

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

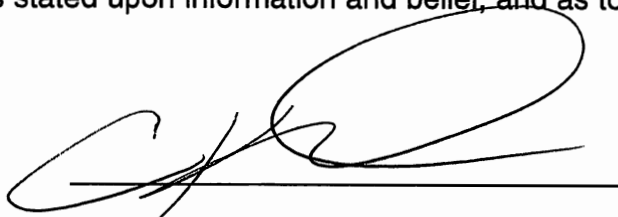


State of Illinois

Application for
9-1-1 Modification Plan

VERIFICATION

I, Craig Kowalski, first being duly sworn upon oath, depose and say that I am the Executive Director, of E-COM Dispatch Center; 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.



Craig Kowalski

Subscribed and sworn to before me

this 31st day of August, 2023.



NOTARY PUBLIC, ILLINOIS



9-1-1 SYSTEM PROVIDER LETTER OF INTENT

August 31, 2023

(Date)

Lisa Wirtanen

(9-1-1 System Provider Company Representative)

AT&T

(9-1-1 System Provider Company Name)

4918 W. 95th St.

(Street Address)

Oak Lawn, IL 60453

(City, State, Zip Code)

Dear Lisa 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,



Craig Kowalski

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:

1.) E-COM Dispatch Center "E-COM" is transitioning from E9-1-1 to Next Generation 9-1-1 (NG9-1-1) using the AT&T NG9-1-1 Hosted Statewide Motorola CallWorks service.

2.) The AT&T services provided to E-COM will comply with all Federal and State laws and National Emergency Number Association Standards (NENA) and be NENA I3 compliant (NENA-STA-010.3a-2021). The NG9-1-1 service is being provided by Motorola CallWorks Emergency Call Handling Servers and Software. All system communications will be Internet Protocol. Both NG9-1-1 ESInet and Network Services will be monitored by AT&T Security Operations and Network Operations Centers 24-7-365 which will handle incidents and notifications per FEMA Incident Command System protocols. The E-COM facility was designed, constructed and complies with NFPA 1221 (2002) and referenced standards for emergency communications centers. E-COM complies with current Illinois State Police (ISP) requirements for training and provision of Emergency Medical Service (EMS) instruction of obtaining licensure through the Illinois Department of Public Health (IDPH) for Emergency Medical Dispatch (EMD) services. Telecommunicators are trained and certified using APCO, Intl. for EMD certification.

3.) Each AT&T NG9-1-1 server premise will be connected to AT&T's redundant ESInet service as provided to the State of Illinois. Each AT&T NG9-1-1 server premise will be connected to E-COM by means of a 24-7-365 monitored AT&T Switched Ethernet (ASE) fiber based Internet Protocol (IP) circuit. E-COM currently has and will retain diversely routed AT&T provided fiber based IP circuits. The AT&T NG9-1-1 servers and services will be shared with other 9-1-1 Authorities and PSAPs as provided in AT&T's Service Agreement executed with the State of Illinois.

4.) Prior to cutover, AT&T will transition duplicate circuit appearances from E-COM's Centralized Automatic Message Accounting (CAMA) based 9-1-1 system, which includes legacy wireline, wireless and VoIP services which are currently selectively routed from AT&T's Central Office facility into the ESInet Legacy Network Gateway (LNG) and Motorola CallWorks NG9-1-1 server equipment. This will include the selective routing database currently in use for legacy E9-1-1 services. AT&T will provide ongoing connection to Legacy Selective Routers and gateways per NENA standards for receipt and transfer of 9-1-1 calls using the Legacy Network Gateway.

Plan Narrative:

5.) The E-COM resides in the 708 area code. The current mechanism of separation is the CAMA trunked selective routing system provided by AT&T which recognizes address based on Emergency Service Number (ESN) exchange routing for wireline calls, carrier based location systems from wireline carriers and subscriber addressed based routing from VoIP providers. The new AT&T ESInet service will provide 9-1-1 call routing to E-COM using both ESN (tabular) and Geographic Information System (GIS) (spatial) routing on the provide Vesta Host Service.

Should E-COM become unable to answer and process 9-1-1 calls, SouthCom Dispatch Center "SouthCom" continues to provide assistance to E-COM as the backup PSAP. In the event of a failure or overflow of 9-1-1 calls, incoming 9-1-1 calls will be routed, answered, and processed by SouthCom.

6.) The NG9-1-1 database will be maintained by AT&T as contracted with the State of Illinois. E-COM and/or a third party contractor will make necessary corrections through the ISP or AT&T provided portal to maintain accuracy.

7.) Database updates regarding addresses will be performed by designated E-COM staff on an as-needed basis. Mapping changes to the ISP/AT&T database will be performed by a third-party GIS contractor which has been contracted by E-COM.

