

ILLINOIS STATE POLICE
Office of the Statewide 9-1-1 Administrator



State of Illinois

Application for
9-1-1 Modification Plan

911 GENERAL INFORMATION

DATE: 01/30/2023

Type of Change: Long Form Modification Plan Short Form Modification Plan

Current System Name:	Population Served	Land Area in Sq Miles
Bond County 911	17000	360

List PSAPs:	Primary	Secondary
Greenville PD/ Bond Co. 911	X	

911 System Contact: Alln Davis

Street Address: 200 W. College Ave

City, State and Zip Code: Greenville IL 62246

Office Telephone: (618) 664-1911

Cellular Telephone: (618) 267-9110

Email: bond911@sbcglobal.net

Wireless Coverage for Consolidated System:
100 % Phase II compliant
 _____ % Phase I compliant

Please check if applicable:
 NG9-1-1 capable
 _____ Receive 9-1-1 Text
 _____ Receive 9-1-1 Video

VERIFICATION

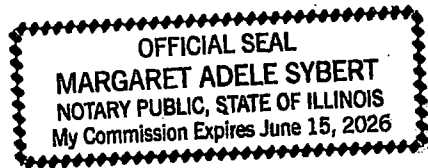
I, Allan Davis, first being duly sworn upon oath, depose and say that I am Director, of Bond County 911; that I have read the foregoing plan by me subscribed and know the contents thereof; that said contents are true in substance and in fact, except as to those matters stated upon information and belief, and as to those, I believe same to be true.

Allan Davis
Director

Subscribed and sworn to before me

this 31st day of January, 20 23.

Margaret Adele Sybert
NOTARY PUBLIC, ILLINOIS



**9-1-1 SYSTEM PROVIDER
LETTER OF INTENT**

January 30, 2023

(Date)

Lisa Wirtanan

(9-1-1 System Provider Company Representative)

AT&T

(9-1-1 System Provider Company Name)

4918 W. 95th St.

(Street Address)

Oak Lawn Il. 60453

(City, State, Zip Code)

Dear Ms. Wirtanan:

This letter is to confirm our intent to modify our 9-1-1 System. Enclosed is your copy of our modification plan to be filed with the Department of the Illinois State Police for approval. Thank you for your assistance in this matter.

Sincerely,



(Name) Allan Davis

(Title) Director
Bono Co 9-1-1

enclosure: Modification Plan

NARRATIVE STATEMENT:

(Provide a detailed summary of system operations for a modified 9-1-1 plan. Also, if incorporating an NG9-1-1 solution, please include the additional items listed below pursuant to 1325.205 b)12).

- 1) Indicate the name of the certified 9-1-1 system provider being utilized.
- 2) Explain the national standards, protocols and/or operating measures that will be followed.
- 3) Explain what measures have been taken to create a robust, reliable and diverse/redundant network and whether other 9-1-1 Authorities will be sharing the equipment.
- 4) Explain 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.
- 5) Explain how split exchanges will be handled.
- 6) Explain how the databases will be maintained and how address errors will be corrected and updated on a continuing basis.
- 7) Explain who will be responsible for updating and maintaining the data, at a minimum on a daily basis Monday through Friday.
- 8) Explain what security measures will be 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.

Plan Narrative:

Next Generation 9-1-1 Modification Plan Narrative

The Bond County 9-1-1 System is transitioning from E9-1-1 to Next Generation 9-1-1 (NG911). AT&T is the 9-1-1 System Provider ("SSP").

The Bond County 9-1-1 System will comply with all Federal and State laws and with National Emergency Number Association Standards (NENA) that pertain to NG911 including the NENA i3 Standard for Next Generation - NENA-STA-010.3a-2021.

The State of Illinois has selected AT&T to provide a statewide Next Generation 9-1-1 System. AT&T's ESInet combines AT&T's network capabilities with technology from Intrado Life & Safety, Inc. (Intrado). The AT&T ESInet solution will facilitate an efficient transition from legacy 9-1-1 networks to networks capable of supporting the growing demands of a mobile society. With AT&T ESInet, the State is taking advantage of AT&T's investment in a pre-built, cloud-based solution that delivers next-generation functionality. AT&T is also providing their industry-leading AT&T VPN MPLS network for primary access to all PSAPs.

AT&T's ESInet solution is a combination of their IP network and Next Gen Core Services (NGCS) components that includes industry leading SLAs, management services and tools to help ensure that they provide the best possible service.

