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

State of Illinois

Application for 9-1-1 Modification Plan

ISP 7-310 (4/22)

911 GENERAL INFORMATION

DATE:

Type of Change: ☒ Long Form Modification Plan ☐ Short Form Modification Plan		
Current System Name:	Population Served	Land Area in Sq Miles
Scott County E-911	4,710	250.8

List PSAPs:	Primary	Secondary
Scott County Sheriff's Dept.	X	

911 System Contact: Brady Milnes

Street Address: 35 E Market St

City, State and Zip Code: Winchester, IL 62694

Office Telephone: (217) 742-8018

Cellular Telephone: (217) 371-4912

Email: 911@scottcoil.gov

Wireless Coverage for Consolidated System:

100 % Phase II compliant

100 % Phase I compliant

Please check if applicable:

X NG9-1-1 capable

_____ Receive 9-1-1 Text

_____ Receive 9-1-1 Video

VERIFICATION

I, Brady Milnes, first being duly sworn upon oath, depose and say that I am Director, of Scott County E-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.

Brady S
Scott County 911 Director

Subscribed and sworn to before me

this 5th day of April, 2024.

Carrie M Burk
NOTARY PUBLIC, ILLINOIS

CARRIE M BURK
OFFICIAL SEAL
Notary Public - State of Illinois
My Commission Expires
August 30, 2025

Scott County
E-911

April 11, 2024

Michelle Sampson
AT&T Senior Client Services Project Manager
405 N Broadway, 8th Floor
Oklahoma City, OK 73102

Dear Ms. Sampson,

This letter is to confirm our intent to transition from a Legacy 9-1-1 System to Next Generation 9-1-1. Scott County 911 Operational Readiness Testing is scheduled for the Week of April 29, 2024 with a go-live date scheduled for May 14, 2024.

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.

Brady S. Milnes
911 Director
Scott County Enhanced 911

35 E. Market St
Winchester, IL 62694
O: 217-742-8018
C: 217-371-4912
E: 911@scottcoil.gov

Enclosure: Modification Plan

Next Generation 9-1-1 Modification Plan Narrative

The Scott 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 Scott 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, 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 ESInets 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 ESInets 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.

TEXT to 911

Scott County 911 does not currently have the capability for text to 911.

Our Text Control Center will be provided by the State of Illinois. All agencies dispatched will post announcements at their public meetings and posted on their websites/social media the availability of text to 911, an explanation of the use and shortcomings of the use for the public to see. All member agencies will be provided with documentation to post in their respective building for the public to view.

BACKUP PSAP

For calls being routed through the Scott County 9-1-1 selective router, the backup answering point is Quincy-Adams County 9-1-1. Our current configuration is to automatically route calls to Quincy-Adams County 9-1-1 in the event of system failure or overflow at Scott County 9-1-1 in conjunction with our current agreement. Quincy-Adams County 9-1-1 will remain the backup answering point for processing 9-1-1 calls from our selective router in the event of the inability of Scott County 9-1-1 to answer and process 9-1-1 calls in accordance with the existing agreement.

Scott County 911 Call Handling Agreements inclusive of call transferring remain the same at this time.

Scott County 911 does not plan to list an alternate route at this time.

FINANCIAL INFORMATION

Annual recurring 9-1-1 network costs prior to modification	$ N/A
Projected annual recurring 9-1-1 network costs after modification	$ TBD
Installation cost of the project	$ TBD
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
Manchester	404 4th St, Manchester, 62663
Alsey	126 Main St, Alsey, 62610
Glasgow	110 S Exchange St, Glasgow, 62694
Winchester	1 E Market St, Winchester, 62694
Oxville - Unincorporated	Unincorporated
Exeter	19 Main St, Exeter, 62621
Merritt - Unincorporated	Unincorporated
Riggston - Unincorporated	Unincorporated
Bluffs	124 Bluffs St, Bluffs, 62621
Naples	211 Mcnair St, Naples, 62665
Smith Lake - Unincorporated	Unincorporated

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
Scott County Sheriff	32 E Market St, Winchester, 62694	(217) 742-3141	X		
Winchester Police Dept.	121 S Hill St, Winchester, 62694	(217) 742-3456	X		
Bluffs Police Dept.	124 Bluffs St, Bluffs, 62621	(217) 754-3389	X		
Illinois State Police	801 S 7th St #400, Springfield, 62703	(217) 786-6677		X	
Winchester EMS	734 IL-106 South, Winchester, 62694	(217) 742-3733	X		
Meredosia-Bluffs EMS	119 S Washington St, Meredosia, 62665	(217) 491-2112	X		
Winchester Fire	121 S Hill St, Winchester, 62694	(217) 742-3191	X		
North Scott Fire Protection Dist	205 Bluffs St, Bluffs, 62621	(217) 754-3013	X		
Chapin Fire Dept.	417 Superior St, Chapin, 62628	(217) 472-8009		X	
Lifestar Ambulance Service	524 S Main St, Jacksonville, 62650	(217) 245-7540		X	
Roodhouse Fire Dept.	1140 S State St, Roodhouse, 62082	(217) 589-5134		X	

