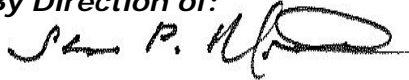


# MANAGEMENT DIRECTIVE

## Commonwealth of Pennsylvania Governor's Office

<b>Subject:</b> Pennsylvania Statewide Radio Network	<b>Number:</b> 245.15 Amended
<b>Date:</b>  December 5, 2016	<b>By Direction of:</b>  Sharon P. Minnich, Secretary of Administration
<b>Contact Agency:</b> Pennsylvania State Police, Bureau of Communications and Information Services, Statewide Radio Network Division, Telephone 717.772.8005	

**This directive establishes policy, responsibilities, and procedures for the Pennsylvania State Police (PSP), Bureau of Communications and Information Services (BCIS), Statewide Radio Network Division ("STARNet Division") to develop, operate, regulate, manage, maintain, and monitor the Pennsylvania Statewide Radio Network (PA-STARNet), and to support its application to public safety and emergency communications. Its provisions ensure responsible stewardship of commonwealth funds, equipment, communication and information infrastructure, related land use, and services. Marginal dots are excluded due to major changes.**

- 1. PURPOSE.** To establish policy, responsibilities, and procedures for the Pennsylvania State Police (PSP), Bureau of Communications and Information Services (BCIS), Statewide Radio Network Division ("STARNet Division") to develop, operate, regulate, manage, maintain, and monitor the Pennsylvania Statewide Radio Network (PA-STARNet), and to support its application to public safety and emergency communications. Its provisions ensure responsible stewardship of commonwealth funds, equipment, communication and information infrastructure, related land use, and services.
- 2. SCOPE.** This directive applies to:
  - a. Departments, boards, commissions, and councils of commonwealth government.
  - b. County and local public safety and emergency response organizations, including first responders.
  - c. Organizations using PA-STARNet, including the following categories:

- (1) Commonwealth agencies and public safety and emergency response organizations using PA-STARNet as their primary two-way radio system.
  - (2) Organizations using PA-STARNet under the sponsorship of state agencies, including Regional Task Forces (RTFs), county 911 centers, county or municipal agencies, and related organizations.
  - (3) PA-STARNet business partners.
- d. Organizations using PA-STARNet for interoperable communications in support of emergency response, but not using PA-STARNet as their primary two-way radio system.

### 3. OBJECTIVES.

- a. Statewide policy, responsibilities, and procedures for the management, protection, and effective application of PA-STARNet assets and for the conduct of public safety and emergency communications using PA-STARNet.
- b. Implementation and deployment of the "communication and information infrastructure" originally funded by [\*the Act of December 2, 1996, \(P.L. 921, No. 148\)\*](#), a supplement to the *Capital Budget Project Itemization Act for 1996-1997*.
- c. Coordination of statewide strategic direction across all levels of government in planning for emergency communications and interoperability in support of emergency response.
- d. Coordination of emergency communications support among commonwealth agencies, between the commonwealth and counties, and between the commonwealth and first responders to discharge the commonwealth's responsibilities under [\*Homeland Security Presidential Directive 5 \(HSPD-5\), February 28, 2003, "Management of Domestic Incidents,"\*](#) in preventing, preparing for, responding to, and recovering from terrorist attacks, major disasters, and other emergencies.
- e. Support for the discharge of the duties of the PSP and the STARNet Division under the September 2012, [\*Pennsylvania Statewide Emergency Operations Plan, Emergency Support Functions \(ESF\) #2 – Communications.\*](#)
- f. Development and expansion of wireless broadband services using PA-STARNet infrastructure to provide "middle mile" network transport for commercial providers, high-speed point-to-point services for government and nonprofit organizations, and improved public safety and emergency communications.
- g. Improvement and expansion of cellular service delivery using PA-STARNet infrastructure, in accordance with recommendations in the Pennsylvania House of Representative's Legislative Budget and Finance Committee report of November 2008, Cell Phone Service in Pennsylvania.
- h. Coordination of STARNet assets and users for implementation and adoption of FirstNet's Nationwide Public Safety Broadband Network (NPSBN), established at Section 6202 of the [\*Middle Class Tax Relief and Job Creation Act of 2012\*](#), 47 U.S.C.A. § 1422.

