# THE PUBLIC SAFETY INDUSTRY

# YOUR GUIDE TO PUBLIC SAFETY Solution providers

DISCOVER OVER 90 COMPANIES WORLDWIDE

Visit our website: <u>companies.whoiswho.eena.org</u>



# Legal disclaimer

This document was created by the EENA staff in June 2023. It provides an overview of companies that are part of the EENA community, in an attempt to facilitate communication and knowledge between different members of EENA. This document is published for information purposes only. Under no circumstances may reliance be placed upon this document by any parties in compliance or otherwise with any applicable laws. Neither may reliance be placed upon this document in relation to the suitability or functionality of any of the described companies. Advice when relevant, may be sought as necessary.

In case of any inquiries, please contact Mr. Jérôme Pâris at jp@eena.org.



# The Who-is-Who Directory In The Public Safety Industry

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# Introduction

The latest edition of the "The who-is-who handbook in the public safety industry" is here!

Do you want to get a clear overview of public safety solutions available on the market? Looking for partners in the emergency services industry? Then look no further: EENA's directory of public safety solution providers is here to be your guide in any public safety industry search!

The objective of the publication is **to bridge communication** between all stakeholders in the emergency services field, and to become **a reliable reference** for public safety professionals seeking an overview of solution providers and their products.

But market information is useful only if still relevant: that's why "**The who-is-who handbook**" is updated every 6 months. This way, you get only the latest news and updates from companies from around the world!

We would like to thank all industry representatives for contributing to this publication!

Comments or remarks? Please contact Jérôme Pâris, EENA Managing Director, at jp@eena.org.

\* Please note that this publication only includes companies that are part of the EENA community. Learn more about EENA membership.

# You're in the right place if you're looking for...

- A crystal clear overview of the market
- Partners in the sector
- Solution providers that can cater to your needs
- The latest solutions available

Last update on 08 Jun 2023.

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# **AIRRUS**

# Airbus

#### Automatic Vehicle Location

Cyber Security Next Gen Comms

Radio Solutions

Voice Comms

Airbus group is a global company with 130000 employees with locations and customers all over the world with strong European roots.

Airbus is operating in many different business areas with wide portfolio. These business areas include: commercial aircraft, helicopters, military aircraft, UAVs, imagery, observation and communication satellites, satellite launchers, border security,

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C4ISR defense solution, cybersecurity, critical communication solutions. The customer base is also wide, including commercial aviation, defence organizations, security and public safety organizations.

Public safety customer base is forming a community consisting of the following key user groups: police and law enforcement, fire and rescue, emergency medical services, customs, borderguard, coastguard and drug enforcement agencies.

Airbus portfolio for public safety is based on key components including:

- voice and messaging oriented critical communication solutions based on Tetra/Tetrapol technologies (networks, terminals, management systems, services), Mission Critical Communication solution over 4/5 G Commercial Networks (Tactilon Agnet, Secure MVNO), SatComms,
- a portfolio of situational awareness applications, AVL, Public Warning solutions, recording and dispatching solutions.

The full offering for public safety customers is constructed by combining public safety specific portfolio components and other Airbus assets like cyber security, Big data and intelligence application suite, Satellite imagery, VoIP Telephony solutions.

# Pioneering the future in Critical Communications for Public Safety, Defense, **Transport and utilities**

With an installed base of 19 Nationwide Land Mobile Radio Networks, more than 30 networks for local authorities and defense forces, over 100 metro lines and 20 airports equipped, 2 million daily users in 80 countries, Airbus has been demonstrating its unique know how in Land Critical Radio-Communication Networks for almost 30 years, connecting field users and Emergency Command Centers via TETRA / TETRAPOL digital PMR solutions.

