

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



State of Illinois

Application for
9-1-1 Modification Plan

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

Sept. 3, 2024
(Date)

Lisa Wirtanen
(9-1-1 System Provider Company Representative)

AT&T
(9-1-1 System Provider Company Name)

4918 W. 95th Street
(Street Address)

Oak Lawn, IL 60543
(City, State, Zip Code)

Dear Ms. Wirtanen:

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.

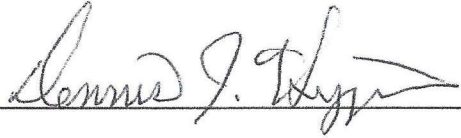
Sincerely,


Dennis Higgins
9-1-1 Coordinator

enclosure: Modification Plan

Verification

I, Dennis Higgins, first being duly sworn upon oath, depose and say that I am the 9-1-1 Coordinator, of Ford County ETSB; 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.



Dennis Higgins - 9-1-1 Coordinator

Subscribed and sworn to before me

this 29 day of August, 20 24.



NOTARY PUBLIC, ILLINOIS



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:

The Ford County ETSB 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 Ford County ETSB 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

Plan Narrative:

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.

Ford County ETSB is currently not receiving text to 9-1-1.

The backup PSAP is not changing. Piatt County Sheriff's Department will be the Ford County ETSB's backup PSAP. Ford County does not have a pre-determined alternate route in place 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

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
Cabery FPD	211 E. Main, Cabery, IL 60919	815-949-1688	X		
Cullom FPD and EMS	POB 231, 107 S. Maple St, Cullom, IL 60929	815-689-2241			X
Elliott FPD/Dix-Patton FPD	P.O. Box 61, Elliott, IL 60933	217-749-2341	X		
Gibson City FPD	P.O. Box 553, 115 S. Lawrence St. 60936	217-784-5326	X		
Iroquois-Ford FPD	109 W. Main St., Thawville, IL 60968	217-387-2341	X		
Kempton FPD	103 W. College, Kempton, IL 60946	815-253-6324	X		
Loda PFD	P.O. Box 157, Loda, IL 60948	217-386-2515			X
Ludlow PFD	202 E. Thomas St., Ludlow, IL 60949	217-396-4853			X
Melvin FPD	100 N. Center, Melvin, IL 60952	217-388-7742	X		
Paxton FPD	POB 315, 310 N. Market, Paxton, IL 60957	217-379-3331	X		
Piper City FPD	14 N. Pine St., Piper City, IL 60959	815-686-9014	X		
Illinois State Police Troop 5	800 S Old Airport Rd ,Pontiac IL 60016	815-844-1500		X	X
Roberts FPD	112 S. Main St., Roberts, IL 60962	217-395-2542	X		
Sullivant FPD	1283 IL-47, Sibley, IL 61773	217-745-2313	X		
Ford County Sheriff	239 N. American, Paxton, IL 60957	217-379-2324	X		
Gibson City PD	109 E. 8th Street, Gibson City, IL 60936	217-784-8666	X		
Paxton PD	POB 59, 755 N. Railroad Ave, Paxton 60957	217-379-4315	X		
Gibson Area Hospital Amb.	1120 N. Melvin, Gibson City, 60936	217-784-2633	X		
Buckley Ambulance	P.O. Box 104, Buckley, IL 60918	217-397-2430			X
Illinois State Police Troop 7	801 S. 7th Street, Springfield, IL 62703	815-844-1500		X	X
Rankin FPD	108 W Third Ave, Rankin IL 60960	217-397-2542	X		
Riverside Amb. ^{Gilman}	400 Kennedy Dr. Bradley IL 60915	815-935-4359			X
Riverside Amb. - Ashkum	"	"			X
Riverside Amb. - Hersher	"	"			X

A list of each public safety agency and existing 9-1-1 System adjacent to the Ford County 9-1-1 System's boundaries, their address(es) and telephone numbers.

AGENCY	ADDRESS	TELEPHONE #
Anchor FPD	235 Second St. Anchor	309-723-3391
Ashkum FPD	105 E. Lake St. Ashkum	815-698-2536
Buckley FPD	104 E. Lincoln St.	217-394-2032
Chatsworth FPD	32654 E 830 N Rd., P.O. Box 87, Chatsworth	217-635-3636
Cropsey FPD	Belle Prairie St. Cropsey	309-377-2028
Danforth FPD	507 North St. Danforth	815-269-2977
Forrest-Strawn-Wing FPD	706 N. Center Forrest	815-657-8221
Gifford FPD	404 N Main St.	217-568-7887
Gilman FPD	107 S. Main Gilman	815-265-4213
Onarga FPD	E. Lincoln Ave., Onarga	815-268-4564
Pilot Twp. FPD	371 E. Myrtle Ave., Herscher	217-426-2143, 815-426-2121
Sangamon Valley FPD	P.O. Box 714, 104 E. Sangamon St. Fisher	217-897-6250
Hersher EMS	P.O. Box 671, Hersher	815-426-2143, 217-426-2121
Rantoul Ambulance/PRO		217-892-2103
Champaign Co. Sheriff	204 E. Main St. Urbana	217-384-1204
Iroquois County Sheriff	550 S. 10 th St. Watseka	815-432-4918
Kankakee County Sheriff	3000 S. Justice Way, Kankakee	815-802-7100
Livingston County Sheriff	844 W. Lincoln St., Pontiac	815-844-2774
McLean County Sheriff	104 W. Front St. Bloomington	309-888-5030
Vermilion County Sheriff	2 South St. Danville	217-442-0153
ISP Troop 5		815-844-3131 (DeWitt, Livingston, McLean) 815-698-2315 (Ford, Iroquois, Kankakee)
ISP Troop 7		217-867-2211
Champaign Co. 9-1-1	1905 W. Main, Urbana	217-333-4348
Iroquois Co. 9-1-1	1001 East Grant St., Watseka	815-432-6956
Kankakee Co. 9-1-1	2380 W. Station St., Kankakee	815-937-3911

Vermilion Co. 9-1-1	2 E. South, Danville	217-444-0165
McLean Co. 9-1-1	2411 E. Empire St. Bloomington	309-663-9911

Updated 2024 (page 2)

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
Cabery	
Cullom	
Elliott	
Gibson City	
Iroquois	
Kempton	
Loda	
Ludlow	
Melvin	
Paxton	
Piper City	
Rankin	
Roberts	
Sibley	
Sullivant	
Thawville	

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	Sent to ATT P.O. Box 5080 Carol Stream, IL	60197-5080
Frontier	Frontier Payment sent to P.O. Box 740407, Cincinnati, OH	45274-0407
T-Mobile		
US Cellular		
Verizon		

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.

TEST PLAN DESCRIPTION

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

See attachment

2) List wireline exchanges to be tested.

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

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