

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: 07/25/2023

Type of Change: <input checked="" type="checkbox"/> Long Form Modification Plan <input type="checkbox"/> Short Form Modification Plan		
Current System Name:	Population Served	Land Area in Sq Miles
Sangamon County ETSD	194,734	868.3

List PSAPs:	Primary	Secondary
Sangamon County Shale	x	
Sangamon County 9th St Backup -unmanned backup		

911 System Contact: Chris Mueller

Street Address: 2000 Shale

City, State and Zip Code: Springfield, IL 62712

Office Telephone: (217) 747-5145

Cellular Telephone: _____

Email: Chris.Mueller@sangamonil.gov

Wireless Coverage for Consolidated System:

100 % Phase II compliant

100 % Phase I compliant

Please check if applicable:

NG9-1-1 capable

_____ Receive 9-1-1 Text

_____ Receive 9-1-1 Video

VERIFICATION

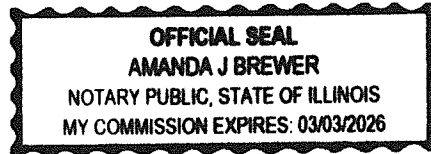
I, Chris Mueller, first being duly sworn upon oath, depose and say that I am Director, of Sangamon County; that I have read the foregoing plan by me subscribed and know the contents thereof; that said contents are true in substance and in fact, except as to those matters stated upon information and belief,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

CHRISTOPHER S. MUELLER
[Signature]

Subscribed and sworn to before me

this 25 day of July, 20 23.

Amanda J Brewer
NOTARY PUBLIC, ILLINOIS



**SANGAMON COUNTY
EMERGENCY TELEPHONE SYSTEM DEPARTMENT**

2000 Shale, Springfield, Illinois 62703 Tel (217) 753-6839 Fax (217) 753-6372

Christopher S. Mueller
Executive Director

Emergency Telephone System Board

Joe Powell, Chairman
Xavier Rice, Vice Chairman
Brian Churchill, Member
Rich Coon, Member
Dick Rentschler, Member
Ken Scarlette, Member
TJ Henson, Member

9-1-1 SYSTEM PROVIDER LETTER OF INTENT

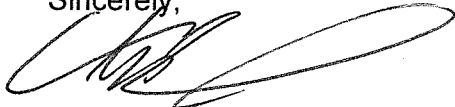
07/25/2023

Lisa Wirtanen
AT&T
4918 W. 95th St.
Oak Lawn, IL 60453

Dear Lisa,

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,



Chris Mueller
Sangamon County 9-1-1 Director

enclosure: Modification Plan

Next Generation 9-1-1 Modification Plan Narrative

The Sangamon 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 Sangamon 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.

We are currently not receiving text to 9-1-1. Our backup is not changing, we will have our back-up center at the Sangamon County building. Macon County is still going to be our back-up center in case both of our sites go down. We do have an alternate route in place with Macon County.

FINANCIAL INFORMATION

Annual recurring 9-1-1 network costs prior to modification	\$ _____	\$ 0.00
Projected annual recurring 9-1-1 network costs after modification	\$ _____	\$ 0.00
Installation cost of the project	\$ _____	\$ 0.00
Anticipated annual revenues	\$ _____	\$ 0.00

**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:

NA

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
Springfield	800 E MONROE ST Springfield, IL 62701
Southern View	3412 S 5TH ST Southern View, IL 62703
Riverton	1200 RIVERTON RD Riverton, IL 62561
Williamsville	141 W MAIN ST Williamsville, IL 62693
Sherman	401 ST JOHNS DR Sherman, IL 62684
Divernon	50 E BROWN ST Divernon, IL 62530
Pawnee	617 7TH ST Pawnee, IL 62558
Auburn	324 W JEFFERSON ST Auburn, IL 62615
Chatham	117 E MULBERRY ST Chatham, IL 62629
Grandview	2377 E RESERVOIR ST Grandview, IL 62702
Jerome	1 JEROME POLICE PLZ Jerome, IL 62704
Illioipolis	305 5th St. Illioipolis, IL 62539
Loami	602 N MAIN ST Loami, IL 62661
New Berlin	301 E ILLINOIS ST New Berlin, IL 62670
Plesant Plains	200 W 4TH ST Pleasant Plains, IL 62677
Rochester	1 COMMUNITY DR Rochester, IL 62563
Thayer	214 E MAIN ST Thayer, IL 62689
Tri-City	PO Box 20 Buffalo, IL 62515

