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: 09/07/2022

Type of Change: ☒ Long Form Modification Plan ☐ Short Form Modification Plan		
Current System Name:	Population Served	Land Area in Sq Miles
Orland Joint Emergency Telephone System	75,000	25

List PSAPs:	Primary	Secondary
Orland Public Safety Dispatch	X	

911 System Contact: Richard Dalzell

Street Address: 15100 S. Ravinia Avenue

City, State and Zip Code: Orland Park, Illinois 60462

Office Telephone: (708) 364-4999

Cellular Telephone: (708) 935-8407

Email: RDalzell@OrlandPark.Org

Wireless Coverage for Consolidated System:

100 % Phase II compliant

100 % Phase I compliant

Please check if applicable:

X NG9-1-1 capable

X Receive 9-1-1 Text

_____ Receive 9-1-1 Video

VERIFICATION

I, Richard Dalzell, first being duly sworn upon oath, depose and say that I am 911 System Administrator, of Orland Public Safety Dispatch; 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.

Subscribed and sworn to before me

this 8 day of September, 20 22.

NOTARY PUBLIC, ILLINOIS / Cook County

NORA T BROWNE
Official Seal
Notary Public - State of Illinois
My Commission Expires Mar 17, 2026

ORLAND JOINT EMERGENCY TELEPHONE SYSTEM BOARD

overseeing the establishment and maintenance of

ENHANCED 9-1-1 SERVICE

in the Village of Orland Park and the Village of Orland Hills

September 7, 2022

AT&T
Ms. Lisa Wirtanen
4918 W 95th Street
Oak Lawn, Illinois 60453

Dear Ms. Wirtanen,

This letter is to confirm our intent to transition from E91-1-1 to Next Generation (NG911). Orland Park and Orland Hills Police Dispatch is presently scheduled operational readiness testing is scheduled for the week of October 3rd, 2022 with a go live date of October 18th, 2022.

Enclosed is your copy of the long form modification plan to be filed with the Illinois State Police for approval.

Thank you for your assistance in this matter.

Best Regards,

Richard Dalzell
9-1-1 System Administrator

ORLAND ETS BOARD
Orland Park Police Department
15100 South Ravinia Avenue
Orland Park, IL. 60462

708/349-4111 (non-emergency)
708/349-8956 (fax)

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 Orland ETSB operates a backup dispatch facility located at 14600 S. Ravinia Avenue with two (2) dispatch positions mirroring the functional aspects of our primary location.

We have tested Text2911 with AT&T and Verizon, but these are treated as TDD/TTY.

We are waiting for a ModUcom or another practical solution.
We have investigated another CPE vendor which may also provide for a proper solution.

The included network diagram is the most current which I have received.

Please see attached narrative for additional specifics.

Secondary Answering Point, Orland Fire, has completed the ISP's Secondary Answering Point (SAP) Operational-Technical Assessment and is presently scheduled to upgrade their ModUcom Call Handling Equipment that meets NG911 Standards required to cutover to the statewide ESInet.

Next Generation 9-1-1 Modification Plan Narrative

The Orland Joint Emergency Telephone System Board (OJETS) 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 Orland Joint Emergency Telephone System Board (OJETS) 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.

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:

Not Applicable

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
Village of Orland Park	14750 S. Ravinia Avenue Orland Park, Illinois 60462
Village of Orland Hills	16033 S. 94th Avenue Orland Hills, Illinois 60487