Building on this outstanding experience and resolutely turned towards the future, Airbus built a full set of solution and products (Agnet<sup>®</sup> family) and services to propose a nominal path to evolve from current 2G PMR Networks to Secured Mission Critical Communication over 4G/5G networks:

- Seamless Integration including an hybrid phase, where TETRAPOL/TETRA and Mission Critical Communications LTE/4G/5G are used together (Agnet 800, PMR Agnet Gateway, Tactilon Management),
- Mission Critical Communication Services and applications over 4G/5G : Agnet AS, Agnet Mobile, Agnet Dispatcher,
- Open Interfaces and support services to 3rd party to develop mobile or control room applications (Agnet Service API, SmarTWISP),
- Service Operator: as a telco integrator, Airbus builds and operates, a secure full MVNO solution including Mission Critical Communication services,
- A wide range of Mobile Terminals and accessories,
- A leading integrator to support customers in the migration phase, ensuring a deep integration of Business Critical applications over this new communication solution.

# **Allianz Partners**

eCall Emergency Apps Emergency Call Management	Information Analytics Third Party Services
<b>Allianz Partners</b> is the world's leading B2B2C	
specialist, delivering integrated solutions that combine insurance, assistance and technology.	Connected Services Connected Services
Part of the Allianz Group, Allianz Partners provides	🖂 thierry.chapeau1@allianz.com
assistance services for automotive, travel, health	$\mathscr{O}$ allianz-partners.com/en_US/products-and-solutions.html
and home. We are here to help 24 hours a day,	
365 days a year. We are there both in emergencies	
and in overview life, providing convices including read	leide assistance home assistance medical advice

and in everyday life, providing services including roadside assistance, home assistance, medical advice, repatriation, and mobile phone insurance.

Allianz Partners developed expertise products and support in insurance and mobility services along the entire automotive value chain and has earned the long-term trust of more than 40 major international automotive manufacturers. For over 70 years, customers around the world have trusted Allianz Partners to provide them with best-in-class all types of assistance services, including travel and health.

Throughout all assistance's services provided, the company drive a common mission and values, on a commitment to continuous innovation and the ability to meet our partners' global demands and a truly customer-centric approach.

## Allianz Partners Key Figures 2021:

- €6.2 Bn Total Revenues,
- €256 M Operating Profit, Commercial Activity in 75 Countries,
- 19.800 employees worldwide,
- 65 million cases handled,
- Working with over 50+ car brands in 30+ countries and with 30+ new mobility service providers in 25+ markets.



# Atos

CAD Control Room Integration

Integration Emergency Call Routing

Couting Emergency Call Management

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Next Gen Comms

Homeland Security Marketing and Portfolio Manager

Atos is the global leader in secure and decarbonized digital with annual revenue of over € 11 billion and 111,000 employees serving a global client base in over 69 countries.

We help our clients evolve with a fully agile and remote workforce, migrate critical applications to the cloud so that they could operate at any time, and envision new

that they could operate at any time, and envision new cybersecurity threats. At Atos, we are committed to a human-centric vision of digital technology as a force for good. We strive for the best compliance with all ethics principles through the pursuit of Corporate Digital Responsibility, ensuring that ethical considerations are fully integrated into the development and applications of Al and other innovations.

Eviden, an Atos brand, is the Atos business leading in digital, cloud, big data and security.

With more than 25 years of products, solutions and innovations with a clear strategy for Public Safety, Homeland Security, Healthcare, Defense, and Mission-Critical Communications, we are recognized as a trusted partner for public and private sectors. Atos is a pioneer in innovative Next-Generation solutions with its globally recognized assets and experts. We provide standardized solutions for "Next Generation Emergency Communications", NG112 in the EU and NG911 in the US, already live in California.

We bring to our customers the most extensive range of solutions to address their public safety challenges. We provide solutions to ensure a timely reaction while providing an efficient response in order to save lives, starting with urgent call routing, emergency and crisis management, tactical communications, connectivity with safe and smart cities, law enforcement, intelligence, anti-terrorism, border control and more.

From observation to action, Atos solutions make it possible to collect and analyze critical data, generate the appropriate response and ensure situational awareness. Organizations such as emergency medical services, police, firefighting services, and civil protection can obtain the information they need for timely decision-making. Atos solutions are based on secure networks and communications.

We are among the leaders who can provide end-to-end Public Safety solutions based on our own intellectual property and services linked to all stages of the process, including planning, design, transformational steps, integration and finally operation with day 2 support.

Our goal is always to provide standards-based solutions to allow seamless integrations with existing customer systems for reduced cost and easier integration.

