



WIRELESS LAN ASSOCIATION

Effective Date: March 2022 Revision No:1.4

Wireless LAN Design Framework: Define

Create a wireless network to meet customer requirements

1. Gather Business Requirements and Constraints

- 1.1. Identify key business personnel & stakeholders
- 1.2. What are the business objectives and purpose of the WLAN?
- 1.3. Service areas
- 1.4. Placement restrictions and aesthetics

2. Gather and/or Define Technical Requirements and Constraints

- 2.1. Requirements area
 - 2.1.1. Real Time Location Services (RTLS)
 - 2.1.2. Voice
 - 2.1.3. Capacity / density
 - 2.1.4. Devices: types, capabilities, and count
 - 2.1.5. Usage, applications, and bandwidth
 - 2.1.6. User behavior
- 2.2. Regulatory domain requirements
- 2.3. Vendor & AP model type
- 2.4. Attenuation Properties (measured or estimated)

3. Define an RF Specification to Meet the Technical and Business Requirements

- 3.1. Target primary, secondary, tertiary coverage
 - 3.1.1. Roaming and redundancy (secondary)
 - 3.1.2. RTLS (tertiary)
- 3.2. Target Signal-to-Noise Ratio (SNR)
- 3.3. Target co-channel contention (CCC)
- 3.4. Number of devices per radio

4. Document Requirements

- 4.1. Business
- 4.2. Technical
- 4.3. RF specification