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
Orland Park Police Department	15100 S. Ravinia Avenue Orland Park, Illino	(708) 349-4111	X		
Orland Hills Police Department	16033 S. 94th Avenue Orland Hills, Illinois 6	(708) 349-4434	X		
Will County ETSB	2561 Division Street Suite 101 Joliet, IL 60			X	
Will County Sheriffs Police	2402 E Laraway Road Joliet, IL 60433			X	
Tinley Park ETSB	7850 W. 183rd Street Tinley Park, IL 60477			X	
Tinley Park Fire Department	17355 S. 68th Court Tinley Park, IL 60477			X	
Southwest Central Dispatch	7611 W. College Drive Palos Heights, IL 604			X	
Palos Heights Fire Protection it	12300 S. Harlem Avenue Palos Heights, IL 6			X	
Palos Park Police Department	8999 W. 123rd Street Palos Park, IL 60464			X	
Palos Heights Police Departme	7606 W. College Drive Palos Heights, IL 60			X	
Orland Fire Protection District	9790 W. 151st Street Orland Park, IL 6046			X	
(708) 687-1376	15400 S. Central Avenue Oak Forest, IL 604			X	
Oak Forest Fire Department	5620 W. James Street Oak Forest, IL 60452			X	
Northwest Homer Fire Protecti	16151 W. 143rd Street Lockport, IL 60491			X	
Mokena Fire Protection District	19853 S. Wolf Road Mokena, IL 60448			X	
Mokena Police Department	10907 Front St, Mokena, IL 60448			X	
Illinois State Police	801 South Seventh Street Springfield, Illinoi			X	
Homer Glen Fire Protection Dit	16050 S. Cedar Road Lockport, IL 60491			X	
Cook County Sheriff's Police	1401 S. Maybrook Maywood, IL 60153			X	
Homer Township Fire District	16050 S. Cedar Road Lockport, IL 60491			X	
Palos Fire Protection District	8815 W. 123rd Street Palos Park, IL 60464			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
Oak Forest ETSB	15440 Central Ave, Oak Forest, IL 60452	(708) 687-1376
15400 S. Central Avenue Oak Forest, IL 604	7850 W, 7850 183rd St, Tinley Park, IL 60477	(708) 444-5300
Will County ETSB	830 S. State St, Lockport, IL 60441	(815) 721-5911
Southwest Central ETSB	7611 W College Dr, Palos Heights, IL 60463	(708) 448-6180
Cook County ETSB	1401 Maybrook Dr, Maywood, IL 60153	(708) 865-4700
Homer Glen	14 W Jefferson Street Joliet, IL 60432 (Will County Sher	(815) 727-8575
Palos Park Police Department	8999 123rd St, Palos Park, IL 60464	(708) 448-2191
Mokena Police Department	10907 Front St, Mokena, IL 60448	(708) 479-3912
Palos Heights Police Department	7607 W College Dr, Palos Heights, IL 60463	(708) 448-5060

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	308 S. Akard St., Ste. 100, Dallas, TX 75202	(210) 821-4105
Frontier	Norwalk, CT	(800) 921-8101
CBeyond	320 Interstate N. Parkway SE, Atlanta, GA 30339	(866) 424-5544
CIMCO	1701 JFK Boulevard, Philadelphia, PA 19103	(215) 286-1700
FOCAL	200 N LaSalle St., Ste 1100, Chicago, IL 60601	(312) 895-8400
GLOBALCOM	17000 Preston Rd., Ste 320, Dallas, TX 75248	(256) 432-2685
LEVEL3	100 Centurylink Dr., Monroe, LA 71203	(318) 388-9000
MCLEOD	1770 Boyson Rd., Hiawatha, IA 52233	(319) 790-7000
MFS	2470 N. 150th, Omaha, NE 68116	(888) 638-6866
PAETEC	200 W. Adams St., Ste 1110, Chicago, IL 60606	(312) 924-9300
SPRINT	6100 Sprint P~wy, Overland Park, KS 66251	(800) 829-0965
TDS METROCOM	525 Junction Rd., Ste. 6000, Madison, WI 53717	(608) 664-4000
[XO COMM	13865 Sunrise Valley Drl, Herndon, VA 20171	(703) 547-2000
MCI	22001 Loudoun County Pkwy, Ashburn, VA	(888) 444-3333
WORLDCOM	22001 Loudoun County Pkwy, Ashburn, VA	(888) 444-3333
Comcast	1701 JFK Boulevard, Philadelphia, PA 19103	(215) 286-1700
Metronet	3701 Communications Way, Evansville, IN 47715	(844) 684-0215
Verizon Wireless	1095 Avenue, New York, NY 10036	(212) 395-1000
T-Mobile	12920 SE 38th St., WA 98006	(425) 378-4000
AT&T Mobility	P.O. Box 97061, Redmond, WA 98073-9761	(800) 331-0500

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 Test Plan Description i3 Attachment

2) List wireline exchanges to be tested.

See Test Plan Description i3 Attachment

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

See Test Plan Description i3 Attachment

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