

# 450-454 MHz

## 1. Band Introduction

The use of the 450-454 MHz band is allocated primarily for non-Federal use to the land mobile radio service. The Federal agencies use this band for land mobile communication systems that are shared with State and local public safety partnering agencies for mutual aid responses such as fire fighting, emergency response, and law enforcement operations. Federal agency use of the band is subject to mutual agreement and coordination with non-Federal users.

## 2. Allocations

### 2a. Allocation Table

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

#### *Table of Frequency Allocations*

#### *United States Table*

<b>Federal Table</b>	<b>Non-Federal Table</b>	<b>FCC Rule Part(s)</b>
450-454	450-454 LAND MOBILE	Remote Pickup (74D) Low Power Auxiliary (74H)
5.286 US87	5.286 US87 NG112 NG124	Private Land Mobile (90)

**2b. Additional Allocation Table Information**

**5.286** The band 449.75-450.25 MHz may be used for the space operation service (Earth-to-Space) and the space research service (Earth-to-space), subject to agreement obtained under No. 9.21.

**NG112** The frequencies 25.04, 25.08, 150.980, 154.585, 158.445, 159.480, 454.000 and 459.000 MHz may be authorized to stations in the Industrial/Business Pool for use primarily in oil spill containment and cleanup operations and secondarily in regular land mobile communications.

**NG124** In the bands 30.85-34, 37-38, 39-40, 42-47.41, 150.995-156.25, 158.715-159.465, 453.0125-453.9875, 458.0125-458.9875, 460.0125-465.6375, and 467.9375-467-9875 MHz, police licensees are authorized to operate low power transmitters on a secondary basis in accordance with the provisions of 47 CFR 2.803 and 90.20(e)(5).

**US87** The band 449.75-450.25 MHz may be used by Federal and non-Federal stations for space telecommand (Earth-to-space) at specific locations, subject to such conditions as may be applied on a case-by-case basis. Operators shall take all practical steps to keep the carrier frequency close to 450 MHz.

### 3. Federal Agency Use

#### 3a. Federal Agency Frequency Assignments Table

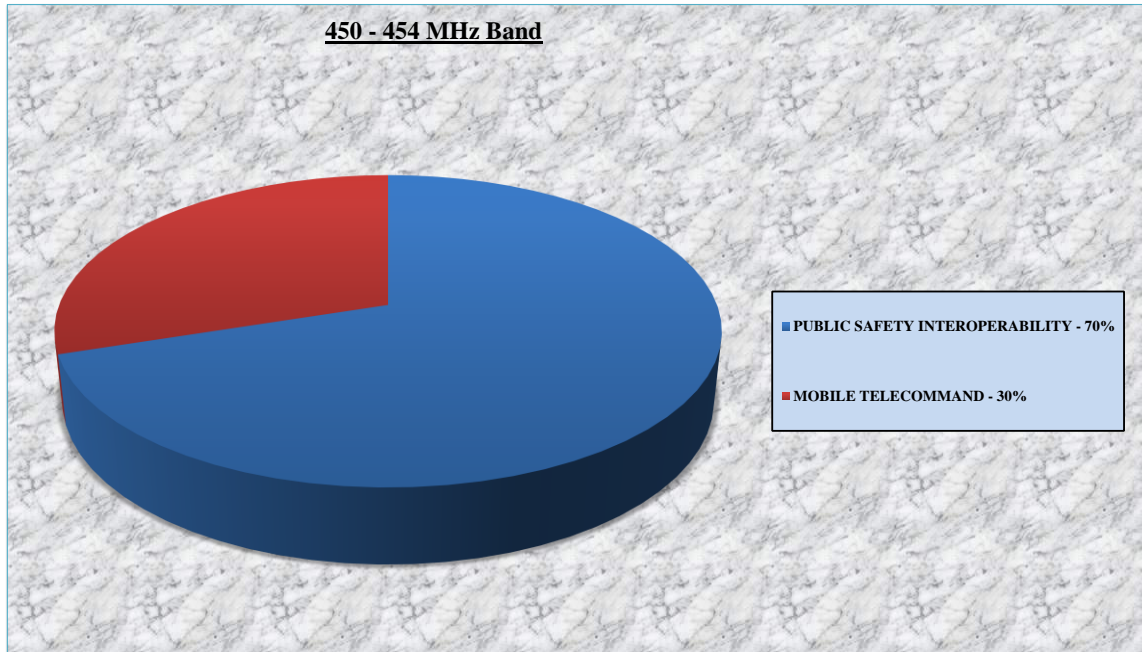
The following table identifies the frequency band, type(s) of allocation(s), types of application, and the number of frequency assignments by agency.

*Federal Frequency Assignment Table*

<b>450-454 MHz Band</b>			
<b>NON-FEDERAL EXCLUSIVE BAND</b>			
<b>AGENCY</b>	<b>FIXED MOBILE LAND MOBILE</b>		
	<b>TYPE OF APPLICATION</b>		
	<b>PUBLIC SAFETY INTEROPERABILITY</b>	<b>MOBILE TELECOMMAND</b>	<b>TOTAL</b>
<b>A</b>	<b>14</b>		<b>14</b>
<b>DHS</b>	<b>2</b>		<b>2</b>
<b>DOE</b>	<b>24</b>	<b>24</b>	<b>48</b>
<b>DOI</b>	<b>9</b>		<b>9</b>
<b>DOJ</b>	<b>4</b>		<b>4</b>
<b>HHS</b>	<b>2</b>		<b>2</b>
<b>TRAN</b>	<b>2</b>		<b>2</b>
<b>TOTAL</b>	<b>57</b>	<b>24</b>	<b>81</b>
<p>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 of assignments.</p>			

### 3b. Percentage of Frequency Assignments Chart

The following chart displays the percentage of assignments in the Government Master File for the Federal Government applications listed in the chart below for the frequency band 450-454 MHz.



## 4. Frequency Band Analysis By Application

### 4a. Public Safety Interoperability

Most of the Federal frequency assignments in the 450-454 MHz band are for land mobile systems used for public safety interoperable communications between Federal, State and local public safety entities. Federal agencies work in conjunction with State, local, tribal public safety and law enforcement to respond in the case of extraordinary natural and man-made disasters, and fulfill unmet public safety needs in carrying out their primary duties. These operations occur in locations where the non-Federal partners are already operating. Federal agencies that operate systems in this band include, but are not limited to, the Departments of Agriculture, Homeland Security, Justice, Energy, and Interior.

Federal agency use of this band is subject to coordination and cooperation (e.g., through a Memorandum of Understanding) with State and local partners.

#### **4b. Mobile Telecommand**

This band is also used by the Federal agencies for mobile telecommand. For example, the Federal Reserve uses a system to dispatch robots (automated guided vehicles) to various locations in buildings for pallet movement. The Department of Energy uses this band for remote control of cranes that operate inside hardened high-level radioactive waste treatment facilities, and the Navy uses this band for target drone control at test ranges.

### **5. Planned Use**

With the need for better coordination efforts between all levels of government, increased emphasis on homeland and border security protection, and a more effective and efficient response and recovery, Federal agency use of this band — in coordination and cooperation with State and local partners — is expected to continue for the foreseeable future.

The use of mobile telecommand by the Federal Reserve, Energy, and Navy is expected to continue.