## ESInet / Next Generation Core Services (NGCS)

Atos Next Generation 112 (NG112) solutions allow you to receive calls through different channels (voice, video, Text, eCall, RTT, PEMEA, apps, IoT devices...) into your call routing network, to quickly allocate emergency callers to the right Public Safety Answering Point (PSAP). Atos offers the only carrier-grade VoIP session controller for both call handling and emergency services routing, aligned with next-generation emergency calling standards (NG112 / NG911). Powering the Emergency Services IP network (ESInet) domain is Atos' NGCS infrastructure, beginning with the OpenScape First Response Emergency Services Routing Proxy (ESRP), built from OpenScape Voice that supports ETSI/EMTEL and NENA standards for ESInet/NGCS. Capable of handling multi-media as well as voice calls, Atos' OpenScape First Response ESInet / NGCS solution is centered around the industry's only carrier-grade Emergency Services Routing Proxy capable of handling high call rates.

Complementing the **OpenScape First Response** Emergency Services Routing Proxy are the other Atosprovided Next-Generation Core Services Components:

- OpenScape First Response Border Control Function (BCF) provides security functions at the border of the Emergency Services IP Network (ESInet).
- **OpenScape First Response Legacy PSAP Gateway** (LPG) allows existing legacy PSAPs to receive emergency calls from a next-generation core services network
- OpenScape First Response Media Service Bridge Function (MSBF) provides call transfer and conferencing capabilities for voice, video and text calls.
- OpenScape First Response Policy Store Server (PSS) supports the ESRPs Policy Routing Function by maintaining a central repository of policy routing rules.
- OpenScape First Response Next Generation Logging Service (NGLS) supports logging of call events in order to provide a traceable call history database. The log event database and internal reporting engine provide standard and ad-hoc reports and dashboard views.

Combined with Atos' third-party provided **Emergency Call Routing Function (ECRF)**, **Location Database (LDB)** and **Location Information Servers (LIS)**, your migration to a secure and managed ESInet/NGCS processing NG112 traffic is fully covered by Atos.

## Emergency management and crisis management

The GEMMA emergency and crisis management product covers both PSAP and field operations, fitting the needs of public safety and other incident-handling organizations like 112 / 911 / 999 / 000 PSAPs, emergency medical services, firefighters, police, civil protection, transports, major events and more. GEMMA has been chosen by public safety organizations around the world, for nationwide operations such as in Romania, for regions such as Aragon, Galicia or Extremadura in Spain, or for major cities such as Madrid or Paris.

As a natively multi-agency and multi-jurisdiction product, GEMMA helps improve cooperation between PSAPs, command & control centers and the response personnel. It covers the entire emergency and crisis management lifecycle, from communications handling and resource dispatching to first-responder intervention and event escalation when a crisis arises. As part of comprehensive solutions, GEMMA combines with other Atos and partner products including unified and critical communications, recording systems, data analytics and intelligence systems into end-to-end systems that rely on Atos' innovation and recognized strength as a service integrator.

GEMMA is available both on-premises and in the Cloud. It provides a homogeneous and configurable user experience, with an extensive use of standards and open/source components, for real-time information updates and sharing in full security (i.e. GEMMA is certified compliant with the Spanish national security framework ENS in the HIGH category) and with the highest quality considerations.

- **Communication handling** with multi-channel and accessible intake, including Real-time-text and Video comms
- CAD (Computer Aided Dispatch) with standard-based information exchange, interoperability with agency-specific systems, resource and victim management.
- GIS-centric operations
- Analytics and dashboards
- Several integration mechanisms and APIs, including embedded WebRTC, a GEMMA Service Catalog with a public data model.

• Atos has successfully launched its **Multi Agency Incident Transfer (MAIT)** solution, connecting the UK's Emergency Services Network through a fast and secure messaging system - minimizing response times.

