System Name: Bureau County ETSB
Case # 20-M-271
Date Filed: 5/14/20

Department Review of Plan Modification

Requirement	Information Included	Staff Comment
Contact and 9-1-1 System information	Yes ☒ No ☐	Diana Stiles 615 Elm Place Princeton, IL 61356 the.director@buecomm.com 815-879-3803 (Office) 815-303-8091 (Cell)
Verification	Yes ☒ No ☐	
Letter of Intent	Yes ☒ No ☐	
Plan Narrative (if incorporating an NG9-1-1 solution, narrative must include the following:)	Yes ☒ No ☐	Bureau County ETSB's filing is a modification plan to implement a Next Generation 9-1-1 (NG9-1-1) System and to change its 9-1-1 System Provider from Frontier to Comtech-NG9-1-1, Inc. DBA NG9-1-1, Inc. The Bureau County 9-1-1 system has one PSAP called Bureau County Emergency Communications (BuECom). BuECom has three answering positions is backed up by the LaSalle County 9-1-1 system. In addition, Bureau County has purchased the capability to activate remote 9-1-1 workstations in the event of area wide or localized situations causing greater than normal demand for 9-1-1 service.
Name of certified 9-1-1 system provider	Yes ☒ No ☐ N/A ☐	The ICC has advised that because Comtech Telecommunications Corp. has acquired NG9-1-1, Inc., they do not need to do anything further to qualify as a certified system provider. They need only to be DBA NG9-1-1, Inc. (per Matt Harvey email, 4/15/20)
Explanation of the national standards, protocols and/or operating measures that will be followed	Yes ☒ No ☐ N/A ☐	The Bureau County 9-1-1 design is IP-based and is fully compliant with current NENA i3 standards. It is geographically diverse and has redundant configuration and design to avoid any single points of failure.

Explanation of measures taken to create a robust, reliable and diverse/redundant network and whether other 9-1-1 Authorities will be sharing the equipment	Yes ☒ No ☐ N/A ☐	Bureau County's new 9-1-1 service provider, NG-911, Inc., has contracted with Syndeo in order to provide the ESInet in the NINGA project. There are two geographically diverse, fully redundant, NG-911, Inc. operated data centers which house the NG9-1-1 core services. One data center is located at the DeKalb County Sheriff's Department Jail Annex, 180 E. Exchange Street, Sycamore, IL, and the second data center is located at the Belvidere Fire Department, 353 East 6th Street, Belvidere, IL. The NG9-1-1 system design not only serves the Bureau County ETSB but will host multiple remote PSAPs in multiple 9-1-1 jurisdictions. The other 9-1-1 authorities involved are Boone, DeKalb, Carroll, Jo Daviess, Ogle, Stephenson, Whiteside and Winnebago Counties who have joined in a collaborative effort to migrate to NG9-1-1 service and share resources to reduce cost. This group is called 9-1-1 Northern Illinois Next Generation Alliance (NINGA). Each 9-1-1 authority will file individual modified plans.
Explanation of how the existing 9-1-1 traditional legacy wireline, wireless and VoIP network, along with the databases, will interface and/or be transitioned into the NG9-1-1 system	Yes ☒ No ☐ N/A ☐	The NG9-1-1 system will handle calls from all carriers that are answered today. Carriers may connect to the ESInet at various points on the fiber ring. The points of interconnection (POI) have been mutually agreed upon by NG-911, Inc., Syndeo and each of the carriers. Carriers were also given the choice between legacy (SS7/ISDN) or newer protocols for trunk signaling (SIP) connectivity at the POI. The NG9-1-1 architecture is comprised of an ESInet which will connect the PSAP using IP signaling. The system will also enable users who are hearing impaired, speech impaired, non-English speaking and text to communicate with 911. Private Switch customers will also be migrated to the new network.
Explanation of how split exchanges will be handled	Yes ☒ No ☐ N/A ☐	Split exchanges will be routed the same as they are today.
Explanation of how the databases will be maintained and how address errors will be corrected and updated on a continuing basis	Yes ☒ No ☐ N/A ☐	Bureau County has designed and purchased a NENA i3 standards-based system. The system will provide ALI, ANI, and selective routing to the PSAPs using dynamic routing. In addition, the system will feature geo-spatial, policy-based functionality. All database elements comply with NENA data formats for ALI, MSAG and GIS.

		NG-911, Inc. will ensure the database records are received from each carrier and reviewed for location accuracy, accepted, validated and integrated into the active working records. Carriers will transmit the database updates to NG-911, Inc. who will work closely with each carrier directly on database updates. Database updates will be completed on a daily basis. NG-911, Inc. will utilize multiple logic checks that guard against invalid ALI updates and increase the reliability of the data. The database system supports direct service order entry, manual update as well as the import and export of NENA format. NG-911, Inc. will maintain the database in a manner that ensures that no one else can alter the data. GIS coding will be added to all service order records that update the ALI.
Explanation of who will be responsible for updating and maintaining the data, at a minimum on a daily basis Monday through Friday	Yes ☒ No ☐ N/A ☐	The software will enable NG-911, Inc. to manage the ALI database. The software fully integrates with the NG9-1-1 core services of the NG9-1-1 system and performs data validation, request/response software, data quality and provides real-time communication tools.
Explanation of security measures placed on the IP 9-1-1 network and equipment to safeguard it from malicious attacks or threats to the system operation and what level of confidentiality will be placed on the system in order to keep unauthorized individuals from accessing it.	Yes ☒ No ☐ N/A ☐	A Session Border Controller is being installed in each of the data centers and will provide access control for protection from unwarranted cyber-attacks, denial of service attacks and/or focused network overloads. The design is in accordance with the NENA i3 Standards. The PSAP will be composed of several positions plus security appliances and software necessary to prevent intrusion by unauthorized personnel. The PSAP will have a diverse IP transport network between the remote PSAPs and the system cores. The system has varying levels of security and administration privileges for managing, configuring, monitoring, maintenance and diagnostic activities. All access to the PSAP will be restricted with a code access. The computer network is password secured and all workstations are updated regularly and scanned for threats with security software.
Financial Information		

	Annual recurring 9-1-1 network costs prior to modification	Yes ☒ No ☐	$101,001.72
	Projected annual recurring 9-1-1 network costs after modification	Yes ☒ No ☐	$96,357.24
	Installation cost of the project	Yes ☒ No ☐	$116,200.00
	Anticipated annual revenues	Yes ☒ No ☐	$576,000.00
Five Year Strategic Plan		Yes ☒ No ☐	
Communities Served		Yes ☒ No ☐	
Participating Agencies		Yes ☒ No ☐	
Adjacent Agencies		Yes ☒ No ☐	
Carrier Listing		Yes ☒ No ☐	
Attachments		If changes necessitate new versions	
	Ordinances	Yes ☐ No ☒	
	Intergovernmental agreement(s)	Yes ☐ No ☒	
	Contracts	Yes ☒ No ☐	The 9-1-1 services agreement between Bureau County and NG9-1-1, Inc. was included in the plan.
	Back-up PSAP agreement	Yes ☐ No ☒	The backup arrangement with LaSalle County 9-1-1 remains the same.
	Network Diagram	Yes ☒ No ☐	

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Call-Handling and Aid outside jurisdictional boundaries agreements	Yes ☒ No ☐	
Test Plan	Yes ☒ No ☐	

Conclusions:

The Bureau County modification plan meets the requirements set forth in 83 Illinois Administrative Code Part 1325.205 for a modification plan.

Reviewed by: Stacy Ross
Date: June 3, 2020