



# Replacing VPN with Zero Trust for Mobile and Passive Surveillance System

## Challenges

**SonicEye** is a Mobile and Passive volumetric surveillance systems using acoustic array technology to enhance public safety, prevent crime, and optimize law enforcement operations. In this deployment, all raw data, audio analytics and alarms flows through an Operation Center where LEA officers can implement SOPs based on the information collected on the field by the acoustic sensors. Currently, providers rely on standard VPNs for connectivity to the Operation Center and data sharing. Challenges include maintaining uninterrupted connectivity, high-quality streaming, and robust cybersecurity to secure remote access, comply with regulations, and minimise liability from breaches while aiming to retain full control over network infrastructure and prevent data exfiltration.

## Solution

After deploying SElink to replace VPN, the client experienced significant benefits. SElink, powered by Zero Trust Network Access (ZTNA), minimised reliance on multiple firewalls and routers through innovative techniques like the closed ports approach and strategic VPN replacement. This improved latency for real-time streaming and optimised bandwidth usage ensuring reliable performance even over poor networks. By enabling client-to-client (C2C) connections, SElink allowed secure, direct links to specific target services, eliminating broad subnets and cumbersome setups. Security was enhanced with port lockdowns, protected device-to-cloud connections, unidirectional micro-links, and Zero Trust access checks with continuous advanced authentication. Crucially, the solution's on-premise deployment gave the client full control over their secure infrastructure and data.



## Sector

Surveillance Systems  
Law Enforcement



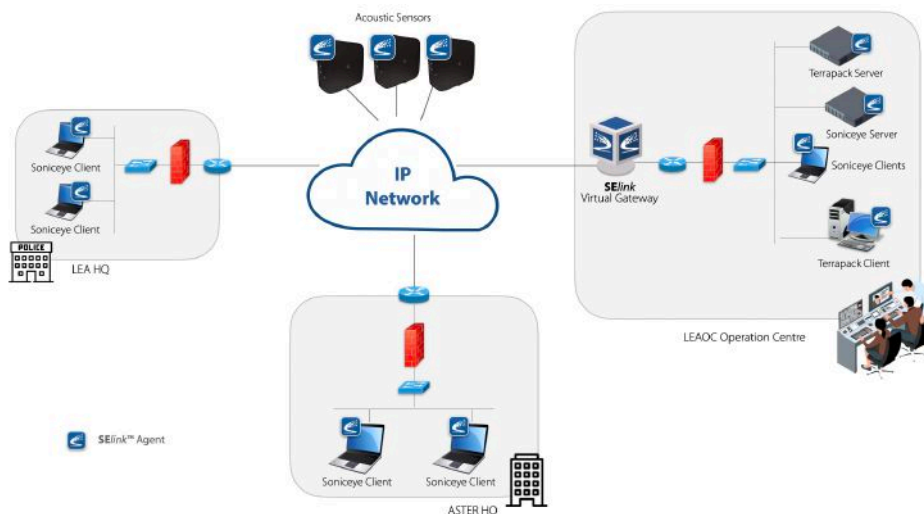
## Objectives

- Improved Performance
- Stable and continuous service
- Third-Parties Secure remote Access
- Robust security to reduce liability and meet regulatory compliance
- Full control over the network
- Prevent exfiltration and data loss



## Results

- Simplified network
- VPN replaced
- **All ports closed** for network lockdown
- **60% improved latency**
- **20% optimised bandwidth usage**



**ASTER** Aster Tec specialises in the design and development of solutions and integration services for the defence, safety, security and law enforcement sector. Since 2018, Aster Tec commercialises SONICEYE™, an innovative Sound Radar technology for surveillance, security and intelligence purposes.



# SONICEYE™

Innovative, portable and passive volumetric surveillance systems based on acoustic array technology. They combine selective remote audio listening and acoustic pulse detection techniques to provide complete scene control to intelligence services and investigative departments in both indoor and outdoor operations. SONICEYE™ systems perform automatic real-time detection of threats even in severe noise and interfering environments, while enabling real-time selective listening with adaptive graphic equaliser. Full recording & off-line reprocessing and playback are also provided.

## Applications



### URBAN AREA PROTECTION

Detection localisation and tracking of blasts, gunfire, crashed and explosions in crowded areas



### ANTI-TERRORISM

Situational Awareness in public places (squares ports stations, airports, malls, stadiums)



### TACTICAL INTELLIGENCE

Indoor & Outdoor selective remote listening with real time filtering optimisation



### FORENSICS

Permanent acoustic crime scene recording and adaptive off-line reprocessing



### FIRST RESPONSE SUPPORT

Selective remote detection and localisation of survivors in disasters' aftermath

## Benefits

- ✓ **INNOVATIVE**  
Automatic real-time acoustic detection of threats in presence of high background noise
- ✓ **EFFECTIVE**  
Real-time listening with audio equalisation of sources of interest
- ✓ **PASSIVE**  
No radiation in respect of citizen health and safety, reducing operations and maintenance costs
- ✓ **FLEXIBLE**  
Modular architecture for a fast integration with Control Rooms and other surveillance systems
- ✓ **PORTABLE**  
Wi-fi connection, reduced size and weight for fast installation on indoor and outdoor urban elements

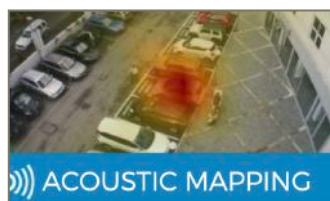
## Capabilities



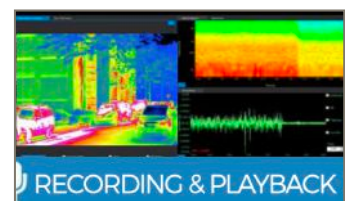
REMOTE LISTENING



BLAST DETECTION  
AND LOCALIZATION



ACOUSTIC MAPPING



RECORDING & PLAYBACK



BLAST CLASSIFICATION



POST PROCESSING  
AND ANALYSIS