## Secure and tactical communications

**Lifelink** critical communication solutions respond to situations where communication is a vital issue. They ensure safety and relevant response to threats. Teams in the field can efficiently communicate and share data in real time with a high level of resiliency and security. Lifelink consists of a complete portfolio covering all needs, from infrastructure to devices, including mission-critical applications, services and maintenance, with key core elements:

- Lifelink Wireless: Full range of secure private network solutions based on 4G LTE / 5G technologies including NB-IoT and LTE-M for sensors connectivity.
- Legacy-to-LTE gateways to interconnect multiple types of networks such as TETRA to LTE.
- Lifelink Hoox: highly secure smartphone solution with a high-level of data protection.
- Lifelink Hub: compact multichannel communication module that allows you to automatically switch from one network to another without interruption, including Device-to-device features.
- Mission-critical applications such as:

**Lifelink MCX Connect:** full featured broadband for mission-critical services on a smartphone that brings a new mission critical set of services including MCPTT, MCData, MCVideo and real-time geolocation. Fully 3GPP compliant, this app successfully passed the ETSI interoperability Plugtests in October 2020. It enables integration with IoT data sources, such as drones and sensors, for example to support safe city applications. It enables seamless migration to 5G, whether it is a private, public or hybrid network.

**Lifelink Multinet Series** that easily combine and record multiple network technologies from a unified C3 Command, Control and Communication platform.

- Lifelink Multinet Dispatcher combines all critical calls from different networks, such as TETRA, GSM-R, LTE, PBX, VHF, UHF or analog networks. They can be easily initiated in one step.
   Communication between the control center and field staff is always performed reliable and the required level of security is guaranteed.
  - Lifelink Multinet Recorder can record all communications at different positions of the connection and throughout the lifecycle of the incident or event. It provides support for nearly all communication technologies and is based on IP architecture and standard COTS hardware.
     NG112 / NG911 communication types are supported including voice, data, pictures, RTT, video, eCall.

## **Public warning**

**Atos population alerting** can cover a city, a region or an entire country. It coordinates different types of alerting technologies such as cell broadcasting, location-based SMS, including sirens and social media, providing a unique system that can be run by any public safety organizations. We have deployed systems in Switzerland.

## Cybersecurity

Atos provides unique end-to-end cybersecurity solutions with a data-centric and preemptive security approach to secure citizen data. We design, develop, manufacture, integrate software and hardware products, and bring a unique combination of expertise and experience in trusted digital identities, access management, data security, data confidentiality, threat detection and incident response.

Our offer is built around four core assets to accompany public safety organizations on their journey to thrive in the digital age of security, transparency, and trust:

- IDnomic / cryptovision, secure and trusted digital identities
- Evidian, identity and access management solutions
- Trustway, data security and confidentiality
- Our comprehensive offer of Managed Security Services:
  - Managed Detection and Response (AI-Driven MDR): Threat hunting, monitoring, containment and incident response
    - **Managed Security Services (MSS)**: Threat, vulnerability, identity and device management solutions
    - $^{\circ}$  CERT Services: Data forensics, breach response, red teaming, and more
    - ° Cloud security: Deploy and augment security controls. Monitor and respond to evolving threats
    - Security Consulting and Compliance: ISMS, compliance audits, security testing, zero trust, and more.

## Safe cities: How to use Big Data, Edge computing and Artificial Intelligence

Our solution allows to leverage smart cities data and enrich them with artificial intelligence and the Internet of Things to ensure the public safety of the future. This can include data sources such as CCTV, smart buildings, smart lighting, traffic monitoring, parking monitoring audio detection, IoT devices and personal wearable devices. The goal is to make this pre-analyzed data available to call takers to accelerate the decision process and better inform the PSAP.

• Atos Urban Data Platform is an innovative solution for cities that collects, stores and performs big data analytics from security and emergency information to provide intelligent incident response. By collecting and analyzing data from multiple open sources, this solution provides insights to trigger and manage a real-time response.

Predictive analytics optimize resource management, and the secure exchange of data between systems enhances inter-agency collaboration. For example, the platform can interface with GEMMA to keep the public informed of an incident, making it easier for emergency teams to operate.

- Atos provides a range of edge computing servers:
  - BullSequana EX series for trusted AI inference outside the datacenter, available in rack, desktop or mounted format
  - BullSequana ES, a 5G-enabled compact and ruggedized server for plug & play analytics.

