

# Description of Communication Uses

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The BLM's Communication Use Rent Schedule covers the following types of communication uses, including related technologies, which are located in a facility authorized by a BLM right-of-way grant or lease. All use categories include ancillary communications equipment, such as microwave or internal one-or two-way radio, that are directly related to operating, maintaining, and monitoring the primary uses listed below. The Federal Communications Commission (FCC) may or may not license the primary uses. The type of use and community served, identified on an FCC license, if one has been issued, do not supersede either the definitions below or the procedures for calculating rent pursuant to 43 CFR 2803.1-2(d) and subsequent interim directives for communication facilities and uses located on public land.

## **Broadcast Uses**

AM and FM Radio Broadcast (AM or FM) means a use that broadcasts amplitude modulation (AM) or frequency modulation (FM) audio signals for general public reception. Users include radio stations that generate revenues from commercial advertising and public radio stations whose revenues are supported by subscriptions, grants, and donations. Broadcast areas often overlap State boundaries. This category of use relates only to primary transmitters and not to any rebroadcast systems such as translators, microwave relays serving broadcast translators, or holders licensed by the FCC as low power FM radio.

Broadcast Translator, Low Power Television, and Low Power FM Radio (BT) means a use of translators, low power television (LPTV), or low power FM radio (LPFM). Broadcast translators receive a television or FM radio broadcast signal and rebroadcast it on a different channel or frequency for local reception. In some cases the translator relays the signal to another amplifier or translator. LPTV and LPFM radio stations are broadcast translators that originate programming. This category of use includes translators associated with public telecommunication services.

Cable Television (CT) means a use that transmits video programming to multiple subscribers in a community over a wired or wireless network. These systems normally operate as a commercial entity within an authorized franchise area. This category does not include rebroadcast devices or personal or internal antenna systems, such as private systems serving hotels or residences.

Television Broadcast (TV) means a use that broadcasts UHF and VHF audio and video signals for general public reception. Users include television stations (major and independent networks) that generate income through commercial advertisement and public television stations whose operations are supported by subscriptions, grants, and donations. Broadcast areas may overlap State boundaries. This category does not include LPTV or rebroadcast devices, such as translators, or transmitting devices, such as microwave relays serving broadcast translators.

## **Non-Broadcast Uses**

Cellular Telephone (CEL) means a system of mobile or fixed communication devices that use a combination of radio and telephone switching technology and provide public switched network services to fixed or mobile users, or both within a defined geographic area. The system consists of one or more cell sites containing transmitting and receiving antennas, cellular base station radio, telephone equipment, or microwave communications link equipment utilized as back haul for that site. The following uses may be categorized as Commercial Mobile Radio Service (CMRS) on an FCC license, however, for rent determination purposes these are all considered Cellular uses: (1) Enhanced Specialized Mobile Radio (ESMR), (2) Improved Mobile Telephone Service (IMTS), (3) Air-to-

Ground, (4) Offshore Radio Telephone Service, (5) Cell Site Extender, (6) Local Multipoint Distribution Service and (7) Personal Communication Service (PCS). When both analog and digital equipment are operated at a site, two cellular (CEL) uses are inventoried to determine the appropriate fee.

Commercial Mobile Radio Service (CMRS) means commercial mobile radio uses that provide mobile radio communications service to individual customers. Examples of CMRS include: Community repeaters, trunked radio (specialized mobile radio), two-way radio voice dispatch, public switched network (telephone/data) interconnect service, microwave communications link equipment, and other two-way voice and paging services.

Facility Manager (FAM). A facility manager does not directly provide communications services and does not hold an FCC license to operate communications equipment. "Facility Managers" are lease holders that lease building, tower, and related facility space to a variety of tenants and customers as part of the holder's business enterprise, but do not own or operate communication equipment in the facility for their own uses.

Local Exchange Network (LEN) means a radio service that provides basic telephone service, primarily to rural communities.

Microwave (MIC & INT MIC) means communication uses that (1) provide long-line intrastate and interstate public telephone (including relay of cellular traffic from other cellular sites), television, and data transmissions (common carrier, code MIC), or (2) support the primary business of pipeline and power companies, railroads, and land resource management companies by providing the companies' internal communication system (internal microwave, code INT MIC), or wireless internet service provider (MIC-ISP). When a portion of the microwave bandwidth is used as a separate, commercial enterprise, a separate microwave use shall be inventoried for fee calculation purposes.

Other Communications Uses (OT) means private communications uses, such as amateur radio, personal/private receive-only antennas, natural resource and environmental monitoring equipment, and other small, low-power devices used to monitor or control remote activities. These facilities are personally owned and not operated for profit.

Passive Reflector (PR) includes various types of non-powered reflector devices used to bend or ricochet electronic signals between active relay stations or between an active relay station and a terminal. A passive reflector commonly serves a microwave communications system. The reflector requires point-to-point line-of-sight with the connecting relay stations, but does not require electric power.

Private Mobile Radio Service (PMRS) means uses supporting private mobile radio systems primarily for a single entity for mobile internal communications. PMRS service is not sold and is exclusively limited to the user in support of business, community activities, or other organizational communication needs. Examples of PMRS include: Private local radio dispatch, private paging services, and ancillary microwave communications equipment for controlling mobile facilities.

Wireless Internet Service Provider (MIC-ISP) utilizes wireless technology to connect subscription users to the internet. The ISP, as a facility owner or as a tenant, is a microwave use for rent determination purposes. A customer of an ISP who has a communications facility on public lands to receive and transmit an ISP signal would be considered a PMRS use for rental determination purposes. This category includes WiFi and WiMax uses (see also Microwave use) and Cellular provided internet services accessed directly by a PC and/or laptop computer card independent of a cellular telephone.

Wi-Fi is used for mobile devices and LANs, and often used for Internet. It enables a person with a wireless-enabled computer or personal digital assistant (PDA) to connect to the Internet when in

proximity of an access point. The geographical region covered by one or several access points is called a hotspot. Wi-Fi range is very limited, normally measured in feet.

WiMAX is an acronym that stands for **Worldwide Interoperability for Microwave Access**, a certification mark for products that pass conformity and interoperability tests for the IEEE 802.16 standards. WiMAX is a standards-based wireless technology that provides high-throughput broadband connections over long distances. WiMAX can be used for a number of applications, including "last mile" broadband connections, hotspots and cellular backhaul, and high-speed enterprise connectivity for business. WiMAX range is normally limited to less than five miles.