should be made subject to the consideration and decision of the proposed regulatory body.

The Bell System owns over 80,000,000 miles of wire (in cables and open construction) which reach all sections of the United States.

The extension of the telegraph service to territory not now served is, in general, impeded by the cost of such extension. The wires of the telephone company now reach very many communities not provided with telegraph offices. Inasmuch as the telephone wires now reach these small places and can by proper equipment be used for telephony and telegraphy, simultaneously, without mutual interference, provisions can be made through proper regulation by which the telegraph service can be extended through the use of these telephone facilities to many of these communities not now served. However, one member believes that only through strenuous and costly Government efforts will the telegraph companies ever be compelled to install telegraph offices and pay operators to operate stations in towns where the volume of telegraphic communication is so small that the office does not pay. He believes that it is because of this lack of business in the majority of small towns, rather than the expense involved in competition in large cities which prevents extension of telegraph service to those small towns. However, the regulatory body could compel the telephone company to handle telegrams by telephone to small towns at fair rates.

There is no existing communication policy for the development of improvement of our national communication facilities nor one single office in Washington to which all communication problems can be referred.

The committee believes that the communication service so far as congressional action is involved should be regulated by a single body.

The committee believes that rigid regulation under a regulatory body exclusively devoted to that duty:

1. Will reduce rates by regulating profits and overhead expenses and intercompany charges.
2. Will prevent discrimination.
3. Will control exclusive contracts which are made by communication companies with hotels, railroads, and foreign countries.
4. Will regulate annual depreciation charges.
5. Will prevent speculative management.
6. Will prevent the "watering" stocks.
7. Will permit the extension of service in localities and homes not now served.

One member observes: The committee has been given no opportunity as yet to make a study of the telephone situation in the United States, except for the meager data contained in the report. There is a feeling, however, that the cost of renting telephones is too expensive and the other members propose to remedy this by clothing the proposed Federal regulatory body with power to regulate services and rates. He feels that perhaps the overhead expense claimed by the telephone companies, on which rests one of the main bases for their rate structures, and which must be paid for by the telephone subscriber, may be too great. The absence of competition (which, nevertheless, is undesirable on a grand scale in this field for reasons he has already indicated) is probably the major cause of such high rates. However, he claims no knowledge on which to base any assertion that a Federal rate control body can remedy this situation. In fact, he is inclined to believe that such rate control by a Federal regulatory body would be almost impossible without enormous expense to the Government and unprecedented invasion of the principal of State rights.

Almost the entire expense of the telephone companies is incidental to local service and plant charges. State and municipal regulatory commissions have authority to regulate local charges based on these expenses. The Interstate Commerce Act prohibits the Interstate Commerce Commission from regulating intrastate rates. As only about $1\frac{1}{2}$ percent of the telephone traffic is on long-distance business, comparatively little revenue is received by the telephone companies for long-distance interstate or foreign calls and this type of service does not appear to be unduly expensive even now. For the Federal rate-regulating body to attempt to regulate interstate rates would necessitate investigation by this body into the cost of services, plant structure, and financial condition of the telephone companies in every city in the Union.

This would entail considerable expense in order to obtain the questionable result of reducing rates on the comparatively few interstate communications handled by the telephone companies. On the other hand, if the Federal rate-control body is to actually function to reduce rates on the huge volume of intrastate traffic (which comprises about $98\frac{1}{4}$ percent of the total telephone traffic, the rates on which are practically the only ones affecting the public to any great extent), the one member can visualize no other way for this body to act efficiently than by appointing commissions in every city and large town in the United States, replacing all State and municipal commissions, in order to investigate costs, services, and conditions

there. Rates could never be regulated from Washington without such assistance. Such a procedure would appear to be an extravagant waste of Government funds unless we are sure it will result in benefit to the public. He does believe that machinery should be set up for the suggested Federal regulatory body, whereby if one or more State commissions complain of excessive interstate rates charged by the telephone monopoly, the regulatory body could compel hearing of all parties and render decisions as to what telephone rates were just. While it is true that the Interstate Commerce Commission does regulate rates within States to a certain extent, the regulation of telephone rates within States and cities would be a vastly more difficult proposition due to the many local and internal municipal problems encountered by communication companies, which have no bearing on railroad problems. Lacking further opportunity for study, he believes that rigid regulation of rates by a Federal regulatory body would be impossible unless accomplished at prohibitive expense. He believes that limited competition will accomplish the desired results in the telegraph field and that a Federal regulatory body empowered to have complaints of State commissions and render decisions as to rates of telephone companies will accomplish them in the two-way voice communication field.

