



ATIS-0700051.v002

ATIS Standard on -

**North American Microwave Spectrum Bands
(United States, Canada, Mexico)**



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North American Microwave Spectrum Bands (United States, Canada, and Mexico)

Alliance for Telecommunications Industry Solutions

Approved October 12, 2023

Abstract

This document is a consolidation/tabulation of the various microwave spectrum bands for the United States and Canada (both licensed and unlicensed). It is intended to be a single point of reference for microwave radio engineers involved in the planning and operation/modification of current and future communications links. The current plans include regularly updating this document with the eventual inclusion of the microwave spectrum band plans for Mexico.

Foreword

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Wireless Technologies and Systems Committee (WTSC) develops and recommends standards and technical reports related to wireless and/or mobile services and systems, including service descriptions and wireless technologies. WTSC develops and recommends positions on related subjects under consideration in other North American, regional, and international standards bodies.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, WTSC, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, WTSC, which was responsible for its development, had the following leadership:

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ATIS Standard on –

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1 Scope, Purpose, & Application

1.1 Microwave Spectrum (900 MHz – 300 GHz)

This document investigates the microwave spectrum (900 MHz to 300 GHz) which is used for Fixed, point-to-point operation. Fixed, point-to-point operation as referred to systems employing a fixed transmitter transmitting to a fixed remote location.

1.2 Fixed Service

1.2.1 Backhaul

Backhaul refers to a point-to-point link to carry communications traffic from an access node.

1.2.2 Fixed Wireless Access

Fixed wireless refers to using a point-to-point link used to serve broadband access (i.e., Internet).

2 Definitions, Acronyms, & Abbreviations

For a list of common communications terms and definitions, please visit the *ATIS Telecom Glossary*, which is located at < <http://www.atis.org/glossary> >.

2.1 Definitions

Broadcast Auxiliary Service: Broadcast Auxiliary stations are used for relaying broadcast aural and television signals. They can be used to relay signals from the studio to the transmitter, or between two points, such as a main studio and an auxiliary studio. The Broadcast Auxiliary services also include mobile TV pickups and remote pickup stations which relay signals from a remote location, back to the studio.

Cable Television Relay Service (CARS): CARS stations are point-to-point or point-to-multipoint microwave systems used by cable and other MVPD operators. CARS stations cannot be used to distribute programming directly to subscribers.

Common carrier fixed point-to-point microwave service: A common carrier public radio service rendered on microwave frequencies by fixed and temporary fixed stations between points that lie within the United States or between points to its possessions or to points in Canada or Mexico.

Digital Electronic Message Service: A two-way end-to-end fixed radio service utilizing digital termination systems for the exchange of digital information in the frequency bands 10,550-10,680 MHz, 18,820-18,920 MHz, and 19,160-19,260 MHz. This service may also make use of point-to-point microwave facilities, satellite facilities or other communications media to interconnect digital termination systems to comprise a network.

Direct Broadcast Satellite (DBS) Service: A radiocommunication service in which signals transmitted or retransmitted by Broadcasting-Satellite Service space stations in the 12.2-12.7 GHz band are intended for direct reception by subscribers or the general public. For the purposes of this definition, the term direct reception includes individual reception and community reception.

Emerging Technologies (ET): In 1993, the Commission reallocated portions of the 2 GHz band from fixed microwave service (FMS) to emerging technology (ET) services, including the personal communications services (PCS).