# IEEE 802.11
# Wireless Access Method and Physical Specification

Title: **Text for Channelization**

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The proposed revised text for 17.3.8.2 and 17.3.8.3 is provided below.

**17.3.8.2 Regulatory Requirements**

Wireless LANs implemented in accordance with this standard are subject to equipment certification and operating requirements established by regional and national regulatory administrations. The PMD specification establishes minimum technical requirements for interoperability, based upon established regulations at the time this standard was issued. These regulations are subject to revision, or may be superseded. Requirements that are subject to local geographic regulations are annotated within the PMD specification. Regulatory requirements that do not affect interoperability are not addressed within this standard. Implementors are referred to the following regulatory sources for further information. Operation in countries within defined regulatory domains may be subject to additional or alternative national regulations.

The documents listed below specify the current regulatory requirements for various geographic areas at the time the standard was developed. They are provided for information only, and are subject to change or revision at any time.

| Geographic Area | Approval Standards | Documents | Approval Authority |
|---|---|---|---|
| **USA** | **Federal Communications Commision (FCC)** | **?** | **FCC** |

**17.3.8.3 Operating Channel Frequencies**

**17.3.8.3.1 Operating Frequency Range**

The OFDM PHY shall operate in the 5 GHz band as allocated by a regulatory body in its operational region. Spectrum allocation in the 5 GHz band is subject to authorities responsible for geographic specific regulatory domains e.g. global, regional, and national. The particular channelization to be used for this standard is dependent on such allocation as well as the associated regulations for use of the allocations. These regulations are subject to revision, or may be superseded. In the USA, the FCC is the agency responsible for the allocation of the 5 GHz U-NII bands.

#### 17.3.8.3.2 Channel Numbering

Channel center frequencies are defined at every integral multiple of 5 MHz above 5 GHz. The relationship between center frequency and channel number is given by the following equation:

$$\text{Channel center frequency} = 5000 + 5 * n_{ch} \quad \text{(MHz)}$$

where $n_{ch} = 0,1,\ldots 200$. This definition provides a unique numbering system of all channels with 5 MHz spacing from 5 GHz to 6 GHz to provide flexibility to define channelization sets for all current and future regulatory domains.

#### 17.3.8.3.3 Channelization

The set of valid operating channel numbers by regulatory domain is defined in Table XXX.

| Regulatory Domain | Operating Channel Numbers |
|---|---|
| USA | U-NII lower 36, 40, 44, 48; U-NII middle 52, 56, 60, 64;<br>U-NII upper 149, 153, 157, 161 |

Table XXX. Valid operating channel numbers by regulatory domain.

Figure 125 shows the channelization scheme for this standard which shall be used with the FCC U-NII frequency allocation. The lower and middle U-NII subbands accommo-date 8 channels in a total bandwidth of 200 MHz. The upper U-NII band accommodates 4 channels in a 100 MHz bandwidth. The centers of the outermost channels shall be at a distance of 30 MHz from the band's edges for the lower and middle U-NII bands, and 20 MHz for the upper U-NII band. The outer channels may have to be amplified by an HPA (High Power Amplifier) which has more backoff than the inner channels. This issue depends on the local regulations and HPA characteristics