

Public Safety Data Network (PSDN)

Part of the Nutmeg Network



The Next Generation of
Public Safety Communications

Improving Public Safety at Light Speed
March 2014



Improving Public Safety at Light Speed

CONNECTING FIRST RESPONDERS TODAY AND PREPARING FOR THE FUTURE

The Connecticut Public Safety Data Network (PSDN) is here! The initial set of services for the network has been completed and core applications are being enabled over the PSDN. We encourage members of the public safety community to start considering whether you have a need for PSDN services and what those services might be.

The PSDN is an ultra-high-speed fiber optic data network that serves as a transport infrastructure and interconnectivity pathway for public safety and government applications and services throughout the state. Connecticut successfully leveraged the state's commitment to the original PSDN into an award of \$94 Million through the [National Telecommunications and Information Administration \(NTIA\) Broadband Technologies Opportunities Program \(BTOP\)](#), which extended the PSDN to a total of 510 public safety locations. The network was constructed in phases, with Phase I connecting the Department of Emergency Services and Public Protection (DESPP), the Department of Administrative Services (DAS) and our 106 9-1-1 Public Safety Answering Points (PSAPs). Phase II connected the additional 404 locations.

The Phase II locations are public safety locations such as Fire Departments and Police Departments not already connected by the initial rollout (pre-BTOP). This extension of the PSDN provides a single connectivity source to allow for the integration of systems, applications and currently disparate networks so that vital information and resources can easily be shared amongst the various public safety entities throughout the state. The PSDN sites will serve as the "points of presence" for connection of additional users to the system, allowing the new users to take advantage of the security and redundancy of the core network.

PROJECT DETAILS

GRANT CONDITIONS

The federal BTOP grant to build out this infrastructure contained strict timing requirements for completion of the work and unlike many other grants programs, these timelines could not be modified. We are pleased to report that the network fully met the federal grant requirements including the completion deadline of September, 2013.

ADDITIONAL EFFORTS

The grant established a solid base for layer 2 (L2) network services. The DAS/BEST Network Services team continues to work to bring new service capabilities to the network with the addition of layer 3 virtual private circuits (L3VPN). As technology evolves, we expect that more service offerings will be available to the public safety community.

THE NUTMEG NETWORK – IS A NEWLY FORMED ENTITY THAT IS DEFINED AS A COMBINATION OF:

- **PUBLIC SAFETY DATA NETWORK (PSDN)** - A closed, secure network that serves first responder and public safety community.
- **CONNECTICUT EDUCATION NETWORK (CEN)** - The research, education and open access network that serves the education, library, municipal and general use community.
- These networks are managed together as the staff, equipment and fiber that support these networks have multiple overlap points.

PSDN BENEFITS AND FEATURES

- HIGH SPEED DATA CONNECTION
- ENHANCED RELIABILITY
- FAULT-TOLERANT DESIGN
- HIGHLY SECURE
- COST REDUCTION FROM OLDER NETWORK
- FUTURE UPGRADES AT LOWER COSTS
- CORE SERVICES SPECIFIC TO PUBLIC SAFETY

CURRENT STATUS

- Construction completed
- L2 services available
- L3VPN services under implementation

PSDN IS:

A secure, reliable network providing interoperable communications for the public safety community.

PSDN IS NOT:

Open Internet access for participants. The use of the network is strictly controlled; traffic is protected to keep critical applications safe.

PSDN CORE SERVICES

The PSDN initial core services are planned to be:

- Next Generation 911
- Criminal Justice Systems (Collect, CISS, OBTS)
- Interoperable communications for DESPP P25 switch
- Communication among Computer Aided Dispatch (CAD) systems including Access to mutual aid pre-plan information used in emergency response
- Access to state emergency systems (i.e. WEBOEC)



ADDITIONAL USAGE

This network provides greater opportunity to the public safety community. It is capable of additional applications and data for public safety agencies. Uses could include CAD-to-CAD connectivity, radio interoperability, among many others. Where these expanded capabilities bring additional costs, these costs will need to be covered by the requesters and users of the newly approved services.

GOVERNANCE

This network ties together many groups that have traditionally maintained standalone networks. A governance model that enables the PSDN to remain robust and secure is critical to the long term viability of the network. Governance will deal with the rules surrounding the PSDN and must be addressed before there can be additional uses.

Governance answers questions such as:

- Who is allowed to use the network?
- Which applications will be considered for "additional use"?
- What are the criteria for that determination?
- How are the applications for use prioritized?

The PSDN Governance Board has been established to review Public Safety applications use of the network. This board meets bi-monthly and has already reviewed/approved several applications for use.



WHAT HAPPENS NEXT

Potential users of the PSDN should evaluate their data connectivity needs now and may wish to start the process of determining whether the PSDN could provide connectivity that would be useful for their agency.

Applying for use of the network is easy. We have developed a form which you can use to submit your application for assessment through this link:

<http://nutmegnetwork.uconn.edu/request/>

Once we receive your submission, a PSDN technical specialist is assigned to you to explain the network, answer questions you may have and assist you in filling out the PSDN Technical Specification Form. This form articulates more detailed design and capacity requirements of your request.

Some more complex applications will result in technical design meetings with other state engineering resources. The final output will be a Technical Design Document describing your application and its technical parameters.

Finally, we have developed a link which will allow you to view status of your application and others that have requested service on the network, as it progresses from submission to installation:

<http://nutmenetwork.uconn.edu/>



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<http://www.ct.gov/best/cwp/view.asp?a=3790&Q=446266>