#### 4. DEFINITIONS.

- a. **Business Partner.** An organization that has entered into an agreement with the commonwealth under which it offers some form of nonmonetary consideration, such as frequency licenses or sites for system infrastructure, in return for permission to use PA-STARNet for radio communications.
- b. **Disaster.** An event that has a large-scale adverse effect on individuals, the environment, the economy, or property.
- c. **Eligible Agency.** Any organization eligible to become a participating agency and engaged in adoption of PA-STARNet for radio services, but not yet using PA-STARNet.
- d. **Emergency.** Any incident that requires responsive action to protect individuals, the environment, the economy, or property.
- e. **Emergency Communications.** The means and methods for exchanging communications and information necessary for successful incident management. See, U.S. Department of Homeland Security, [National Emergency Communications Plan](#), 2014, Appendix 9, "Glossary of Terms," p. A-37.
- f. **First Responder Network Authority (FirstNet).** Established by Section 6204 of the [Middle Class Tax Relief and Job Creation Act of 2012](#), 47 U.S.C.A. § 1424, an independent authority within the National Institute of Standards and Technology, tasked to establish a nationwide interoperable public safety broadband network, the Nationwide Public Safety Broadband Network, and to provide wireless services to public safety agencies across the country, based on 700 Mhz spectrum and open Long Term Evolution (LTE) standards.
- g. **First Responders.** Those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as that term is defined at Section 2 of the [Homeland Security Act of 2002](#), 6 U.S.C.A. § 101.
- h. **Fleet Configuration.** Specification for a participating agency, within each network region of operation, of authorized subscriber devices, voice users, voice groups, voice group profiles, user personalities, consoles, and interoperability gateways, defining the basic parameters for voice and data communications.
- i. **Frequency Administration.** Coordination of Radio Frequency (RF) spectrum planning, acquisition, licensing, and application to the commonwealth's wireless communications requirements, especially those of PA-STARNet, according to federal regulations, processes, and requirements, including representation of commonwealth interests in the regional planning and frequency coordination processes.
- j. **Incident Command System (ICS).** A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. The incident command system is the combination of facilities, equipment, personnel, procedures, and communications operating within a common

organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small and large, complex incidents. The incident command system is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations. See, U.S. Department of Homeland Security, [National Emergency Communications Plan, 2014](#), Appendix 9, "Glossary," p. A-38.

- k. Interoperability.** Ability of emergency responders to communicate among jurisdictions, disciplines, frequency bands, and levels of government as needed and as authorized. System operability is required for system interoperability. See, U.S. Department of Homeland Security, [National Emergency Communications Plan](#), 2014, Appendix 9, "Glossary," p. A-39.
- l. Interoperating Agency.** Any government agency, public safety organization, first responder organization, or cooperating or related organization using PA-STARNet for interoperable communications that is not a PA-STARNet participating agency.
- m. National Incident Management System (NIMS).** A system that provides a consistent nationwide approach for federal, state, local, and tribal governments, the private sector, and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. The term includes any successor system established by the federal government. See also, U.S. Department of Homeland Security, [National Incident Management System, December 2008](#), "Glossary of Key Terms," p. 143.
- n. National Institute of Standards and Technology (NIST).** A non-regulatory federal agency of the United States Department of Commerce responsible for measurement science, rigorous traceability and development and use standards.
- o. National Telecommunications & Information Administration (NTIA).** A non-regulatory federal agency of the United States Department of Commerce responsible for telecommunications and information policy.
- p. Nationwide Public Safety Broadband Network (NPSBN).** The nationwide, interoperable public safety broadband network established by FirstNet pursuant to Section 6202 of the [Middle Class Tax Relief and Job Creation Act of 2012](#), 47 U.S.C.A. § 1422.
- q. Participating Agency.** Any government agency, public safety organization, first responder organization, business partner, or other organization authorized by the STARNet Division to use PA-STARNet and enrolled as a PA-STARNet subscriber with a fleet configuration defined in the network's administrative system.
- r. Pennsylvania Statewide Radio Network (PA-STARNet).** Statewide radio network comprising a communication and information infrastructure connected by a digital microwave system for transmission of voice and data, referred to in [the Act of December 2, 1996, \(P.L. 921, No. 148\)](#), a supplement to the *Capital Budget Project Itemization Act for 1996-1997*, as "Statewide Mobile Radio and Microwave System," including all frequency bands and other system extensions