The design is based on building redundant systems to avoid any single point of failure (SPOF) in the ESInet and the overall NG9-1-1 Network Architecture. The NG9-1-1 system will provide flexibility in the routing of calls. The ESInet being deployed has all PSAPs connected and can route calls based on not only location, but also by availability. In a Next Generation solution, a call will be answered through intelligent routing. Additionally, there will be more available positions to answer calls because all connected and tested PSAPs will be technically able to answer the call and will be able to dispatch or transfer the call to another PSAP.

AT&T's ESInet defense-in-depth security is built into the architecture. AT&T's Global IP network is monitored by 8 different Security Operations Center (SOC) facilities located across the world. AT&T uses its security portfolio capabilities to protect their data centers and networks.

AT&T's ESInet provides six (6) geographically diverse and fully redundant facilities to increase resiliency and survivability in natural and man-made disaster scenarios, with scalable capacity capable of supporting more than twice the 9-1-1 busy hour call for the entire United States. AT&T has documented business continuity and restoration plans, including complex disaster and evacuation contingencies. The 24x7 operations center employs an Incident Handling process modeled on FEMA's Incident Command System,

Plan Narrative:

with notifications built into the process.

The ESInet is monitored 24x7x365 from a NOC with tier 2 and tier 3 technical resources dedicated to the AT&T ESInet. AT&T's 9-1-1 Resolution Center has dedicated public safety resources.

The AT&T ESInet provides a flexible routing platform that supports both ESN (tabular) and GIS (spatial) routing on the same Emergency Call Routing Function (ECRF).

The AT&T ESInet solution will interconnect to legacy selective routers as defined per NENA standards. AT&T provides redundant, public safety grade points of presence in each LATA for OSP ingress locations for Legacy Network Gateways (LNGs).

AT&T will interconnect to Legacy Selective Routers to transfer and/or receive calls with Automatic Number Identification (ANI) and Automatic Location Identification (ALI) information to the State's NGCS via legacy means through the Legacy Selective Router Gateway (LSRG). Interconnections will also allow legacy PSAPs served by legacy selective routers to serve as the abandonment route for PSAPs served by the AT&T ESInet solution.

Connectivity extends beyond the internal ESInet transport to external network and OSP interfaces. The ESInet supports both TDM and IP OSP ingress at geographically distributed Points of Interconnection (POI's). The ESInet supports standards-based protocol interfaces to external ESNets for call hand-off and call transfers. With pre-established connectivity capabilities, PSAPs on the ESInet have the ability to transfer calls to PSAPs on other ESNets or PSAPs that have not yet transitioned off legacy selective routers.

AT&T will coordinate getting the OSPs records into the AT&T ESInet database. AT&T will also jointly plan the interconnecting network with the OSP. Circuits will be ordered and implemented between the OSP and the ESInet POI. The ESInet POI may reside in an AT&T office or hub. AT&T will cooperatively test and turn up all trunking arrangements with the OSP. Traffic migrations from the legacy to new AT&T infrastructure will follow.

Integrated Text-to-911 is supported by the ESInet.

AT&T is responsible for negotiating interconnection agreements and trunking arrangements with each service provider. Interconnection agreements will include the roles and responsibilities of the Parties related to the exchange of 9-1-1 traffic including but not limited to, split rate centers, tandem to tandem and IP connections.

GIS data is submitted to the AT&T ESInet via a web-based spatial interface (SI) portal. The portal provides secure GIS file transfer. 9-1-1 Authorities can maintain their local database schema and configure database changes using attribute field mapping tools.

The Spatial Interface (SI) validation engine logs errors and refers errors back to the originating 9-1-1 Authority in comprehensive reports that are retrieved in the 9-1-1 Enterprise Geospatial Database Management System (9-1-1EGDMS). Validation errors are corrected by the 9-1-1 Authority within their own GIS database. Updates are submitted and processed on an on-going basis.

AT&T's ESInet cyber security policies, standards, and guidelines are consistent with industry best practices as defined by International Organization for Standardization and Control Objectives for Information and related Technology. The AT&T ESInet is a highly secure, privately managed IP network providing IP based call routing services for next generation 9-1-1 call delivery. All inbound and outbound traffic interactions are with pre-authorized entities, utilize agreed upon protocols and traverse controlled access points. Call processing and real-time data delivery are protected through both physical and logical controls.

