



**Certified Wireless Network Administrator (CWNA)
PW0-106**



Chapter 15
RF Site Survey Fundamentals



Chapter 15 Overview

- WLAN Site Survey Interview
- Documentation and Reports
- Vertical Market Consideration



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WLAN Site Survey Interview

- The site survey interview is conducted to determine the needs of the target organization
 - Customer briefing
 - Business requirements
 - Capacity and coverage requirements
 - Existing wireless network
 - Infrastructure connectivity
 - Security expectations
 - Guest access



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Customer Briefing

- Provides an overview of wireless networking and how it really works from a business perspective
 - Mobility advantages discussed
 - Bandwidth and throughput limitations
 - Need for a site survey



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Business Requirements

- Applications used
 - Real time
 - High volume
 - Standard business apps
- Types of users
 - Internal
 - Guest
- Types of devices
 - Laptops/desktops
 - Tablets/mobile phones



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Capacity and Coverage Requirements

- Capacity is a reference to capabilities
- Coverage is a reference to availability
- Consider the following related to capacity:
 - Data applications
 - User density
 - Peak on/off use
 - Existing transmitters
 - Portability vs. mobility
 - Backward compatibility



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Existing Wireless Network

- Current problems
- Sources of RF interference
- Coverage dead zones
- Prior site survey data
- Currently installed equipment



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Infrastructure Connectivity

- Roaming
- Wiring closets
- Antenna structure
- Hubs/switches
- PoE
- Segmentation
- Naming convention
- User management
- Infrastructure management



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Security

- Security expectations
 - AAA requirements
 - WIDS and WIPS
 - Compliance
- Guest access
 - Captive portal
 - VLAN separation

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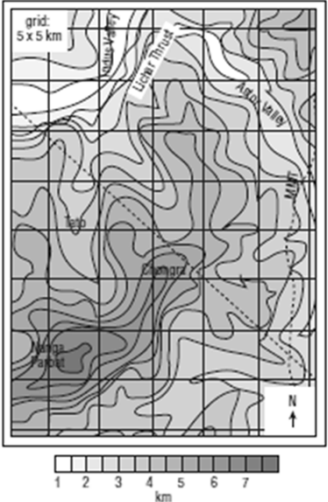
Documents and Reports

- Forms and customer documentation
 - Blueprints
 - Topographic map
 - Network topology diagram
 - Security credentials
 - Interview checklist
 - Installation checklist
 - Equipment checklist

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SYBEX **WILEY**

Topographic map



grid: 5 x 5 km

Luzon Through

Agua Mague

1 2 3 4 5 6 7 km

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Deliverables

- Purpose statement
- Spectrum analysis
- RF coverage analysis
- Hardware placement and configuration
- Performance analysis

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Additional Reports

- Vendor recommendations
- Implementation Diagrams
- Bill of Materials
- Project Schedule and Costs
- Security Solution Recommendations
- Wireless Policy Recommendations
- Training Recommendations

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Vertical Market Considerations

- Outdoor surveys



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Vertical Market Considerations

- Aesthetics



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Other Vertical Market Considerations

- Government
- Education
- Healthcare
- Hotspots
- Retail
- Warehouses
- Manufacturing
- Multitenant buildings

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