owned and operated by the commonwealth and connected to the core digital trunked radio network operating in the 800 megahertz (MHz) public safety frequency band and in other public safety frequency bands licensed by the Federal Communications Commission (FCC), or to the microwave backbone network.

- s. **Public Safety Communications.** Means and methods for transmitting and receiving information necessary for the conduct of services rendered by or through federal, state, or local government entities in support of the protection and preservation of life, property, and natural resources, as prescribed by law.
- t. **Response.** Activities that address the short-term, direct effects of an incident. The term includes the execution of emergency operations plans and incident mitigation activities designed to limit the loss of life, personal injury, property damage and other unfavorable outcomes.
- u. **Sponsorship.** Classification of participating agency under which an organization outside commonwealth government uses PA-STARNet to satisfy public safety and emergency communications requirements within a community of practice by being incorporated administratively under the fleet of a state agency that is also a member of that community: for example, a Regional Task Force sponsored by the Pennsylvania Emergency Management Agency (PEMA).
- v. **Statewide Communications Interoperability Plan (SCIP).** Comprehensive plan for public safety and emergency communications interoperability in Pennsylvania required of all states by the U.S. Department of Homeland Security (DHS) as part of the Public Safety Interoperable Communications (PSIC) grant program and as originally submitted in November 2007 and amended in September 2016.
- w. **Statewide Interoperability Coordinator (SWIC).** The central coordinator for the commonwealth, who maintains the SCIP and specifies, promotes, and implements a statewide strategic vision for interoperability. The SWIC works with emergency response leaders across all levels of government, including SWICs from other states and the DHS. See, U.S. Department of Homeland Security, Statewide Interoperability Coordinators [webpage](#).

## 5. POLICY.

### a. Public Safety Role.

- (1) PSP, through the STARNet Division, is the single agency responsible for the development, operation, regulation, management, maintenance, and monitoring of PA-STARNet, including all infrastructure, equipment, software, services, and licenses supporting its application to public safety and emergency communications.
- (2) PSP manages and administers PA-STARNet for the benefit of all Participating Agencies, for the support of effective communications at critical public events, and for the interoperable communication needs of local, state, and federal first responders during emergencies.

- (3) The STARNet Division establishes policies, standards, and procedures for the specification, procurement, development, testing, configuration, operations, use, replacement, and maintenance of all PA-STARNet resources.

**b. Wireless Antenna Tower Management.**

- (1) Any tower installed on state property must meet the technical and operational requirements of PA-STARNet as determined by the STARNet Division.
- (2) All requests for use of state property for new towers or renewals of leases or licenses for existing towers are subject to review and approval for compliance with this directive and subsequent policy.

**c. PA-STARNet Committee.**

- (1) Committee is established in order to provide a standing forum for participating agencies to ensure coordination and cooperation among participating state agencies and county and local agencies in the development and use of PA-STARNet and its application to public safety and emergency communications.
- (2) The committee will consist of two workgroups including the PA-STARNet Strategic Workgroup and the PA-STARNet Communications Operations Workgroup. The workgroups will meet quarterly.

**(3) PA-STARNet Strategic Workgroup Membership and Organization.**

**(a) Purpose.** Senior managers in selected commonwealth agencies are responsible for providing guidance, planning, and strategic implementation recommendations and as it relates to PA-STARNet to mitigate the challenges of interoperable communications for public safety and emergency communications.