Sensitive data resides in trusted data centers that employ logical and physical access controls. All hardware and software elements deployed in a production environment go through stringent release management processes that incorporate thorough penetration scan testing. Corporate and development environments are separate from production and are not used in development or system test environments. Inter-zone traffic is restricted to only that of authorized personnel and the necessary protocols destinations used to support the management and applications of the ESInet with all other traffic implicitly denied by way of redundant and diverse Session Border Controllers (SBC) and stateful firewalls. A Network Operations Center (NOC) staffed 24 hours a day, seven days a week, 365 days a year to actively monitor and manage the AT&T ESInet end-to-end service is provided. When a potential or actual Customer-affecting issue is detected, the Incident Administration team is engaged by the NOC. The team uses established processes that are ISO 9001:2008-compliant for immediate escalation, notification, resolution, and reporting. All buildings, NOC and Data Center access are monitored by 24x7 security and access control systems.

We are currently not taking Text to 911 calls. We will be able to take text to 911 calls when the EsiNet is in place and connected to the new Solocom equipment.

Our backup/overflow call center is Clinton County 911 in Carlyle Il.
We are also the backup center for Fayette County 911 in Carlyle Il.

FINANCIAL INFORMATION

Annual recurring 9-1-1 network costs
prior to modification

\$ N/A

Projected annual
recurring 9-1-1 network costs after
modification

\$ N/A

Installation cost of the project

\$ N/A

Anticipated annual revenues

\$ N/A

FIVE YEAR STRATEGIC PLAN FOR MODIFIED PLAN

(Provide a detailed summary of the proposed system's operation, including but not limited to, a five-year strategic plan for implementation of the modified 9-1-1 plan with financial projections)

Narrative:

N/A

COMMUNITIES SERVED

Provide a list of all communities to be served by the proposed 9-1-1 System. Please include the name of the community and the official mailing address including street address, city and zip code.

USE ADDITIONAL SHEETS AS NECESSARY

City, Town or Village	Street Address, City, Zip Code
Bond County	403 S. Second St Greenville Il. 62246
Greenville	404 S. Third St. Greenville Il. 62246
Pocahontas	101 W Kavanaugh St Pocahontas IL 62275
Smithboro	202 South Main St. Smithboro Il. 62284
Keyesport	701 Main St. Keyesport Il. 62253
Mulberry Grove	205 N Wood St, Mulberry Grove, IL 62262
Pierron	203 IL-143, Pierron, IL 62273
Donnellson	P.O. Box 73 Donnellson Il. 62019
Panama	237 Cleveland Ave, Panama, IL 62077
Sorento	P.O. Box 298 Sorento Il 62086

COMMUNITIES SERVED

Provide a list of all communities to be served by the proposed 9-1-1 System. Please include the name of the community and the official mailing address including street address, city and zip code.

USE ADDITIONAL SHEETS AS NECESSARY

City, Town or Village	Street Address, City, Zip Code

PARTICIPATING AGENCIES

Provide a list of public safety agencies (Police, Fire, EMS etc.) that are to be dispatched by the 9-1-1 System. Each Agencies land area(s) in square miles and estimated population which will have access to the proposed 9-1-1 System. Do not forget to include County Sheriff's jurisdiction and Illinois State Police Districts. Each agency that appears on this list should also have signed a call handling agreement.

9-1-1 Participant Agencies	Street Address, City, Zip Code	Administrative Telephone No.	Direct Dispatch	Transfer	Call Relay
Alhambra Fire	514 E Main St. Alhambra Il	(618) 488-3865		X	
Rural Med EMS	817 E. Harris Av Greenville Il. 62246	(618) 245-9111	X		
Bond County Sheriff	403 S. Third St. Greenville IL 62246	(618) 664-2151	X		
Coffeen Fire	P.O. Box 367 Coffeen Il. 62017	(217) 534-2410		X	
Grandfork Fire	210 N. Locust St. Highland Il. 62246	(618) 275-6555		X	
Greenville Fire	P. O. Box 402 Greenville Il. 62246	(618) 664-4265	X		
Greenville Police	404 S. Third St. Greenville Il 62246	(618) 664-2131	X		
Highland-Pierron-Fire	187 Woodcrest Place Highland Il. 62249	(618) 654-1161		X	
ISP Troop 8	801 S. 7th St. 300A Springfield il 62703	(618) 346-3990		X	
Keyesport Fire	P.O. Box 251 Keyesport il. 62253	(618) 749-5591	X		
MedStar Ambulance	P.O. Box 296 Sparta Il. 62286	(618) 233-2383		X	
Mulberry Grove Fire	P.O. Box 117 Mulberry Grove Il. 62262	(618) 326-9025	X		
New Douglas Fire	105 E. Allen St. New Douglas Il. 62074	(217) 456-6221		X	
Pocahontas-Old Ripley Fire	4 State St. Pocahontas Il. 62275	(618) 669-2349	X		
Shoal Creek Fire	101 N. Main St. Sorento Il. 62284	(217) 272-4441		X	
Smithboro Fire	305 E. Third St. Smithboro Il. 62284	(618) 664-2697	X		
Vandalia Fire	219 S Fifth St. Vandalia Il. 62471	(618) 283-0556		X	