Atos developed two offerings in AI Software:

- Atos Computer Vision Platform: end-to-end platform providing pre-trained and customizable AI models powered by BullSequana server range or the cloud for video and image data analytics in real time. Features Ipsotek VISuite software (deployed in +600 projects in +30 countries). More than 100 AI models are available with >99% accuracy and are enhanced with 5G
- Outcome-driven AI Platform delivering tailored vertical AI solutions thanks to our +300 data scientists.

All major products used in our public safety solutions were developed by and for Atos and remain Atos intellectual property. All products have been implemented based on both European and North American standards. Atos has the organizational and technical scope and expertise to perform the role as systems integrator in large national-scale public safety projects.

Atos is recognized as the Global Leader in Edge AI in ISG's Provider Lens™ 'Internet of Things – Solutions & Services' 2021 and 2022 Quadrant Report.



# Attentive Quadrant Sdn Bhd

#### Big Data Cloud Services Cyber Security Disaster Management

Attentive Quadrant Sdn Bhd (AQSB) is a full fledge multi-discipline Information Technology company that is fast emerging IT company in Malaysia. We develop and customize software to Client's unique requirements. We are pioneering in-house software development that includes Uniqlog, Cognisense and Document Central Solution. Having a team with more than a decade long experience in Customer Software Development, we believe that we can realise our client's application

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software solution needs. We work closely with our clients to understand their requirements in achieving their objectives, customizing solutions according to their expectations.

## **Key Products Highlights**

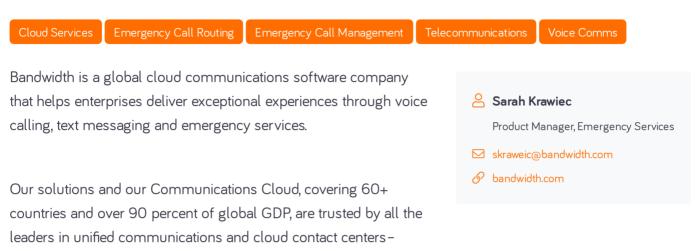
- **Cognisense**; a Cloud-Based Intelligent Monitoring System which includes: Temperature, Humidity, Power loss detection, Current sensor measurement, Smoke detector, Water leak, Log and historical usage patterns on server room, generate notifications for early detection and alerts. Advanced analytics such as rate of change analysis, anomaly detection is being used to help provide insights and early warnings to the customer.
- Uniqlog; a logging management intelligence system that automatically consolidates data from multiple devices and manages them in a central repository, ie. using Hadoop Big Data ecosystem. Administrators provides the convenience of monitoring to prevent down time by early detection of critical areas.
- Terminal Access Controller Access-Control System Plus (TACACS+) system solution to manage security aspects of Authentication, Authorization and Accounting for terminal access control of network devices, typically routers in large networks for Telco companies, some which consists of up to 30,000 devices. Our solution can handle multiple types and brands of routers or any other devices required by our customer, as well as supporting IPV6 Addresses. All the configurations are easily managed through our customized web interface and systematic password flow and management. Multiple instances and a Centralized Control Management (CCM) Web Server provides users with High Availability as well as a single point of configuration, management, and reporting.
- MyDoma; is an easy-to-use document management solution that allows businesses to control the production, storage, management and distribution of electronic documents. MyDOMA transforms your manual system by capturing information from paper documents and converting it into digital formats. It is also cloud-based, granting you more flexibility compared to a local network.

