



**Division of State Patrol  
Policy and Procedure**

Number  
**5-1**

Subject <b>DSP COMMUNICATIONS TOWER SITE USE</b>	
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**I. POLICY**

It is the policy of the Division of State Patrol (DSP) to consider all reasonable requests for occupancy of State Patrol towers by government agencies, public service organizations (Amateur Radio Services, RACES/ARES-affiliated) and public utility companies, but does not have an obligation to provide space based on factors mentioned in Section II below.

The State Patrol has the right of refusal of private requests for tower space for any reason it deems appropriate.

**II. BACKGROUND**

WisDOT communication towers are used for mission critical public safety radio communication. These tower sites, comprised of an equipment building and a tower, are generally located on leased property. These towers support microwave dishes for the DSP's Statewide Microwave system and antennas for both the DSP and the Department of Natural Resources (DNR) communication systems. The DSP employs antennas for internal voice and data systems, and for one or more mutual aid channels, including the Mutual Aid Radio Channel (MARC) repeaters system, VLAW-31 (formerly WISPERN) and Point-to-Point (POINT) on these towers. The DNR locates their antennas on these towers for their radio systems. A majority of these towers also directly support the Wisconsin Interoperable System for Communications (WISCOM) network. WISCOM is a shared trunked radio system that first responders in communities across the state can use to communicate during a major disaster, large-scale incidents or incidents/events requiring interoperable voice radio communications. WISCOM can support multiple simultaneous conversation paths during an incident, dramatically increasing the capacity available with statewide mutual aid talk groups and allowing responders from any area of the state to assist another community without losing voice radio communications capabilities.

The DSP must consider several factors in tower occupancy:

- A. The majority of tower sites occupy leased property. Many of these leases are 20 or more years old. Many leases contain various covenant clauses limiting co-location; for example, only agencies involved in law enforcement or other public safety entities.
- B. Tower capacity is an issue. Towers are designed to support a specific load. Design standards have become more demanding with every revision of the Electronic Industries Alliance/Telecommunications Industry Association (EIA/TIA) code. When these standards change, an existing tower may be deemed at maximum load and no new attachments will be allowed.
- C. Building capacity, including air conditioning and emergency generator capacity, is a consideration.
- D. Technical issues, such as communication interference from other tower users, must be evaluated.
- E. Security issues in DSP buildings where there is access to public safety radio systems, typically prohibit private sector tenants, including quasi-governmental entities.

### III. GENERAL PROVISIONS

- A. Space shall be reserved on towers for the State's future expansion of communications systems.
- B. Lease rates for private sector tenants, including quasi-governmental entities, will normally be negotiated using current market rates.
- C. The rates for governmental entities will be based on site-specific costs.
- D. The revenues from tower site leases shall be applied to offset the operational costs of tower sites.
- E. The applicant will be billed at the prevailing DSP Bureau of Network Engineering and Data Infrastructure (BNEDI) charge-back rate for all time spent by the BNEDI Tower Site Specialist for research and coordination beyond eight applied hours per applicant, per site. Payment shall be placed in account 0106-04-02.
- F. Equipment for private sector tenants, including quasi-governmental entities, will generally not be allowed in State Patrol buildings.
- G. Only tower contractors approved by the State Patrol BNEDI will be allowed to work on the tower or appurtenances mounted thereon. Contractor insurance paperwork must be submitted prior to starting any work on towers.

- H. All installations shall conform to the guidelines and the direction of the BNEDI field supervisor for the site.
- I. Access to tower sites may be limited or denied during increased levels of security.

**IV. PROCEDURE**

- A. Potential tenants will make contact with the BNEDI Section Chief to request use of tower space. The Section Chief will then consult with the Bureau Director, the Electrical Engineer, and the Frequency Specialist.
- B. An initial feasibility check will be completed and the applicant will be provided with the proper procedures either by U.S. mail or by e-mail.
- C. Applicant (the end user; not a third party) will provide a letter or e-mail to include:
  - 1. The specifics of the appurtenances to be placed on the tower.
  - 2. Desired location(s) on the tower.
  - 3. Specifics of the equipment and/or building to be placed at the site.
  - 4. Name, title, and telephone number of employee or local company who will be responsible for initial installation and ongoing maintenance of the equipment. If different individuals or contractors will be involved, all related information must be supplied.
  - 5. Acceptance of financial responsibility for the cost of engineering analyses, including, but not limited to structural, geotechnical, foundation, and/or intermodulation analyses as deemed necessary by BNEDI. BNEDI will make arrangements for needed analyses to be completed by an engineering firm selected by the BNEDI.
- D. Information will be routed through appropriate and necessary channels for approval by the Section Chief who will notify the applicant of the approval or disapproval.