PARTICIPATING AGENCIES

Provide a list of public safety agencies (Police, Fire, EMS etc.) that are to be dispatched by the 9-1-1 System. Each Agencies land area(s) in square miles and estimated population which will have access to the proposed 9-1-1 System. Do not forget to include County Sheriff's jurisdiction and Illinois State Police Districts. Each agency that appears on this list should also have signed a call handling agreement.

9-1-1 Participant Agencies	Street Address, City, Zip Code	Administrative Telephone No.	Direct Dispatch	Transfer	Call Relay

ADJACENT AGENCIES LIST

Provide a list of public safety agencies and existing 9-1-1 Systems that are adjacent to the proposed system's boundaries. Each agency that appears on this list should also have signed a call handling agreement and/or aid outside jurisdictional boundaries.

AGENCY	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER
Clinton County ETSB	P.O. Box 119 Germantown Il. 62245	(618) 594-4555
Clinton County Sheriff	810 Franklin St. Carlyle Il. 62231	(618) 594-4555
Fayette County ETSB	219 S. Fifth St. Vandalia Il. 62471	(618) 268-7241
Fayette County Sheriff	221 S. Seventh St. Vandalia Il. 62471	(618) 283-2141
Madison County ETSB	101 E. Edwardsville Rd Wood River Il. 62095	(618) 296-5913
Madison County Sheriff	405 Randall St. Edwardsville Il. 62025	(618) 692-6087
Montgomery County ETSB	104 N Main St. Hillsboro Il. 62049	(217) 532-9511
Montgomery County 911	104 N Main St. Hillsboro Il. 62049	(217) 532-9514

ADJACENT AGENCIES LIST

Provide a list of public safety agencies and existing 9-1-1 Systems that are adjacent to the proposed system's boundaries. Each agency that appears on this list should also have signed a call handling agreement and/or aid outside jurisdictional boundaries.

AGENCY	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER

CARRIER LISTING

(Wireline, Wireless, VoIP)

Provide a list of each carrier that will be involved in the proposed system.

(USE ADDITIONAL SHEETS AS NECESSARY)

CARRIERS	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER
AT&T		
AT&T Wireless		
Frontier		
Verizon		
T-mobile		

CARRIER LISTING

(Wireline, Wireless, VoIP)

Provide a list of each carrier that will be involved in the proposed system.

(USE ADDITIONAL SHEETS AS NECESSARY)

CARRIERS	STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER

ATTACHMENTS

Ordinance - The local ordinance which created an ETSB prior to January 1, 2016.

Contracts - The contract for a new 9-1-1 system provider or for NG 9-1-1 service.

Intergovernmental Agreement

Back-up PSAP Agreement - The agreement that establishes back-up service due to interruptions or overflow services between PSAPs.

Network Diagram - Diagram provided by the 9-1-1 System Provider. Re-evaluate P.01 grade of Service for cost savings and network efficiency.

CALL HANDLING AND AID OUTSIDE JURISDICTIONAL BOUNDARIES AGREEMENT

For 9-1-1 Emergency Communications

This agreement is made between the 9-1-1 Authority, and the (Public Safety Agency) _____, for the purpose of effective handling and routing of 9-1-1 Emergency calls.

CALL HANDLING

(9-1-1 System Name) _____ receiving a call for emergency services in your jurisdiction shall dispatch the call in the following manner:

Primary: _____ (State Specific Procedures if radio frequency-identity number, if talk group-identity name, if telephone-identity telephone number)

Secondary: _____ (State Specific Procedures if radio frequency-identity frequency number, if talk group-identity name, if telephone-identity number)

AID OUTSIDE JURISDICTION BOUNDARIES

Once an emergency unit is dispatched in response to a request through the system, such unit shall render its service to the requesting party without regard to whether the unit is operating outside its normal jurisdictional boundaries.

The legislative intent is that 9-1-1 be used for emergency calls only. Therefore, all calls of an administrative or non-emergency nature shall be referred to your agency's published telephone number.

The PSAP Center agrees to keep all records, times, and places of all calls. All records will be available to all participants of the 9-1-1 System.

It shall be the responsibility of your agency to maintain the report of the call and the disposition of each call received.