## **Key Project Highlights**

- Integrated Forecasting Gas Optimization (IGFO) Systems. The system is used to forecast gas production on 56 wells that is managed by Sarawak Gas
- Corporate Sector Equity Database Version 2 (CSED V2) Application System. The system involved complex calculation and analysis of Companies Shares, Net Asset Value and PAR Value using SSM Data, JPN Data and Bursa Data.
- AbleAce Raakin Integrated Islamic Murabahah System (ARIIMS). Developed a web based commodity murabahah system that includes commodity stocks such as Crude Palm Oil (CPO), Rubber, etc. Core functions of this system are to handle commodity transactions between Asset Suppliers, Customers (Banks, Trading Companies, etc) and Counter Party (Purchaser Agents). Reporting consists of Monthly Summary Report, Daily Stock In-Hand, Purchaser Request, Seller Offer, Purchaser Acceptance, Holding Certificate and Delivery Order. Currently the system is being used by 50 banks from 9 countries.
- Integrated Production and Forecasting Environment (IPFE) Migration Project. Migration of IPFE Engine from IBM PSeries AIX 4.3 platform to Red Hat Intel on VMware environment, redevelop C++ Engine and Libraries to increase performance as well as enable virtualization capabilities and reduce calculation time of scenario forecasting from 6 hours to less than 1 hour.
- As-Built Drawing Management System (ADAMS). Re-Engineering of ADAMS for PLUS Berhad. Web based As- Built Drawing Management System for Projek Lebuhraya Utara Selatan Berhad (PLUS) the main scope are Data migration from existing As built management system to the new database and to update data source Metadata by using OCR features Indexing Engine tuning.



# Bandwidth



including Amazon Web Services (AWS), Cisco, Google, Microsoft, RingCentral, Zoom, Genesys and Five9–as well as Global 2000 enterprises and SaaS builders like Docusign, Uber and Yosi Health. As a founder of the cloud communications revolution, we are the first and only global Communications Platform-as-a-Service (CPaaS) to offer a unique combination of composable APIs, owner-operated network, and broad regulatory experience. Our award-winning support teams help businesses around the world solve complex communications challenges to reach anyone, anywhere. For more information, visit bandwidth.com.

Specifically, Bandwidth's emergency solutions provide fast, reliable call routing and highly-reliable location management capabilities. All supported by Bandwidth's white glove support and subject-matter expertise on call 24/7/365.

## **Global Emergency Services**

Because emergencies know no borders, Bandwidth's global emergency services footprint spans across 38 countries, including US and Canada and an additional 26 countries in the EU. Our country-specific VoIP emergency solutions meet the local regulatory routing rules to ensure our customers' most important calls route to the right PSAP.

## Emergency Calling for VoIP and Unified Communications

Bandwidth offers simplified address provisioning and address validation, as well as seamless call routing, ensuring public safety knows where users are when a 911 or 112 call is made. We are compatible with leading enterprise PBX and cloud communications platforms from Asterisk, Avaya, Broadsoft, Cisco, Metaswitch, Microsoft, Mitel, NetSapiens, Ribbon, ShoreTel, 3CX and much more.

## 911 Dynamic Location Routing

Organizations with nomadic VoIP users have the ability to provision precise address information separately from user information (caller name / callback number), then pair these two data points together at the time of a 911 call. The result is more precise call routing and improved dispatchable location accuracy.

# US & Canada Emergency Calling API

Embedding emergency calling functionality directly into your application or IoT device means your users are never more than a button push away from getting the help they need, when and where they need it--and even when they're not near the location of the emergency.

# Beijing GS Technology Co., Ltd

#### Big Data CAD

Disaster Management

Information Analytics

**Beijing Global Safety Technology Co., Ltd** (also known as GSAFETY, stock code 300523) is a high-tech enterprise sole spin-off from Tsinghua University, which is the only achievement conversion company of the Public Safety Research Institute of Tsinghua University. In July 2016, the company was successfully listed on the Shenzhen Stock Exchange.

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GSAFETY is an international public safety products and service provider,

focusing on government and emergency management departments, large enterprises to provide the monitoring platform system, emergency equipment, product sales and technical services for Fire Safety, Industry Safety, Emergency Management, City Safety Operation Monitoring, etc. Also providing the services for Early warning information release, Wisdom air-defence, Environmental safety, Campus safety, Social security and Safety culture. Providing top-level design, construction and operation service for urban public safety.

GSAFETY is committed to the progress and industrialization of public safety technology. In terms of key technology systems and equipment of public safety emergency system and urban safety, it has a complete independent intellectual property and a series of core technology, making over 500 software copyrights and patents, being rewarded the National Science and Technology Progress Award.