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
American Ambulance	700 N. 2nd St. Springfield, IL 62702	(217) 523-3636	x		
Animal Control	2001 Shale St. Springfield, IL 62703	(217) 535-3065	x		
Auburn Fire Department	117 W JACKSON ST Auburn, IL 62615	(217) 483-3121	x		
Auburn Police Department	324 W JEFFERSON ST Auburn, IL 62615	(217) 438-3351	x		
Capital Airport Police	1200 CAPITOL AIRPORT DR Spfld 62707	(217) 788-1080	x		
Chatham Community Fire Prot	1 FIREMANS SQ Chatham 62629	(217) 493-2121	x		
Chatham Police Department	117 E MULBERRY ST Chatham 62629	(217) 483-2456	x		
Divernon Police Department	50 E BROWN ST Divernon 62530	(217) 628-3355	x		
Grandview Police Department	2377 E RESERVOIR ST Grandview 62702	(217) 544-7318	x		
Illinois Air National Guard	3101 J DAVID JONES PKY Spfld 62707	(217) 757-1406	x		
Illinois National Guard Camp Li	1301 N MACARTHUR BLVD Spfld 62702	(217) 761-3569	x		
Illinois Supreme Court Marshal	200 E CAPITOL AVE Spfld 62701	(217) 782-7821	x		
Jerome Police Department	1 JEROME POLICE PLZ Jerome 62704	(217) 546-5954	x		
Leland Grove Police Departme	2000 CHATHAM RD Leland Grove 62704	(217) 522-6611	x		
Lifestar Ambulance	404 N 2ND ST Spfld 62702	(217) 522-8831	x		
LLCC Police Department	2445 POORMAN DR Spfld 62712	(217) 786-2278	x		
Loami Police Department	602 N MAIN ST Loami 62661	(217) 624-6011	x		
New Berlin Police Department	301 E ILLINOIS ST New Berlin 62670	(217) 488-6102	x		
Pawnee Fire Protection District	P. O. BOX 922 Pawnee 62705	(217) 625-3131	x		
Pawnee Police Department	617 7TH ST Pawnee 62558	(217) 625-2341	x		
Pleasant Plains Police Depart	200 W 4TH ST Pleasant Plains 62677	(217) 626-1351	x		
Prairieland Ambulance	304 S SPRINGFIELD ST Virden 62690	(217) 965-5999	x		
Rescue Squad	2801 N 5TH ST Spfld 62702	(217) 527-1973	x		
Riverton Police Department	1200 RIVERTON RD Riverton 62561	(217) 629-9800	x		
Rochester Fire Protection Distr	700 E MAIN ST Rochester 62563	(217) 498-7162	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
Rochester Police Department	1 COMMUNITY DR Rochester 62563	(217) 498-8424	x		
Sangamon Co Sheriff's Office	1 SHERIFFS PLZ Spfld 62701	(217) 753-6666	x		
Sangamon County Probation	200 S 9TH ST Spfld 62701	(217) 753-6780	x		
Sangamon County Coroners O	200 S 9TH ST Spfld 62701	(217) 753-6610	x		
Sangamon County States Attor	200 S 9TH ST Spfld 62701	(217) 753-6690	x		
Sherman Fire Protection Distri	2215 E ANDREW RD Sherman 62684	(217) 496-2213	x		
Sherman Police Department	401 ST JOHNS DR Sherman 62684	(217) 496-3256	x		
Southern Illinois University Sch	801 RUTLEDGE ST Spfld 62702	(217) 545-9583	x		
Southern View Police Departm	3412 S 5TH ST Southernview 62703	(217) 529-0255	x		
Springfield Fire Department	825 E CAPITOL AVE Spfld 62701	(217) 788-8474	x		
Springfield Fire Investigation	825 E CAPITOL AVE Spfld 62701	(217) 789-2170	x		
Springfield Park District	2501 S 11TH ST Spfld 62703	(217) 544-1751	x		
Springfield Police Department	800 E MONROE ST Spfld 62701	(217) 788-8311	x		
Springfield Police Department I	510 E ALLEN ST Spfld 62703	(217) 788-8380	x		
Thayer Police Department	214 E MAIN ST Thayer 62689	(217) 965-4612	x		
Tri-City Police Department	PO BOX 20 Buffalo 62515	(217) 364-4557	x		
University of Illinois Springfield	1 UNIVERSITY PLZ Spfld 62703	(217) 206-6690	x		
Williamsville Fire Protection Di	9850 S WILLIAMSVILLE Williamsville 62693	(217) 566-3311	x		
Williamsville Police Departmen	141 W MAIN ST Williamsville 62693	(217) 566-3634	x		

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)
_____ Sangamon County _____, for the purpose of effective handling and routing of 9-1-1 Emergency
calls.

CALL HANDLING

(9-1-1 System Name) _____ Sangamon County _____ 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-identify name, if telephone-identity telephone number)

Secondary: _____ (State Specific Procedures if radio frequency-identity
frequency number, if talk group-identify 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.

Director of Sangamon County	Sangamon County
_____ 9-1-1 Authority	_____ Public Safety Agency
By _____	By _____
Title _____	Title _____

TEST PLAN DESCRIPTION

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

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 a

2) List wireline exchanges to be tested.

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
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- 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 a

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

TEST # TEST CASE TYPE

- 1 Trunk Verification (SIP) Call Routing
- 2 Trunk Verification (SS7 Ingress from LSR) Call Routing
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