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



State of Illinois

## **Application for** 9-1-1 Modification Plan

### 911 GENERAL INFORMATION

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Type of Change:	Short Form Modification Pl	Short Form Modification Plan			
Current System Name: Skokie Combined Communication	ns Population Served	Land Area in Sq Miles			
	81,287		12.75		
List PSAPs:		Primary	Secondary		
Skokie Police/Fire Communications	,	Κ			
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911 System Contact: John Barkhoo					
Street Address: 7300 Niles Center Rd					
City, State and Zip Code: Skokie, I160076					
Office Telephone: (847) 982-5904					
Email: john.barkhoo@skokie.org					
Wireless Coverage for Consolidated System	: Please check if applicable:				
	X NG9-1-1 capable				
% Phase I compliant	Receive 9-1-1 Text				
	Receive 9-1-1 Video	ס			

### **VERIFICATION**

I, Mate Setka	, first being duly sworn upon oath, depose and say that
l am Assistant Communications Director	of Skokie Police / Fire Department; 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 the	se matters stated upon information and belief, and as to
those, I believe same to be true.	
	lutes
	Assistant Communications Director
Subscribed and sworn to before me	
this 13th day of MARCH	, 20 <u>24</u> .
NOTARY PUBLIC, ILLINOIS	JOHN BARKHOO OFFICIAL SEAL Notary Public - State of Illinois My Commission Expires Jun 25, 2025



#### **Police Department**

7300 Niles Center Road Skokie, Illinois 60077

Phone (847) 982-5900 Fax (847) 982-5978

www.skokie.org SkokieVision Municipal Cable 1660 AM Skokie

#### Council-Manager Government

Mayor Clerk Trustees George Van Dusen Pramod C. Shah James H. Johnson Khem Khoeun Ralph Klein Alison Pure Slovin Keith A. Robinson

Manager Counsel Edie Sue Sutker John T. Lockerby Michael M. Lorge

#### Awards and Distinctions

American Public Works Association (APWA) Accreditation

Commission on Fire Accreditation International (CFAI)

Gold Level Clean Air Counts Community

Government Finance Officers Association Budget Award

Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting

Illinois Law Enforcement Accreditation (ILEAP)

Insurance Services Office (ISO) Class One Fire Department

State of Illinois Certified Health Department

Tree City U.S.A. Distinction

### Village of Skokie

February 1, 2024

Lisa Wirtanen AT&T 10 S. Canal Chicago, IL 60606

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,

Mate Setka

Assistant Communications Director

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:

The Skokie 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 Skokie 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.

#### Plan Narrative:

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.

The Northbrook Police Department is our current backup 911 center and will remain as our backup. Skokie does not have an alternate route.

We are currently utilizing a web based solution to receive Text to 9-1-1. Our current Text to 9-1-1 provider is Comtech. Upon transition to the ESInet, our Text Control Center will be Intrado and Text to 9-1-1 will be received through our CallWorks call processing equipment.

### 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

### **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 Skokie	5127 Oakton St Skokie, IL 60077	
Village of Lincolnwood	6900 Lincoln Ave Lincolnwood, IL 60712	
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### **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
Skokie Police Department	7300 Niles Center Rd Skokie, IL 60077	(847) 982-5900	×		
Skokie Fire Department	7424 Niles Center Rd Skokie, IL 60077	(847) 982-5300	×		
Lincolnwood Police Dept.	6900 Lincoln Ave Lincolnwood, IL 60712	(847) 673-2167	×		
Lincolnwood Fire Dept.	(847) 673-1545	х			
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### **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
Evanston Police Department	1454 Elmwood Ave, Evanston, IL 60201	(847) 866-5000
Wilmette Police Department	710 Ridge Rd, Wilmette, IL 60091	(847) 256-1200
Glenview Police Department	2500 E Lake Ave, Glenview, IL 60026	(847) 729-5000
Niles Police Departmernt	7000 W Touhy Ave, Niles, IL 60714	(847) 588-6500
Morton Grove Police Department	6101 Capulina Ave, Morton Grove, IL 60053	(847) 470-5200
Chicago Police Department	3510 S Michigan Ave, Chicago, IL 60653	(312) 746-6000
Cook County Sheriffs	1401 S. Maybrook Drive Maywood, Illinois 60153	(708) 865-4700
RED Center	1842 Shermer Rd, Northbrook, IL 60062	(847) 724-5700
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### **CARRIER LISTING**

(Wireline, Wireless, VoIP)

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

### (USE ADDITIONAL SHEETS AS NECESSARY)

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STREET ADDRESS, CITY, ZIP CODE	TELEPHONE NUMBER
10 S. Canal. Chicago IL 60606	(800) 288-2020
350 North Orleans, Suite 600 Chicago, IL 60654	(800) 427-8686
10 S. Canal. Chicago IL 60606	(877) 288-8362
854 Cypress Ave. Ridgewood, NY 11385	(347) 668-1207
200 North Lasalle St Suite 1100 Chicago, IL 60601	(312) 895-8400
401 Merritt 7, Norwalk, CT 06851, USA	(800) 921-8101
14 Marsh Ct, Madison, Wisconsin, 53707	(608) 663-8016
100 Mathilda Place, Suite 600, Sunnyvale, CA 94086	(800) 379-7729
200 W. Adams St., Ste 1110, Chicago, IL 60606	(312) 924-9300
200 E Randolph St, Chicago, IL 60601	(312) 240-9110
1095 Avenue of the Americas, New York, NY 10036	(212) 395-1000
3865 Sunrise Valley Dr, Herndon, VA 20171	(703) 547-2000
	10 S. Canal. Chicago IL 60606  350 North Orleans, Suite 600 Chicago, IL 60654  10 S. Canal. Chicago IL 60606  854 Cypress Ave. Ridgewood, NY 11385  200 North Lasalle St Suite 1100 Chicago, IL 60601  401 Merritt 7, Norwalk, CT 06851, USA  14 Marsh Ct, Madison, Wisconsin, 53707  100 Mathilda Place, Suite 600, Sunnyvale, CA 94086  200 W. Adams St., Ste 1110, Chicago, IL 60606  200 E Randolph St, Chicago, IL 60601  1095 Avenue of the Americas, New York, NY 10036

### **TEST PLAN DESCRIPTION**

1) De	escription	of test p	lan (baci	k-up, ove	erflow, fai	lure, da	tabase).
See	attache	ed.					

2) List wireline exchanges to be tested.

AT&T

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

AT&T Mobility Verizon T-Mobile Comcast

### **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	Failover
	edge router at PSAP	
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	Call Handling
	bridge to i3 PSAP if available – willing PSAP)	
14	S/R Transfer: Selective Bridge Conferencing Confirmation, if used by the	Call Handling
	PSAP	
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