**(b) Membership.** Office of Administration and PA-STARNet Division shall co-chair, coordinate, designate representatives and administer meetings of the PA-STARNet Strategic Workgroup. The workgroup includes one member from each of the following:

- 1 Office of Administration
- 2 Pennsylvania State Police
- 3 Pennsylvania Emergency Management Agency
- 4 Department of Transportation
- 5 Department of Conservation and Natural Resources
- 6 Department of Military and Veterans Affairs

7 Other agencies as determined by the co-chairs based on needs of the workgroup.

(c) **Consultations.** In support of PA-STARNet Strategic Workgroup's goals for operability, interoperability, and continuity of communications, the SWIC will provide briefings, when necessary, to the workgroup, ensuring coordination with county and local agencies in the development and use of STARNet as it applies to public safety and emergency communications.

(d) **Responsibilities.** The PA-STARNet Strategic Workgroup will provide a summary of strategic recommendations for PA-STARNet annually to the Commissioner of the Pennsylvania State Police.

**(4) STARNet Communications Operations Workgroup Membership and Organization.**

(a) **Purpose.** Provide a consistent forum for the exchange of information and discussion concerning PA-STARNet development status, operation, policy and procedures, projects and initiatives, agency transition status, and other topics related to PA-STARNet, its application to public safety and emergency communications, and statewide communications interoperability.

(b) **Membership.** The STARNet Division shall chair, coordinate, designate county representative and administer meetings for the PA-STARNet Communications Operations Workgroup. Agency heads from each of the following agencies will appoint a member of the PA-STARNet Communications Operations Workgroup:

1 Area Transportation Authority of North Central Pennsylvania

2 Board of Probation and Parole

3 Civil Air Patrol

4 Cumberland County

5 Department of Agriculture

6 Department of Conservation and Natural Resources

7 Department of Corrections

8 Department of Environmental Protection

9 Department of General Services

10 Department of General Services, Capitol Police

11 Department of Health

12 Department of Military and Veterans Affairs

- 13 Department of Transportation
- 14 Pennsylvania Emergency Management Agency
- 15 Exelon Nuclear
- 16 FirstEnergy Corporation
- 17 Pennsylvania Fish and Boat Commission
- 18 Pennsylvania Game Commission
- 19 House of Representatives Security
- 20 Huntingdon County Sheriff's Office
- 21 Office of Administration, Office for Information Technology
- 22 Office of Attorney General
- 23 Office of Inspector General
- 24 Pennsylvania State Police
- 25 Public Utility Commission
- 26 Senate Security
- 27 State System of Higher Education
- 28 Treasury Department
- 29 Turnpike Commission

(c) **Responsibilities.** The PA-STARNet Communications Operations Workgroup will provide a summary of quarterly updates and lists of issues to the PA-STARNet Strategic Workgroup on a quarterly basis.

**e. Agency Adoption.**

- (1) All commonwealth agencies with requirements for two-way mobile radio communications for which proposed use meets the criteria set forth by the FCC for eligibility under the applicable frequency spectrum licenses must use or plan to use PA-STARNet to satisfy those requirements, unless the STARNet Division issues a waiver.
- (2) All eligible commonwealth agencies with existing two-way mobile radio systems, as defined above in 5.e.(1), must transfer all radio use to PA-STARNet under the support and direction of the STARNet Division.

**f. Data Network.** The STARNet Division establishes standards, policies, and procedures for the transmission of voice and data communication on all PA-STARNet connections, including microwave and fiber optic, for managing all PA-



STARNet backbone network resources, and for directing all PA-STARNet procurement, configuration, operations, use, and maintenance. The STARNet Division, in concert with the SWIC, advises FirstNet about existing and necessary infrastructure for the NPSBN.

**g. Communications Priorities.** Users of PA-STARNet must observe the following communication priorities, in descending order, yielding in case of conflict with a higher priority use:

- (1) Voice communications for emergency response.
- (2) Video or other data communications in support of emergency response.
- (3) Public safety voice communications by commonwealth agencies.
- (4) Interoperable voice communications.
- (5) All other voice communications.
- (6) Data communications.

**h. Data Applications and Software.** Participating agencies and other organizations desiring to deploy data applications, custom software, or vendor-provided software for use on or interaction with PA-STARNet must obtain review and approval by the STARNet Division prior to deployment, providing information according to the STARNet Division standards and requirements for evaluation of operability and resource impact.