GSAFETY started to export key technologies in the field of emergency response to overseas in 2011, and established a subsidiary **Beijing GS Technology Co., Ltd.** in 2013 to focus on overseas business areas. Meanwhile **Beijing GS Technology Co., Ltd.** has been providing solutions and platform in more than 30 countries such as Latin America (Ecuador, Venezuela, Dominic Rep., Trinidad and Tobago, etc.), Africa (Angola, Algeria, etc.), Asia (Indonesia, Singapore, Brunei, Laos, Philippines, Macao of PRC, etc.) and has been providing a series of technical services covering expert consultation, top-level design, customized technology R&D and construction, system integration and deployment, technical support and expert training, etc. These projects significantly improved the local public safety situation and eco-nomic and social prospect.

# Key technical solution:Computer Aided Command and Control System (GS-CACCS)

We have been engaged in Computer Aided Command and Control System (hereinafter referred to as "CACCS") for more than 15 years. We deployed National CACCS for Ecuador, Dominican Republic, Angola, Philippines, etc., significantly improving the responsiveness and performance of local emergency forces. After years of development, we build the whole life-time GS-CACCS product which can be easily deployed and smoothly upgraded.

GS-CACCS adopts component-based business units, coupled with flexible deployment features in different police scenarios. With basic functions of unified call-taking, visual command and dispatch, and intelligent decision support, GS-CACCS also integrates disaster response modules to handle major emergent events in a holistic manner, and supports fusion communication, multi-dimensional data analysis, situation awareness and analysis. This highly reliable, easy-to-use system can achieve high availability under extreme circumstances. Moreover, we always believe the services play the critical role for the customer. Based on the industrial best practice, we can provide professional tailor-made operation maintenance service, technical support service and systematic training solutions, furtherly ensuring smooth operation and system continuity.

## Successful Case Introduction: ECU911 Project in Ecuador

In 2011, GSAFETY undertook the software development and technical integration design of the ECU911 project in Ecuador, helping Ecuador build 16 command centers at the national, regional, and local levels nationwide. The ECU911 system integrates professional resources from multiple departments and more than 87% of the response time can be controlled within 3 minutes, and more than half of the resources can reach the incident scene within 10 minutes.

The completion and operation of the ECU911 system has significantly improved the efficiency of emergency response and public safety in Ecuador. Since the establishment of various centers in 2012, the total number of police calls in Ecuador has increased at a rate of more than 10% per year, indicating that public awareness of the ECU911 system in Ecuador is gradually increasing. According to the statistical data in July 2016, the number of malicious crimes handled by ECU911 centers decreased by 23% compared to the same period in 2015. And Ecuador's 2019 Global Peace Index was raised to the 3rd in Latin America after the system deployment.



# Beta 80 Group

CAD Caller Location eCall Emergency Apps Next Gen C

Beta 80 Group, with over 30 years of experience in Public Safety, is a global leader and reference for PSAPs and other Emergency Management authorities worldwide.

With more than 100 PSAPs over disciplines like 112 Call taking, EMS, Fire, Police, 116117 and Coast Guard, we guarantee safety for more than 67 million citizens in 3 continents, with a 100% customer retention rate.

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Beta 80 has become one of the few companies in Europe and beyond to be technologically independent in the public safety and emergency business. We can deliver an end-to-end project, worldwide, covering every aspect of a Contact Center / Control Room infrastructure.

Our portfolio now includes:

#### Communications

- A lightweight multi-tenant SIP-PABX, with voice recording.
- A SIP-based eCall modem, ready to manage NG-eCalls
- All the core components of NG112 ESInet (ESRP, ECRF, LIS and Forest Guide)
- Software-based SMS gateway, based on SMPP protocol.

#### Call geolocation

- AML server, to receive and process AML messages
- Network-based location server (cell-based location and landline call location)
- Smartphone app for emergencies, capable of delivering geolocation and other metadata about the user, certified with PEMEA protocol
- HTML-5 based service, that geolocates the caller through the smartphone's browser and enables videocall, chat and file sharing.