All agreements, management, records, and service will be the responsibility of the 9-1-1 authority.

9-1-1 Authority	Public Safety Agency
By _____	By _____
Title _____	Title _____

TEST PLAN DESCRIPTION

1) Description of test plan (back-up, overflow, failure, database).

See Attached

2) List wireline exchanges to be tested.

(217) 272, 456, 534, 537

(618) 326, 425, 488, 654, 664, 669, 675, 749

3) List of wireless and VoIP Carriers to be tested.

AT&T, Verizon, T-Mobile

Test Plan Description i3

TEST #	TEST CASE	TYPE
1	Trunk Verification (SIP)	Call Routing
2	Trunk Verification (SS7 Ingress from LSR)	Call Routing
3	Trunk Verification (SS7 Egress from AGC to LSR)	Call Routing
4	Perform reboot and validation on each AT&T network edge router at PSAP	Failover test
5	Perform WAN interface shutdown and validation on each AT&T network edge router at PSAP	Failover
6	Perform reboot and validation on each ATT Interface Router (between CPE and AT&T router)	
7	Wireline Call Routed to PSAP through AT&T ESInet	Equipment
8	Wireless Call Routed to PSAP through AT&T ESInet	Equipment
9	VOIP Call Routed to PSAP through AT&T ESInet	Equipment
10	CPE bids i3 Components	Call Handling
11	i3 Routing Fails, Routing via SRDB for Wireline call	Call Routing
12	i3 Routing via ECRF for Wireline call	Call Routing
13	i3 Transfer: Fixed Bridge Conferencing Confirmation (Call to IP PSAP then bridge to i3 PSAP if available – willing PSAP)	Call Handling
14	S/R Transfer: Selective Bridge Conferencing Confirmation, if used by the PSAP	Call Handling
15	S/R Transfer: Fixed Bridge Conferencing Confirmation	Call Handling
16	S/R Transfer: Fixed Bridge Conferencing Confirmation	Call Handling
17	PSTN Transfer: Fixed Bridge Conferencing Confirmation	Call Handling
18	Manual Transfer to valid local TN	Call Handling
19	Manual conference bridging to invalid unassigned number	Call Handling
20	Manual conference bridging to a valid 8YY number	Call Handling
21	Manual conference bridging to a valid Busy number	Call Handling
22	Manual conference bridging to a Multi-Party Conference	Call Handling
23	Manual conference bridging to a valid long-distance cell	Call Handling
24	Alternate Routing	Call Routing
25	Ring no Answer Timer	Call Routing
26	No position Logged In	Call Routing
27	Abandonment Routing	Call Routing
28	Un-Abandonment Routing	Call Routing
29	Abandonment Routing – PAD Testing (if PAD available)	Call Routing
30	Un-Abandonment Routing – PAD Testing (if PAD available)	Call Routing
31	Test line appearances that appear on each CPE	Call Processing
32	TTY call	Call Handling
33	TTY conference call	Call Handling

**Call Handling Agreement 2022
For 9-1-1 Emergency Communications**

This agreement is made between the Bond County Public Safety Answering Point, hereafter referred to as "PSAP" and Bond County Sheriff Department, for the purpose of effective handling and routing of 9-1-1 emergency calls.

CALL HANDLING

Bond County PSAP receiving a call for emergency services response shall dispatch in the following manner:

*Primary: Starcom

*Non-emergency Phone: 618-664-2151

*Secondary: 618-664-2152

*Contact Person: Sheriff James Leitschuh

*Mailing address: 403 S. Second St. Greenville, IL 62246

AID OUTSIDE JURISDICTION BOUNDARY

Once an emergency unit is dispatched in response to a request through the system, such unit shall render its service to the requesting party without regard to whether the unit is operating outside its normal jurisdictional boundaries.

The legislative intent is that 9-1-1 be used for emergency calls only. Therefore, all calls of an administrative or non-emergency nature shall be referred to your agency's published telephone number.

The PSAP center agrees to keep all records of times and places off all calls dispatched by 9-1-1. All records will be available to all participants of the 9-1-1 system.

It shall be the responsibility of your agency to maintain the report of call and the disposition of each call received.

All agreements, management, records, and services will be the responsibility of the Emergency Telephone System Board.

Any agreements or changes in agreements and operating policies must be approved by the Emergency Telephone Systems Board.

Bond County ETSB, PSAP

By Allan Davis / All

Allan Davis, 9-1-1 Coordinator

Date 12-15-21

By 

Title Sheriff

Date 12-20-21