

CHAPTER 2

Telecommunication Policy

2.1 OBJECTIVES FOR THE USE OF THE RADIO SPECTRUM APPLYING TO DEPARTMENTS AND ESTABLISHMENTS OF THE NATIONAL GOVERNMENT

The Federated States of Micronesia is vitally dependent upon the use of the radio spectrum to extend communications and information services to remote communities and islands with the national objective of furthering economic development and the delivery of government services. Use of the spectrum is vital to enhancing health care, education and the welfare of the Nation and to the conduct of its foreign affairs. This use exerts a powerful influence upon the everyday lives of citizens and annually contributes significantly to the Nation's growth and economy.

The radio spectrum is a limited natural resource that is accessible to all nations. It is imperative that this resource be developed and administered wisely so as to maintain a free democratic society and to stimulate the healthy growth of the Nation, while ensuring its availability to serve future requirements in the best interest of the Nation.

Therefore, consistent with international treaty obligations and with due regard for the rights of other nations, the national objectives for the use of the radio spectrum are to make effective, efficient, and prudent use of the spectrum in the best interest of the Nation, with care to conserve it for uses where other means of communication are not available or feasible. Specifically, in support of national policies and the achievement of national goals, the primary objectives are:

- (a) to enhance the conduct of foreign affairs;
- (b) to safeguard life and property;
- (c) to support crime prevention and law enforcement;
- (d) to support the national and international transportation systems;
- (e) to foster conservation of natural resources;
- (f) to provide for the national dissemination of health, educational, general, and public interest information and entertainment;

(g) to make available rapid, efficient, nationwide, and worldwide radiocommunication services;

(h) to promote scientific research, development, and exploration;

(i) to stimulate social and economic progress; and

(j) in summary, to improve the health and well being of our citizens.

The following areas of interest are associated with the national objectives listed above:

- o Agriculture and fishing
- o Amateur (emergency preparedness, self-training and technical investigation)
- o Commerce
- o Computers and data processing
- o Consumer expenditures and savings
- o Education and training
- o Entertainment (Broadcasting)
- o Health care
- o Infrastructure (housing, schools, hospitals, libraries, and telecommunications)
- o Conduct of Foreign Affairs and information exchange
- o Natural resources (including pollution abatement)
- o Oceanography
- o Public Safety
- o Research and Development
- o Social Welfare
- o Transportation (roads, shipping, ports and harbors)

These areas of interest are identified to assist in the frequency management process and are not intended to be all inclusive. Priorities among these areas of interest are normally determined on a case-by-case basis and are dependent upon many factors, including past and foreseen political and administrative decisions.

2.2 FORMULATION OF TELECOMMUNICATIONS POLICY

The formulation and enunciation of national telecommunication policies designed to ensure achievement of the national objectives is an essential element of the role of the FSM National Government. Telecommunication policies are made by the Congress, by the Court, by the President and the Secretary of Transportation Communications and Infrastructure. Policy is made through treaties to which the Federated States of Micronesia adheres with the advise and consent of the Congress, through executive agreements, by executive departments and departments in the discharge of their telecommunication responsibilities, and by custom and precedent.

2.3 TELECOMMUNICATIONS POLICY APPLYING TO THE FEDERATED STATES OF MICRONESIA

The following policies have been established regarding the use of telecommunications by the Federated States of Micronesia.

Government to study new uses for radiocommunications and generally encourage the larger and more effective use of radiocommunications in the public interest.

The Department shall make such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this chapter, the Compact of Free Association with the United States of America or any international radio or wire communications treaty, agreement or convention, or regulations annexed thereto, including any treaty, agreement or convention to which the Federated States of Micronesia is or may hereafter become a party.

The Department has authority to require the painting and/or illumination of radio towers if and when in the Secretary's judgment such towers constitute, or there is a reasonable possibility that they may constitute, a menace to air navigation. The licensee, and the tower owner in any case in

which the owner is not the licensee, shall maintain the painting and/or illumination of the tower as prescribed by the Department pursuant to this Section. In the event that the tower ceases to be licensed by the Department for the transmission of radio energy, the owner of the tower shall maintain the prescribed painting and/or illumination of such tower until it is dismantled, and the Department may require the owner to dismantle and remove the tower when it determines that there is a reasonable possibility that it may constitute a menace to air navigation.

The Department has authority in any case in which an aircraft registered in the Federated States of Micronesia is operated (pursuant to a lease, charter, or similar arrangement) by an aircraft operator who is subject to regulation by the government of a foreign nation, to enter into an agreement with such government under which the Department shall recognize and accept any radio station licenses and radio operator licenses issued by such government with respect to such aircraft.

The Department has exclusive jurisdiction to regulate the provision of direct-to-home satellite services. As used in this subsection, the term "direct-to-home satellite services" means the distribution or broadcasting of programming or services by satellite directly to the subscriber's premises without the use of ground receiving or distribution equipment, except at the subscriber's premises or in the uplink process to the satellite

2.3.1 General

Telecommunication Development and Regulation

The Government shall encourage the development and regulate the use of radio communications subject to its control so as to meet the needs of national security, safety of life and property, international relations, and the business, social, educational and political life of the Nation.