**i. Frequency Administration.** Participating agencies must submit all matters concerning public safety and emergency communications frequency administration, including licenses for RF spectrum, to the STARNet Division for evaluation and resolution. Upon completing migration of radio services to PA-STARNet, transitioning agencies must transfer all licenses for RF spectrum to the STARNet Division for administration.

**j. Interoperability.** All public safety and emergency response organizations, including first responders, must use PA-STARNet as the statewide backbone for regional and state interoperable emergency communications according to the SCIP and the policies, standards, and procedures for communications interoperability established by the STARNet Division. The point of connection to state, county and local agencies for interoperable communications using PA-STARNet is the county's Public Safety Answering Point (PSAP). The Director of the STARNet Division appoints the SWIC.

**k. Infrastructure Management.** The STARNet Division manages use of PA-STARNet infrastructure and state property for tower sites, including design, construction, configuration, maintenance, and modification, and extending to negotiation of all leases, licenses, and agreements for use by commercial or other third parties in conjunction with the Office of General Counsel and the Office of the Budget.

- I. **Representation.** The STARNet Division represents the commonwealth in all matters concerning federal planning for interoperability, administration of federal grant for interoperable communications according to the SCIP, frequency administration, and compliance with federal regulations of the FCC, the Federal Aviation Administration, and any other federal regulatory agency with jurisdiction over PA-STARNet infrastructure or operations.

## 6. RESPONSIBILITIES.

### a. The STARNet Division shall:

- (1) Develop, operate, regulate, manage, maintain, and monitor PA-STARNet, including tower sites, for reliable delivery of network services to users and effective application to public safety and emergency communications.
  - (a) **Develop.** Oversee the design, deployment, configuration, and testing of PA-STARNet infrastructure and software for a statewide radio system that complies with all applicable standards and criteria.
  - (b) **Operate.** Configure, monitor, integrate, troubleshoot, and repair PA-STARNet to ensure that it remains effective, reliable, and available to support participating agency operations, and to serve public safety and emergency communications.
  - (c) **Regulate.** Publish policies, standards, and procedures for the reliable and effective operation of PA-STARNet, and its application to public safety and emergency communications and effectively addresses needs and concerns identified by the PA-STARNet Committee.
  - (d) **Manage.** Manage PA-STARNet infrastructure and assets to ensure reliable and effective network operation, to coordinate and manage commercial and other use of infrastructure, and to support delivery of broadband and cellular services.
  - (e) **Maintain.** Establish and oversee programs and contracts to ensure the continued reliable and effective operation of PA-STARNet infrastructure, equipment, and software.
  - (f) **Monitor.** Monitor participating agency and interoperable use of PA-STARNet to oversee conformance with applicable policies, standards, and procedures and to ensure the reliability and effectiveness of network operations.
- (2) Direct the consolidation and transition of radio services within the scope of this directive from use of legacy systems to use of PA-STARNet.
- (3) Advise agencies in interoperable communications investments and initiatives, and approve any proposed connection to PA-STARNet or use of equipment with it.
- (4) Advise the Governor of the Commonwealth of Pennsylvania through the Commissioner, PSP, concerning the development, operation, and

management of commonwealth emergency communications infrastructure and decisions regarding FirstNet and the NPSBN.