ADJACENT AGENCIES LIST

Provide a list of public safety agencies and existing 9-1-1Systems 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
Pike County Enhanced 911	204 E Adams St, Pittsfield, 62363	(217) 285-5011
West Central Joint ETSB	200 W Douglas Ave, Jacksonville, 62650	(217) 479-4616

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 (Comtech)	2401 Elliott Ave, Seattle WA 98121	(206) 792-2000
US Cellular	8410 W Bryn Mawr Ave, Ste 700, Chicago, IL 60631	(773) 399-8900
Vonage	8675 W 96th St, Overland Park, KS	(844) 365-9460
Frontier Communications	3 High Ridge Park, Stamford, CT 06905	
Verizon (Comtech)	2401 Elliott Ave, Seattle WA 98121	(206) 792-2000
T-Mobile/Sprint	601 Pennsylvania Ave NW, Washington DC, 20004	(888) 662-4662

TEST PLAN DESCRIPTION

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

See Attached

2) List wireline exchanges to be tested.

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

9-1-1 AUTHORITIES
BACKUP AGREEMENT

For the purpose of effective handling and routing of 9 -1-1 Emergency Calls, 9-1-1 Authority Quincy/Adams County ETSB and 9-1-1 Authority Scott County ETSB have entered into this Agreement pursuant to a framework established between participants of the 9-1-1 System **(hereinafter the "Parties")**.

This Backup Agreement authorizes and directs the 911 System Manager of Quincy/Adams County 911 System and the 911 System Manager of Scott County 911 System to enter into a 9-1-1 Authorities Backup Agreement ("AGREEMENT") to establish the procedures that enable management of emergency calls during prearranged, unanticipated, and exigent circumstances.

This AGREEMENT establishes the procedures to follow during such circumstances.

The headings contained in this AGREEMENT are for convenience of reference only and shall not affect in any way the meaning or interpretation of this AGREEMENT. As the Public Safety Answering Point's (PSAPs) name will be used to describe the PSAPs that answer 9-1-1 calls.

I. DEFINITIONS

Abandoned Call - A call placed to 9-1-1 when a PSAP is in an abandonment state/offline.

Contingency diversion– The capability of routing 9-1-1calls to a designated alternate location(s) if all 9-1-1 trunks are busy or out of service due to a service interruption. May be activated upon request or automatically, if detectable, when call volume exceeds a designated threshold, 9-1-1 equipment fails, the PSAP itself is disabled, or other conditions causing the processing and answering of a 9-1-1 call to be compromised.

Exigent circumstances – Situation impacting 9-1-1 call processing in which the PSAP authority determines is sufficiently significant and pressing to divert calls from the PSAP to a predetermined alternate PSAP.

Primary [Diverting] PSAP – The PSAP which, by agreement, reroutes 9-1-1 calls to an alternate PSAP under prearranged, unanticipated, or exigent circumstances.

Prolonged event – An exigent circumstance of a lengthy duration and condition that causes the PSAP's authority to invoke contingency diversion of 9-1-1 calls from one PSAP to a predetermined receiving PSAP.

Backup [Receiving] PSAP – The PSAP which, by agreement, answers 9-1-1 calls for another PSAP under prearranged, unanticipated, or exigent circumstances.

9-1-1 AUTHORITIES
BACKUP AGREEMENT

II. 9-1-1 EMERGENCY CALL HANDLING DISPATCH PROCEDURES AND PROTOCOLS

It is agreed by Quincy/Adams County 911 System and Scott County 911 System that contingency diversion of 9-1-1 calls may not be supported if the Backup PSAP is experiencing its own emergency or has its own need for overflow call handling support.

The exigent circumstances and conditions under which a contingency diversion activation may occur shall include, but are not limited to the need for PSAP evacuation, network failure, call handling equipment failure, unavailability of numerous workstations, or other conditions causing the processing and answering of a 9-1-1 call to be compromised.

The rerouting of all 911 calls to the Backup PSAP shall be done at the 911 routing level (Selective router or NG911 Core Services [NGCS]) to maintain the same level of service and information, and not routed to ten-digit lines. If this is not capable, the substitute methods must be approved by the 911 Coordinator.

