AT&T ESI.net™ Customer Presentation

The best of today built for tomorrow.
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Introduction | Voice transformation drivers for public safety

An estimated 240 million calls are made to 9-1-1 in the U.S. each year (Source: NENA)

It estimated that 70% of all calls made to 9-1-1 originate from a mobile device. (Source: FCC)

39% of US Households are wireless only. (Source: CTIA)

Within two years, carriers will be required to transmit to 911 call centers a caller's indoor position within 50 meters. (Source: FCC)
Public Safety Agency needs a 9-1-1 solution to enable interoperability among government agencies

Solution implements National Emergency Number Association (NENA), current i3 implementation standards allowing agencies to interoperable and automatically handle call overflow and disaster recovery scenarios.

Public Safety Agency needs a 9-1-1 solution that is highly secure

Provides a highly secure network and is resilient to cyber-attack, penetration, abuse or misuse.

Public Safety Agency needs a 9-1-1 solution to provide expanded communication technology capabilities such as delivery of text messages

Supports the transition from TDM to Voice over IP (VoIP) technology by using SIP IP for 9-1-1 calls, and enables text messaging and future applications such as photos and videos.
AT&T ESInet™ National Solution | The best of today built for tomorrow

- Nationally distributed, geographically diverse, redundant architecture enhances reliability
- Pre-deployed call processing in our data centers across US; co-located with existing 9-1-1 databases to optimize throughput of location queries
- Aggregation Centers (AGC) in our Central Offices augment future growth capacity
- Initial call processing capacity twice current volumes to handle unexpected spikes
- Supports the i3 standards for ease of integration
- Enables public safety interoperability with neighboring PSAPs, helping to enable fast call transfers and data sharing

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National Emergency Number Association (NENA) i3 Call Routing

**Originating Networks**
- Call Origination
- TDM Class 5
- VOIP

**Emergency Services IP Network (ESInet)**
- Call Routing
- LNG (Legacy Network Gateway)
- ALI DB (Automatic Location Information Database)
- LoST (Location to Service Translation)
- ECRF (Emergency Call Routing Function)
- SBC/BCF (Session Border Controller/Border Control Function)
- ESRP (Emergency Services Routing Proxy)

**PSAP**
- Call Termination
- NENA i3 PSAP
- Legacy PSAP
- Front Office
- Back Office
AT&T Emergency Services IP Network (ESInet™)

9-1-1 Database Transition
- Supports 9-1-1 databases transition from the Automatic Location Identifier (ALI) tabular records to NG9-1-1 databases

Geospatial Routing Feature
- Routes 9-1-1 calls based on caller’s physical location
- Helps eliminate misrouted calls and improve response times.

Text to 9-1-1
- Routes Text to 9-1-1 messages over AT&T AVPN network
- Works with industry leading Text Control Centers (TCC)
- Service integration with PSAP call handling equipment

Security
- Multi-layered security approach with VPN encryption
- Separate logical networks protecting voice/data privacy
- Physical security, password, and access control
- Change control/patch management policies and processes
AT&T ESInet™ Customer Stewardship 24 x 7 x 365

- ESInet System Monitoring
- AT&T Field Services
- Incident Management
- Help Desk
- Service Management Team
- AT&T Test Labs
- Capacity and Performance Management
- Global Network Operations Center
- AT&T Customer Resolution Center
### AT&T Advantage for Public Safety Agencies

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<tr>
<th>Feature</th>
<th>Description</th>
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<tr>
<td>Commitment to Public Safety</td>
<td>Ongoing investments in networks and platforms that protect people, infrastructure and information</td>
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<td>Experience in Emergency Preparedness Response</td>
<td>Over 100 years in emergency response. A leader in designing, using, and deploying solutions for Public Safety</td>
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<td>Shaping the Future with Innovative Technologies</td>
<td>Experts in developing and testing new technologies and in establishing industry wide technology standards</td>
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<tr>
<td>Global Network Cybersecurity Expertise</td>
<td>A network owner with deep experience in the mitigation of security attacks and the development of security solutions</td>
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