8.) Communications with the redundant AT&T servers and the ESInet connected border-wall servers is provided through a fiber based AT&T Switched Ethernet (ASE) Virtual Private Network (VPN) circuit between E-COM ETSB and it's on premise Motorola CallWorks server. The last-mile circuit from AT&T's central office to the PSAP is implemented over diversely routed fiber circuits which enter the E-COM facility on the north side of the facility.

E-COM utilizes HikVision video surveillance and proximity key fob configuration security devices in our facility. The operating system for HikVision is contained in our equipment room which is in compliance with current NFPA 1225 Standards for power and security. This video surveillance equipment includes thermal imaging cameras inside the server room as well as application notifications for people identification when a person enters the server room or walks near the entrance door to the server room. Entrants to the equipment room must first be admitted to the Dispatch Center after identification by working staff. All NG9-1-1 equipment, wiring and cabling is contained in the lower basement level of E-COM as defined in NFPA 1221 and requires vetting by operating personnel prior to admittance into that secure environment.

The network infrastructure at E-COM includes two ASA Firewalls, a Barracuda Webfilter, and an Office 365 Spam Filter between all external and internal traffic. All user accounts are password protected with password complexity required. User passwords are rotated every ninety (90) days.

The required ASE fiber based connectivity will be available to E-COM within AT&T's monitored internal network and covered by AT&T security measures otherwise approved by the ISP. These include monitoring network operations 24-7-365 at multiple security centers. Sensitive data resides in trusted data centers that employ logical and physical access controls. Hardware and software elements have been tested using stringent management processes that incorporate penetration scan testing. All AT&T buildings, Network Operations Centers (NOC) and data centers are monitored by 24x7 security and access control systems.

E-COM currently does not have the capability to accept text-to-9-1-1. E-COM intends to utilize the text-to-9-1-1 platform selected by the State of Illinois. We are exploring other options at this time.

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:

The new AT&T NG9-1-1 Hosted Statewide ESInet Service will provide residents and visitors to E-COM an upgraded 9-1-1 telephone answering service with NG9-1-1 transport and location features including the ability to text 9-1-1. The services are scheduled to be cutover in November of 2023. As enhancements to NG9-1-1 occur, such as improving location accuracy, the ability to correlate new sources of information, telematic IoT devices, receipt of streaming video etc., will be incorporated into E-COM's 9-1-1 services as provided by AT&T. E-COM has also contracted for software maintenance and upgrades to workstation, routing and switching equipment over a 5-year period.

Services will occur over the 5-year contracted and prepaid service agreement E-COM ETSB has executed with AT&T. Local installation and maintenance will be provided by Motorola Solutions LLC as AT&T's selected provider. The only on-going cost of operating the system is a fiber based ASE connection to AT&T's offices.

5-Year Contracted Cost (Includes Maintenance & Upgrades):	\$
5-Year Network Access Cost (Estimated based on 3-Year Contracts):	\$
Net Projected 5-Year Cost:	\$
Net Projected 5-Year Revenue (From 2022 Surcharges Received)	\$

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
Country Club Hills Police Dept.	3700 W.175th St., Country Club Hills, IL	(708) 798-3191	5m2, 17kp		
Vilage of East Hazel Crest Police Department	17223 S. Throop St., East Hazel Crest, IL 60429	(708) 798-2171	2m2, 1.3kp		
Village of East Hazel Crest Fire Department	17223 S. Throop St., East Hazel Crest II	(708) 798-3902	2m2, 1.3kp		
Village of Flossmoor Police Department	2800 Flossmoor Rd., Flossmoor, IL 60422	(708) 957-4500	3.7m2, 10kp		
Village of Flossmoor Fire Department	2828 Flossmoor Rd., Flossmoor, IL 60422	(708) 798-3896	3.7m2, 10kp		
Village of Glenwood Police Dept	1 Asselborn Way., Glenwood, IL 60425	(708) 753-2420	3.3m2, 9kp		
Village of Glenwood Fire Dept	605 E. Glenwood Lansing Rd., Glenwood, IL 60425	(708) 753-2440	3.3m2, 9kp		
Village of Hazel Crest Police Department	3700 W. 170th St., Hazel Crest, IL 60429	(708) 335-9640	3.5m2, 13kp		
Village of Hazel Crest Fire Department	2903 W. 175th St., Hazel Crest, IL 60429	(708) 335-9630	3.5m2, 13kp		
Village of Homewood Police Department	17950 Dixie Hwy., Homewood, IL 60430	(708) 206-3420	5.3m2, 20kp		
Village of Homewood Fire Department	17950 Dixie Hwy., Homewood, IL 60430	(708) 206-3400	5.3m2, 20kp		
Village of Riverdale Police Department	725 W. 138th St., Riverdale, IL 60827	(708) 841-2203	3.5m2, 10kp		
Village of Riverdale Fire Department	725 W. 138th St., Riverdale, IL 60827	(708) 841-2122	3.5m2, 10kp		
Village of South Holland Police Department	16330 South Park Ave., South Holland, IL 60473	(708) 331-3131	7.2m2, 22kp		
Village of South Holland Fire Department	16230 Wausau Ave., South Holland, IL 60473	(708) 331-3123	7.2m2, 22kp		
Village of Thornton Police Department	700 Park Ave., Thornton, IL 60476	(708) 877-4440	2.5m2,2.4kp		
Village of Thornton Fire Department	115 E. Margaret St., Thornton, IL 60476	(708) 877-4459	2.5m2,2.4kp		