Compliance With U.S. FCC Type-Approved Standard for Equipment

As a policy matter, the Federated States of Micronesia has adopted the U.S. Federal Communications Commission (FCC), type-approved standard. All transmitting and receiving equipment imported into the FSM must comply with FCC requirements. All equipment must be type acceptance, certification and bearing the required label evidencing compliance with the appropriate equipment authorization program. All imported equipment or apparatus must be cleared with the Division of Customs under the Department of Finance and Administration.

International Telecommunication Regulation

The Government considers the International Telecommunication Union the principal competent and appropriate international organization for the purpose of formulating international regulations on telecommunication matters.

The Government recognizes that other international bodies, such as the International Civil Aviation Organization, Intergovernmental Maritime Consultative Organization and the World Meteorological Organization also provide appropriate international organizations for considering specialized telecommunication matters.

The Federated States of Micronesia shall be appropriately represented at international conferences dealing with telecommunications when such conferences appear to involve its national interests.

The Government shall foster and encourage the participation, for the purpose of coordination and provision of advice and information, of experts from its commercial communication, scientific, and educational communities as advisers in the preparation for and participation in international telecommunication conferences, in consonance with national policy and security considerations.

Operating Capability of Industry

The Government regards the operating capability of the Federated States of Micronesia

Telecommunications Corporation as a vital national asset and shall encourage and promote the development of that industry in consonance with other national policy and security considerations.

2.3.2 Functions to be Achieved

National Defense

The Federated States of Micronesia in time of war or national emergency, as proclaimed by the President, shall have available to the Government the total telecommunication resources of the Nation for utilization with due regard to the extent of the war or emergency and to the continuing operation of services considered to be essential or desirable for the welfare and interest of the Federated States of Micronesia during such a time.

On a continuing and current basis, the Federated States Micronesia Telecommunications Corporations and the amateur radio operators shall be encouraged and assisted in planning and preparing for their immediate readiness to meet emergency or war conditions so that telecommunications responsiveness to emergency requirements can be instantaneous with the occurrence of such conditions.

In advance of a national emergency, all desirable and possible measures and procedures necessary for use during emergency or war conditions will be developed and made available as needed so that they can be effected concurrently with the onset or threatened onset of emergency conditions.

Safety at Sea

The Government shall aggressively foster the development, investigation, selection, and standardization of a worldwide system of radio and electronic aids for marine navigation and communication, since the national security, the Nation's sea commerce, and the assurance of adequate safety of life and property at sea for ships of all nations require such an efficient, integrated, and standardized system.

Safety in the Air

The Government shall aggressively foster the development, investigation, selection, and stan-

standardization of a worldwide system of radio and electronic aids for air navigation and communication, since the national security, the Nation's air commerce, and the assurance of adequate safety of life and property in flight require such an efficient, integrated, and standardized system.

Protection of Life, Property, and National Resources

The Government shall promote the development and use of radio for the protection of the lives and property of its citizens and of other national resources where other means of communication are not appropriate or available.

Promotion of Efficiency and Economy of Government Operations

The Government shall promote the development and use of radio to improve the efficiency and economy of Government operations where other means of communication are not appropriate or available.

2.3.3 Government Use of Commercial Telecommunication Service

The Government of the Federated States of Micronesia places heavy reliance on the private sector in providing telecommunication service for

The Government shall exercise leadership in the application of technological advances of operational procedures that will result in more efficient and effective use of the radio spectrum.

Periodically, it shall measure the status of current technical and operational capabilities to determine necessary changes in technical standards, allocations, or assignments which should be effected.

2.3.5 Radio Spectrum Administration

The Government regards the radio frequency spectrum as a world resource in the public domain; consequently it shall adopt policies and measures to insure that this resource is used in the best interest of this Nation, but with high regard to the needs and rights of other nations.

its own use. This means that all functions normally associated with providing the service shall be performed by the private sector. These functions include design, engineering, system management and operation, maintenance, and logistical support.

In order to emphasize the Government's proper role as a user, any proposal designed to provide needed telecommunication service, which requires the Government to perform any of the "provider" functions, such as those listed above, shall be adopted only if commercial service is:

a) not available to the user during the time needed;

b) not adequate from either a technical or operational standpoint; or c) significantly more costly.

A non-commercial service approach is acceptable if such an approach will result in significant savings over an otherwise acceptable commercial service offering. To be considered significant the savings must exceed ten percent of the cost of the commercial service. If the proposed approach involves heavy investment, rapid obsolescence, or uncertain requirements, the minimum savings threshold should be increased to reflect these factors.

The Government shall establish separate communication satellite systems only when they are required to meet unique governmental needs, or are otherwise required in the national interest.

2.3.4 Role of Leadership by the Government

The supervision and administration of the use of the radio frequency spectrum shall have the objective of assuring that such use is efficient, effective, and prudent.

