



Public Safety Grade Report for FirstNet with emphasis on Site Hardening

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APCO Broadband Committee



NPSTC Member Organizations

Member Organizations:

- American Association of State Highway and Transportation Officials
- American Radio Relay League
- Association of Fish and Wildlife Agencies
- Association of Public-Safety Communications Officials – International
- Forestry Conservation Communications Association
- International Association of Chiefs of Police
- International Association of Emergency Managers
- International Association of Fire Chiefs
- International Municipal Signal Association
- National Association of State Chief Information Officers
- National Association of State Emergency Medical Services Officials
- National Association of State Foresters
- National Association of State Telecommunications Directors
- National Emergency Number Association
- National Sheriffs' Association

Associate Member Organizations:

- Canadian Interoperability Technology Interest Group
- National Council of Statewide Interoperability Coordinators
- Telecommunications Industry Association
- Utilities Telecom Council

Liaison Organizations:

- Federal Communications Commission
- Federal Emergency Management Agency
- Federal Partnership for Interoperable Communications
- National Telecommunications and Information Administration
- Office of Emergency Communications
- Office of Interoperability & Compatibility
- SAFECOM
- U.S. Department of Interior
- Department of Justice
 - NIJ COMMTECH



Public Safety Grade

Public Safety Grade

- ❑ NPSTC develops NPSBN Launch Statement of Requirements
 - First use of the term Public Safety Grade (PSG)
 - PSG is not defined in the Report
- ❑ FirstNet through PSCR requests the term Public Safety Grade to be defined by NPSTC
- ❑ APCO BB Committee started organizing to define Site Hardening for PS sites.
- ❑ APCO and NPSTC agreed to a joint effort to include using APCO Site Hardening work in the PSG document



Public Safety Grade

Public Safety Grade



“The National Public Safety Broadband Network (NPSBN) must be built to Public Safety Grade (PSG) standards. It is generally recognized commercial broadband networks are designed as “best effort” networks and are more prone to outages during both natural and human caused disasters, power outages, and other events. The NPSBN, as well as existing LMR systems, must be able to withstand more severe natural and manmade disasters and must also be capable of being quickly repaired and/or quickly place into service temporary network components after one of these events.”



Public Safety Grade

Public Safety Grade



“The public safety community understands that the entire FirstNet system may not, economically, be built to meet all of the best practices contained in this document.”



“FirstNet, in consultation with local jurisdictions, should assess the importance or criticality of each site and determine how to balance cost and risk.”



Public Safety Grade

PSG Sections

- Introduction
- Purpose
- Background
- ★ Environmental
- ★ Service Level Agreements
- Reliability and Redundancy
- Coverage
- Push to Talk
- Applications
- Sites
- Installations
- Operations and Maintenance



Public Safety Grade

PSG Site Hardening

- General Requirements
- Physical Security
- Antenna Support Structure
- Equipment Enclosures
- Environmental and Climate Control
- Power



Public Safety Grade

Site Hardening for Public Safety



“This chapter represents site requirements with the specific future intention to establish “hardening” standards which create public safety grade sites.”



Public Safety Grade

Site Hardening for Public Safety - Physical Security



The overall intent of this section is to provide requirements for public safety communications site physical security. The physical security of the public safety sites is critical to protecting emergency responders and our communities to insure that this vital resource is operational and functioning at the highest level in the greatest time of need.



Public Safety Grade

Site Hardening for Public Safety - Antenna Support Structures



These antenna support structure requirements address the necessary steps to provide reliable and robust structures to support communications site apparatus above ground level.



Public Safety Grade

Site Hardening for Public Safety - Equipment Enclosures



“This section will provide requirements for the use and potential upgrades of communications equipment shelters and cabinets which, when implemented, will be considered PSG for this category.”



Public Safety Grade

Site Hardening for Public Safety - Environmental and Climate Control



This section will provide minimum design requirements for the use and potential upgrades of environmental control systems to include heating and cooling of any structure or enclosure which, when implemented, will be considered PSG for this category.



Public Safety Grade

Site Hardening for Public Safety - Power



Clean, reliable electrical power is paramount to highly available wireless communications sites. Availability of power to communications equipment is the fundamental limiting factor regarding the in-service state of the equipment.



Questions?



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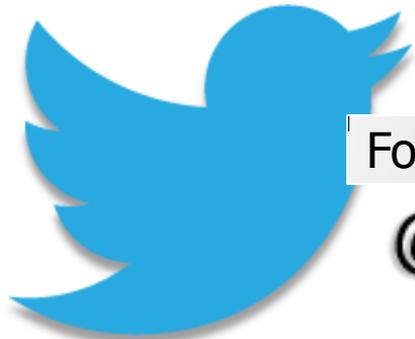
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