ADJACENT AGENCIES LIST

Provide a list of public safety agencies and existing 9-1-1 Systems 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
SouthCom	21113 Dettmering Dr., Matteson, IL 60443	(708) 748-6131
Village of Lansing	2710 E. 170th St., Lansing, IL. 60438	(708) 895-7150
Cook County Sherrif	9511 W. Harrison., Des Plaines, IL 60016	(847) 294-4744
Chicago Heights Police Department	1601 S. Halsted St., Chicago Heights, IL 60411	(708) 756-6400
Orland Central Fire Protection District	9790 W. 151st St., Orland Park, IL 60462	(708) 873-2748
Chicago Heights Fire Department	83 Joe Orr Rd., Chicago Heights, IL 60411	(708) 756-5370
Calumet City Fire Department	684 Wentworth Ave., Calumet City, IL 60419	(708) 891-8146
Calumet City Police Department	1200 Pulaski Rd., Calumet City, IL 604149	(708) 868-2500
Central Dispach	1234 Sibley Blvd., Dolton, IL 60419	(708) 249-0945
Blue Island Police Department	13031 Greenwood Ave., Blue Island, IL 60406	(708) 385-1313
Blue Island Fire Department	2450 Vermont Ave., Blue Island, IL 60406	(708) 396-7072
Calumet Park Fire Department	12457 Ashland Ave., Calumet Park, IL 60827	(708) 385-0550
Calumet Park Police Department	12409 Throop St., Calumet Park, IL 60827	(708) 385-6862
Dolton Police Department	14030 Park Ave., Dolton, IL 60419	(708) 841-2533
Dolton Fire Department	14022 Park Ave., Dolton, IL 60419	(708) 849-2141
Harvey Fire Department	15600 Center Ave., Harvey, IL 60426	(708) 331-7720
Harvey Police Department	15301 Dixie Hwy., Harvey, IL 60426	(708) 331-3030
Markham Fire Department	16313 Kedzie Ave., Markham, IL 60426	(708) 331-2171
Markham Police Department	16313 Kedize Ave., Markham, IL 60426	(708) 331-2171
Oak Forest Fire Department	5620 James St., Oak Forest, IL 60452	(708) 687-6050
Oak Forest Police Department	15440 Central Ave., Oak Forest, IL	(708) 687-1376
Matteson Fire Department	3445 W. 211th St., Matteson, IL 60443	(708) 748-5129
Matteson Police Department	20500 Cicero Ave., Matteson, IL 60443	(708) 748-1564
Olympia Fields Police Department	20040 Governors Hwy., Olympia Fields, IL 60461	(708) 503-8100
Chicago Police Department - District 5	727 E. 111th St., Chicago, IL 60628	(312) 747-8210
Chicago Fire Department	12701 S. Doty Ave., Chicago, IL 60633	(312) 746-9500

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 attached i3 Test Plan Description.

2) List wireline exchanges to be tested.

206, 225, 271, 332, 335, 339, 365, 511, 647, 798, 799, 816, 825, 922, 957, 991, 754, 755, 756, 794, 914, 960, 248, 265, 283, 300, 365, 441, 503, 575, 709, 753, 757, 758, 877, 898, 983, 996, 249, 331, 566, 596, 893, 918, 940, 985, 991, 481, 841, 895, 918, 922, 774, 201, 385, 388, 389, 392, 396, 418, 444, 487, 489, 597, 849, 862, 880, 888, 891, 896, 974, 727, 774, 201, 210, 225, 251, 263, 331, 333, 360, 362, 394, 474, 417, 527, 589, 596, 713, 768, 802, 825, 841, 849, 858, 862, 868, 875, 877, 889, 893, 895, 913, 915, 940, 985, 474

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

Vonage, Comcast, Verizon, AT&T

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