- (5) Offer guidance to participating agencies concerning staffing, operational, and technical issues related to use of PA-STARNet.
- (6) Establish standards, policies, and procedures for resource management, configuration, use, and maintenance of equipment and systems, and applications software.
- (7) Establish standards, policies, and procedures for data applications, custom software, and vendor-provided software intended for operation on or interaction with PA-STARNet, and review all such applications and software for conformance prior to deployment.
- (8) Monitor participating agency use of PA-STARNet to oversee conformance with applicable policies, standards, and procedures and to ensure the reliability and effectiveness of the network through maintenance and tuning.
- (9) Provide support for emergency communications using PA-STARNet during an emergency.
- (10) Ensure compliance with federal regulations and requirements for licensing and notifications for frequency use and communications towers, and carry out frequency administration duties and functions for all RF spectrum required for commonwealth agency public safety and emergency communications using PA-STARNet.
- (11) Review all requests for use of state property for new towers or renewals of leases or licenses for existing towers to ensure compliance with the requirements of PA-STARNet and with any other technical or operational requirements established by the STARNet Division.
- (12) Negotiate terms and conditions, prices, and other provisions of leases, licenses, cooperative agreements, and contracts for the use of PA-STARNet infrastructure or other use of towers on state property, including price levels and administration of payments for reimbursement of operating and maintenance costs and for use of PA-STARNet infrastructure and state property for tower sites by commercial or other third-party users.
- (13) Oversee and manage the use of PA-STARNet infrastructure for sale of wireless broadband services to providers of Internet and point-to-point services, and to local governments and nonprofit organizations for improvement of public safety and emergency communications.
- (14) Oversee and manage the use of PA-STARNet infrastructure for the improvement and expansion of cellular service.
- (15) Manage and administer federal and state grants for public safety communications, interoperable emergency communications, and broadband and cellular communications within the commonwealth as

appropriate in conjunction with PEMA for federal grants and with other administrative authorities at the federal and state levels.

- (16) Ensure the creation and management of governance structures for public safety and emergency communications within the commonwealth to meet requirements of state and federal policies, including those of the FCC, DHS, and the NTIA.

**c. Participating Agencies shall:**

- (1) Cooperate with and provide assistance to the STARNet Division in discharging the objectives and responsibilities set forth herein.
- (2) Effect transition of legacy two-way radio systems to PA-STARNet according to negotiated transition schedules, committing necessary agency resources and management oversight.
- (3) Lend support as appropriate for the deployment of radio infrastructure both on commonwealth-owned structures and on commonwealth-owned land.
- (4) As appropriate, assist when requested in the acquisition of new rights of way and land as required to extend or improve PA-STARNet radio frequency coverage.
- (5) Designate an agency coordinator to serve as the agency's point of contact for use of PA-STARNet including development and tuning of the fleet configuration, and as the agency's representative at meetings of the PA-STARNet Communications Operations Workgroup.
- (6) Provide support and cooperation for communications during emergency response by making available all applicable equipment, personnel, and other resources not otherwise committed for vital agency operations.

**d. Interoperating Agencies shall:**

- (1) Participate in statewide planning for interoperable public safety and emergency communications under the direction of the STARNet Division.
- (2) Conform to statewide standards, policies, and procedures for interoperable public safety and emergency communications established by the STARNet Division.

**7. PROCEDURES.**

- a. Radio Communication Bulletins.** Policies and practices governing participating agency use of PA-STARNet are published as Radio Communication Bulletins (RCBs). Agencies are advised to consult the PA-STARNet website for the current set of documents.
- b. Manuals.** Procedures for the use of PA-STARNet are published as Manuals through the Office of Continuity and Records Information Management in accordance with *Management Directive 210.1, Directives Management System*.

**c. Agency Use.**

- (1) Agency Requirements.** The STARNet Division conducts a thorough review of radio communications requirements for all agencies using or planning to use PA-STARNet and works cooperatively with them to ensure that all capabilities vital to agency operations are addressed adequately.
- (2) Critical Use.** The STARNet Division approves exemptions from use of PA-STARNet for agencies with specialized communications requirements that cannot be met with existing PA-STARNet capabilities or with planned extensions to those capabilities.

**d. Emergency and Interagency Communications.**

- (1) NIMS and ICS.** As required by the Governor's [\*Proclamation Implementing the National Incident Management System\*](#), December 20, 2004, all emergency communications using PA-STARNet are conducted in accordance with NIMS and ICS.
- (2) Plain Language.** As required by NIMS, all emergency communications using PA-STARNet are in plain language and common terminology, free of codes, acronyms, abbreviations, and unnecessary technical terms. See, Federal Emergency Management Agency, [\*NIMS Alert\*](#), December 19, 2006.
- (3) Call Protocol.** During emergency and other interagency communications, all callers using PA-STARNet identify themselves clearly, using jurisdiction, agency, public safety discipline, unit, and role as applicable.

**This directive replaces, in its entirety *Management Directive 245.15*, dated August 14, 2015.**