Quincy/Adams County 911 System agrees to accept the following call types from Scott County 911 System:

- [x] 911 Voice
- [x] 911 Text
- [ ] 10-digit Emergency
- [ ] CAD-to-CAD Interface
- [ ] 10-digit Non-Emergency/Administrative (admin)
- [ ] Images/Video to 911

A. Condition 1: Call overflow due to instances such as PSAP busy condition or ring, no-answer due to full call queue.

   i. The Backup PSAP will accept overflow calls from Scott County 911 System when its call queue is full, or a call goes unanswered for a period of Sixty (60) seconds. The Backup PSAP will make best efforts to deliver any answered call details under this provision back to the PSAP's jurisdiction for dispatch by the following manner and in the following priority order:

      1. 1st Priority Method: Radio transmission on 217-119-4058 (911 Line)
      2. 2nd Priority Method: 10-digit non-emergency/admin
      3. (217) 742-3141
      4. 3rd Priority Method: Talk group N/A

B. Condition 2: Call diversion due to instances such as PSAP offline or evacuated (also known as abandonment) or call handling equipment is offline due to a network outage.

   i. The Backup PSAP will accept calls from the Primary PSAP when the Primary PSAP has invoked its abandonment state in the NGCS policy routing rules and the Backup PSAP is next in the rules queue. The Primary PSAP may have multiple alternate destinations provisioned ahead of the Backup PSAP which may assist in limiting the volume of calls diverted to its call queue. The Backup PSAP will make best efforts to deliver any answered call details under this provision back to the Primary PSAP for dispatch by:

      1. 1st Priority Method: Radio transmission on 217-119-4058 (911 Line)

      2. 2nd Priority Method: 10-digit non-emergency/admin

      3. (217) 742-3141

      4. 3rd Priority Method: Talk group N/A

C. Condition 3: Call misrouted due to routing function, shared exchange, mobile caller, or other reason.

   i. The Backup PSAP will accept calls from the Primary PSAP when misrouted calls are transferred.

D. Both Quincy/Adams County 911 System and Scott County 911 System agree to place an overflow queue for each other on their call handling screens to manage inbound diverted 9-1-1 calls within thirty days (30) days of execution of this AGREEMENT. Each Party shall bear their own costs for equipment modification. Both Parties understand that diverted calls may be answered with a lower priority than the answering jurisdiction's – Check all that apply:

☑ Text to 911, ☑ 10-digit emergency, ☐ 10-digit non-emergency calls/admin, and ☐ alarm calls.

E. During a call diversion event the Backup PSAP will audio record answered calls from the Primary PSAP. Recordings will be made available to the Primary PSAP upon request.

F. During an emergency event lasting longer than Twelve (12) continuing hours, the Primary Party will in good faith, make best efforts to send staff to the Backup PSAP to provide operational support and subject matter expertise to minimize impact to the Backup PSAP staff and operations.

G. Parties will share their call handling and call documentation procedures to inform one another of the specifics of each other's operation. At a minimum, Parties will gather location information, call back number, nature of the call, and known safety information.

Parties will make a concerted effort to align with the call documentation procedures when handling calls from the other's jurisdiction.

H. If a valid callback number is available, Parties will attempt to re-establish contact with abandoned calls. At a minimum, one callback should be performed to verify if an emergency exists when there are signs of distress, inaudibility, or a clear indication that emergency service is needed.

I. When feasibly possible, Qunicy/Adams County 911 System will follow up with a radio, voice transmission, or TTY with the delivery of an email to (___) _____ of the available Computer-Aided Dispatch (CAD) record for 911@scottcoil.gov calls.

J. When feasibly possible, Quincy/Adams County 911 System will follow up with a radio or voice transmission, or email with the delivery of a fax to (___) _____ of the available CAD record for 911@scottcoil.gov calls.

K. Within thirty (30) days of the execution of this AGREEMENT, the Parties agree to conduct and document the appropriate training of their respective staff on the processes and procedures agreed to by the Parties.

L. The Parties agree to notify the other Party of a return to normal conditions (such as the re-occupation of an evacuated PSAP) at the earliest possible opportunity. The Primary PSAP will be responsible for returning services back to normal conditions.

M. If Quincy/Adams County 911 System or Scott County 911 System is compelled by Law to disclose any call information, it shall provide prompt written notice to the other Party. If the Parties cannot fail to quash the legal process requiring disclosure, both Parties understand the requested call information will be disclosed only to the extent necessary to satisfy the request.

III. UPDATES AND MODIFICATIONS TO THIS AGREEMENT

This agreement shall last for a period of one year from May 14, 2024 through November 14, 2024 and shall continue from year to year thereafter. If either party wishes to terminate this agreement, they shall provide the other party with at least 30 days written notice of such termination.

The Parties agree to review this Agreement on a bi-annual basis, at a minimum, to update any processes or understandings.

9-1-1 AUTHORITIES
BACKUP AGREEMENT

The Parties entering into this AGREEMENT acknowledge that any modifications must be by mutual consent, in writing, with as advanced notice as possible considering the circumstances, and will be treated as an amendment to this AGREEMENT.

The 911 Administrator shall be notified when there are any modifications to, or termination of, this AGREEMENT.

IV. EFFECTIVE DATES

This AGREEMENT shall take effect upon its signing by authorized representatives of each party.

Signatures:

Name: Jessica Douglas

Signature: Jessica Douglas Date: 05/14/2024

Title: 911 Director

Name: Brady S. Milnes

Signature: Brady S Milnes Date: 05/14/2024

Title: Scott County 9-1-1 Director

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