2500-2655 MHz

1. Band Introduction

This band is allocated exclusively to non-Federal fixed and mobile (except aeronautical mobile) services. The Federal Government operates, on a non-interference basis, a limited number of telemetry systems, point-to-point data links, and equipment associated with development, testing and evaluation (RDT&E) programs.[1] There is also a secondary allocation in this band for the space research (passive) and Earth exploration-satellite (passive) services.

2. Allocations

2a. Allocation Table

The frequency allocation table shown below is extracted from the Manual of Regulations and Procedures for Federal Radio Frequency Management, Chapter 4 – Allocations, Allotments and Plans.

Table of Frequency Allocations

United States Table

Federal Table	Non-Federal Table	FCC Rule Part(s)
2500-2655 5.339 US205	2500-2655 FIXED US205 MOBILE except aeronautical mobile 5.339	Wireless Communications (27)

2b. Additional Allocation Table Information

5.339 The bands 1370-1400 MHz, 2640-2655 MHz, 4950-4990 MHz and 15.20-15.35 GHz are also allocated to the space research (passive) and Earth exploration-satellite (passive) services on a secondary basis.

US205 Tropospheric scatter systems are prohibited in the band 2500-2690 MHz.

[1]. Non-interference basis is a condition of use relative to other specific uses that affords no protection from harmful interference from the other specified users, and prohibits causing harmful interference to the other specified users. *See*, Chapter 6 of the NTIA Manual.

3. Federal Agency Use

3a. Federal Agency Frequency Assignments Table

The following table identifies the frequency band, type(s) of allocation(s), types of application, and the number of frequency assignments in the Government Master File (GMF) by agency.

Federal Frequency Assignment Table

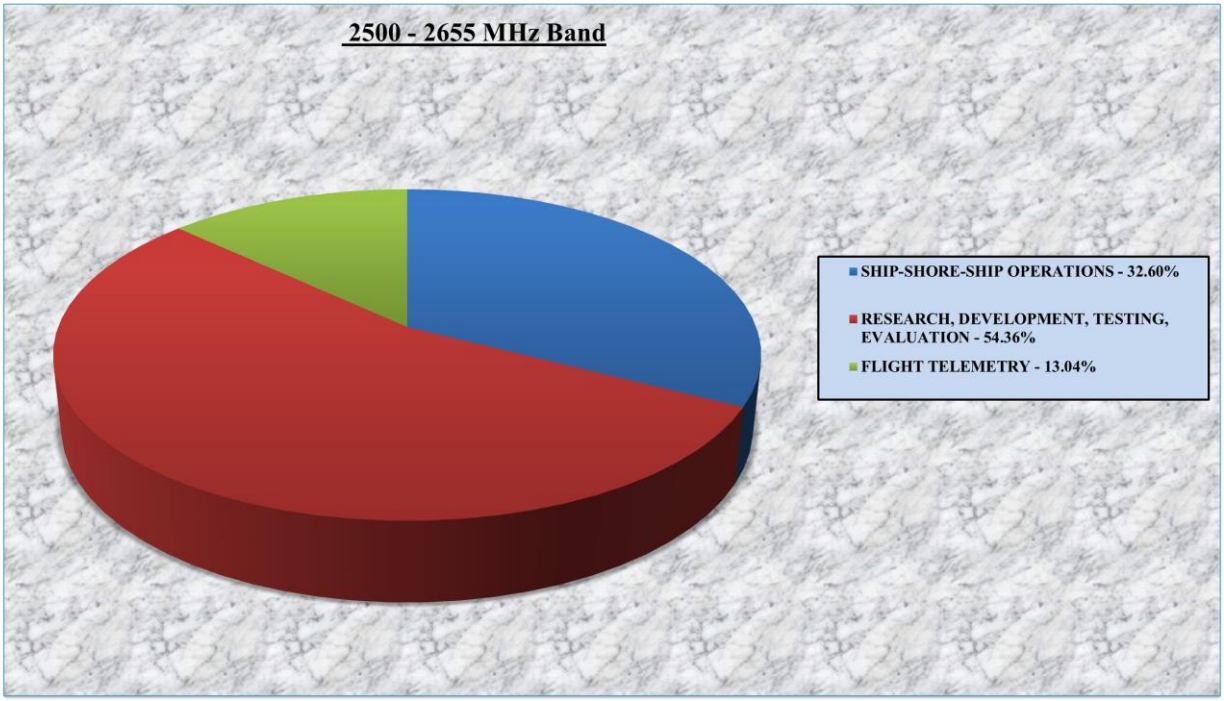
2500-2655 MHz Band					
NON-FEDERAL EXCLUSIVE BAND					
	FIXED MOBILE (except aeronautical mobile)				
	TYPE OF APPLICATION				
AGENCY	SHIP-SHORE- SHIP	FLIGHT TELEMETRY		RESEARCH DEVELOPMENT TESTING EVALUATION	TOTAL
AF				20	20
DOE				5	5
N	15				15
NASA		6			6
TOTAL	15	6		25	46

The number of actual systems, or number of equipments, may exceed and sometimes far exceed, the number of frequency assignments in a band. Also, a frequency assignment may represent, a local, state, regional or nationwide authorization. Therefore, care must be taken in evaluating bands strictly on the basis of assignment counts or percentages assignments.

The ship-shore-ship operations essentially are for testing purposes and could be considered under the RD&T category above.

3b. Percentage of Frequency Assignments Chart

The following chart displays the percentage of frequency assignments in the GMF for the systems operating in the frequency band 2500-2655 MHz



4. Frequency Band Analysis By Application

The Air Force and Navy use this band for research, development and testing of tactical communication systems; the development and testing of antennas used on aircraft; and the calibration of equipment. These RDT&E operations are performed at a limited number of military facilities in the United States. The operation of these RDT&E systems is typically limited to short duration.

The Navy has a few assignments, including one for development and testing of antennas for use on aircraft and in a single location, for calibration of equipment on Navy ships. These transmissions are shore-to-ship, of limited duration and transmissions are made only after a spectrum analyzer assesses RF radiation in the band.

The Department of Energy operates point-to-point data links in this band that are used to provide two-way audiovisual classroom instruction. The systems operate at Los Alamos and Sandia Crest, New Mexico.

The National Aeronautics and Space Administration operates video telemetry systems used to transmit data from unmanned aerial vehicles in this band at their Wallops Island, VA facility.

The Federal Government does not operate any systems in the space research (passive) and Earth exploration-satellite (passive) services.

5. Planned Use

The Federal Government use in the 2500-2655 MHz band to support RDT&E programs is expected to remain the same.

The Federal Government use of this band for telemetry systems and point-to-point data links is expected to continue.

The Federal Government has no plans to operate systems in the space research (passive) and Earth exploration-satellite (passive) services in the 2500-2655 MHz band.