The Government considers the radio frequency spectrum to be a vital national resource. Any rights of users to operate on any radio frequency are rights held by the Federated States of Micronesia as a whole. Such rights may be transferred by this Government from one user to another, as required in the overall national interest.

The Government considers that the basic guide to follow in the normal assignment of radio frequencies for transmission purposes is the avoidance of harmful interference and the use of frequencies in a manner which permits and encourages the most beneficial use of the radio frequency spectrum in the national interest.

Within the jurisdiction of the Federated States of Micronesia, use of the radio frequency spectrum for radio transmissions for telecommunications or for other purposes shall be made only as authorized by the Secretary of Transportation Communication and Infrastructure.

In view of the limitations of the usable radio frequency spectrum, and to insure the best possible return from the use thereof, the Government in time of peace shall require all users to:

a) justify any except an emergency request for radio frequencies prior to the assignment or use of such frequencies; b) confirm periodically the justification of continued use; c) employ up-to-date spectrum conserving techniques as a matter of normal procedure; and d) assure the ability to discontinue the electronic functioning of any emission system including satellites when required

in the interest of communication efficiency and effectiveness.

2.3.6 Spurious Emissions

In principle, spurious emissions from stations of one radio service shall not cause harmful interference to stations of the same or another radio service within the recognized service areas of the latter stations, whether operated in the same or different frequency bands.

Providing appropriate spectrum standards in Annex C are met, an existing station is recognized as having priority over a new or modified station. Nevertheless engineering solutions to mitigate interference may require the cooperation of all parties involved in the application of reasonable and practicable measures to avoid causing or being susceptible to harmful interference.

2.3.7 Safety Service

ITU Radio Regulation **S1.59** defines a safety service as “any radiocommunication service used permanently or temporarily for the safeguarding of human life and property”. For more information on safety services see Chapter 6 of these Regulations; Section 6.2.10 and 6.2.13 on aeronautical and maritime mobile services, and Articles 30 through 34 of the international Radio Regulations on distress and safety communications. The intent of

S1.59 is that the safety service connotation should be applied to individual uses (assignments) of the radio frequency spectrum, irrespective of the radio service normally applied. This is a very important point since assignments which do entail the providing of a safety-of-life function require an appropriate degree of protection. It does not mean that such assignments have any special status which would in any way alter the normal rules applied with respect to primary, and secondary allocations, noting that priority of communications are otherwise provided in the Radio Regulations (Articles S44 and S53).

From a spectrum management point of view, the domestic and international policies regarding safety service are consistent. Accordingly, the following guidance is applicable:

(a) The protection and status afforded to the categories of Services and allocations and to stations in all services is governed, *inter alia*, by Art. S5, Sec. II. ITU Radio Regulations (RR).

(b) request for assistance in the case of harmful interference (RR **S1.169**) caused to stations of the radionavigation service in a frequency band

where the service is allocated under the Table of Frequency Allocations on a secondary basis would be treated by terms of RR **S5.28** through **S5.31**.

(c) request for assistance in the case of harmful interference (RR **S1.169**) caused to stations of the radionavigation service in a frequency band where the service is allocated under the Table of Frequency Allocations on a coequal primary basis would be treated in accordance with normal practices based upon which operation was first brought into use unless it can be demonstrated that a “safety-of-life function is being served.” In other words, any radiocommunication service which uses the spectrum for safety purposes may be regarded in that case as a safety service and, in this respect, the appropriate provisions of the Radio Regulations would apply.

2.3.8 Use of Spectrum-Conserving Methods for Radio Communication Systems

In the Federated States of Micronesia, the application of advanced technology, shall foster the application of spectrum-conserving methods for radiocommunication systems authorized by the Department of Transportation, Communication and

Infrastructure. Spectrum-conserving systems are new or existing systems that make use of innovative designs or unique applications that result in efficient use of frequency, space and time. Efficient use is a mission-oriented factor that combines the requirements of the mission with available techniques to provide the most effective solution.

Government departments are encouraged to use spectrum – conserving technologies and methods where they will satisfy agency operational requirements and will enhance service, economy of operation, and the more efficient and effective use of the radio spectrum. However, where spectrum is readily available due to geographic considerations or other factors, or where mission requirements mandate, security, economics, or some technical or system performance criterion may be the determining factor in system selection.

2.3.9 Land Mobile Systems

Spectrum-conserving methods that should be considered for land mobile operations include trunked systems, narrowband FM (NBFM), and amplitude compandored single sideband (ACSSB).

a. Trunking is a technique that uses dynamic channel assignment to potentially obtain a higher degree of channel loading and increased spectrum utilization.

b. NBFM is conventional FM with channel spacing of 12.5 kHz or less. It may be capable of interoperation with conventional FM equipment using 25 kHz channel spacing.

c. ACSSB is a single-sideband modulation scheme with a necessary bandwidth of approximately 3.0 kHz, a standardized pilot carrier for synchronization, and amplitude compandoring.