From the legal, engineering, and public service standpoints it appears that the Governments' regulation of private communications should be administered either by a communications commission of a quasi-judicial character, or placed directly under the jurisdiction of a Cabinet officer. In the event of the latter, there should be established a board of communication appeals whose function would be limited to issues involving equity. In either event, whether the regulatory administration is placed directly under a Cabinet officer or under a communications commission, all interested parties should have recourse to a Federal court in the District of Columbia for the purpose of appealing adverse decisions.

Inasmuch as there is a very close relationship, insofar as availability of facilities is concerned, between the departments of the Government operating their communication systems, such as the Army, Navy, Coast Guard and the Airways Division, and the organizations, both domestic and international, which operate public service communication systems, it would seem advisable to establish a national communication advisory council consisting of representatives, appointed by the President from the various interested Government departments, including the Department of State. This National Advisory Council, together with the civil body responsible for the administration of civil communications, would be charged primarily with the formulation of policies. Where these policies involved, either directly or indirectly, the interests of nongovernment communication organizations holding license under the Government, or directly involved the interest of the public, the civil communications administration and the advisory council should be constituted as a communications committee of the whole to hold public hearings at which any person who could qualify as an interested party would be permitted to appear and give evidence as well as arguments.

Fourth. Under the heading of "mergers", it is stated that existing law permits two or more telephone companies to consolidate with the

ability to compete with wire and cable in both the international and domestic telegraph fields."

Fifth. Under the heading of "rates", members of the committee, with one exception, say the subject of rates is one properly for consideration and control by the recommended regulatory body. One member makes an extended argument for the principle of limited competition.

(The subject of rates is one properly for consideration and control by the recommended regulatory body.)

One member is not in agreement with this statement for the reasons put forth in his discussion of "Regulations." If the principle of limited competition is adopted, as he recommends, in the field of telegraphy, this principle will provide an automatic rate regulation in itself and he foresees little need of the regulatory body concerning itself with the rates of telegraph companies. Lacking detailed data concerning the rates of the telephone company, he is unable at present to see how rate regulation of their services can be accomplished to any appreciable extent by a government regulatory body without prohibitive expenditures, except in the manner which he has indicated in his discussion under "Regulation", suggesting certain improvements to be made in the existing Federal Government machinery for administering communications.

In view of the foregoing, one member recommends that the following points be adopted in the institution of a national communications policy for the United States Government:

(1) In the interest of service to the public, fair rates, development of the art of telecommunications and governmental economy, the policy of the Government should be to require and, at the same time, limit competition in the telegraph communication field between that number of companies which can operate at a reasonable profit.

(2) No policy, such as permitting the merger of radio and cable or wire companies, should be adopted, which would tend to retard the development or expansion of any phase of the art of telecommunications, either in the domestic or international field. Positive action should be taken to insure the rapid development and application of radiotelegraphy.

(3) The communication companies of our country, including holding companies, should be privately owned by American stockholders, operated and controlled by American directors, officials, and personnel.

(4) Encouragement should be given to American-owned communication enterprise in foreign countries which is independent of radio companies licensed to own or/and operate radio facilities within the United States and its possessions; on the other hand the merger of foreign-controlled, or partly foreign-controlled, communication services or facilities with those of American communication companies, including holding companies, should be prohibited.

(5) Provision should be made for the permanent assignment of such radio frequencies and other communication facilities as are required for national defense and other authorized Government agencies and any policy upon which the Government decides should fully meet the requirements of national defense.

There stand out in the study the following:

(1) Continuation of private ownership and operation of communications;

(2) Government regulation of such ownership and operation by one agency, whether an independent commission or a bureau in an executive department;

(3) Some further extension of permission to merge existing companies under the supervision of a regulatory body; and

(4) A disagreement as to the extent of the elimination of competition.