- Our jewel of the crown, Life 1st CAD. A web-based, multi-tenant, SOA-based platform, ready to manage processes coming from the traditional 112, Fire, Ambulance, Police, Coast Guard agencies, but also used in private security and other facilities.
- Life 1st includes incident management functionalities, an intelligent dispatch engine, capable of defining response plans made of vehicle, crews, stations, and tools for the rescue.
- Incident triage filter totally customizable and configurable to perform the right questions and reach the correct incident qualification.
- Mobile CAD to be used on vehicles, for a tracking of dispatch operations, status advancement reporting, route navigation
- Mobile application for first responders, used to alert volunteers and perform life-saving manoeuvres and map AED (defibrillators) nearby an incident.

#### GIS

- Open-source lightweight GIS platform, compatible with the most used map formats, including ESRI shapefiles, Google maps, OSM and many more.
- An intelligent routing algorithm to select the most appropriate resources for the dispatch.
- Geocoding and reverse geocoding of addresses, with a google-like search engine.

All our products are software-based, virtualised, and not requiring any special or proprietary hardware to be delivered.

We provide 24/7 customer service worldwide and process consultancy, to optimize the capabilities of the customer to use the new installed Life 1st CAD at its best.

# bevuta IT GmbH

#### Accessibility Caller Location

Emergency Apps

Emergency Call Routing

Next Gen Comms

We are bevuta IT, a Germany-headquartered software company. Our team consists of tech enthusiasts and other curious people from all over Europe. Together we build and operate SaaS products like DeployBot, our hosted CI/CD system, and nora, a nationwide emergency call system in Germany. We also work forward to build further cool, new products that make lives easier. Our ultimate goal is to improve the way we live and work together.

Andreas Matthies
 Captain
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At bevuta we truly believe in working at eye level across the whole team – from interns to top management. We try to avoid cargo cult and bullshit bingo as much as possible. We value honesty, dedicated work and attention to detail.

Open source and open knowledge are really important to us. We run almost all our software ourselves, for example GitLab, Mattermost, Redmine, Zammad, Prometheus, Grafana, our mail servers and much more, all under NixOS.

## Providing public safety via an emergency call app

On behalf of the German federal states, we build and operate nora – the official emergency call app. nora connects you directly with the responsible police, fire brigade and rescue service emergency control centres – just like calling 110 or 112.

## Who is nora intended for?

Anyone who needs rapid assistance in an emergency situation anywhere in Germany can use the emergency call app.

nora is particularly useful for people who cannot use or have difficulty using the telephone, for instance on account of a speech or hearing impairment, or because their German language skills are not advanced enough to enable them to communicate reliably via telephone.

nora is structured so that users can send an emergency call with the most important information even if they know little German and without having to speak. Icons and symbols, clear texts and an intuitive user interface make it easy.

### What are the advantages of nora?

- Emergency call without speech: nora makes it possible for people to make an emergency call themselves even if they can't call the emergency numbers. This makes the emergency call app equivalent to voice emergency calling for people with hearing or speech impairments.
- Location determination: nora is also useful when you don't know exactly where you are. The app uses the geolocation function of your mobile device to determine the location of the emergency and automatically sends this to the responsible emergency control centre.
- Chat-based communication: nora lets you communicate with the emergency control centre via a textbased chat. However, the emergency control centre will also send help even if you don't use the chat.
- Silent emergency call: nora can also be used in situations in which the emergency call needs to remain unnoticed. That is why the app comes with a silent emergency call function for threatening situations.

## **blacklinesafety**

# **Blackline Safety**

Caller Location

Cloud Services

Control Room Integration

Disaster Management

Information Analytics

Blackline Safety is a global connected safety leader that helps to ensure every worker gets their job done and returns home safely each day. Blackline provides wearable safety technology, personal and area gas monitoring, cloud-connected software and data analytics to meet demanding safety challenges and increase the productivity of organizations with coverage in more ➢ Inna Rabkin
 Technical Director, Safety Operations Center
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than 100 countries. Blackline Safety wearables provide a lifeline to tens of thousands of people, having reported over 161 billion data-points and initiated over five million emergency responses. Armed with cellular and satellite connectivity, we ensure that help is never too far away. For more information,

visit BlacklineSafety.com and connect with us on Facebook, Twitter, LinkedIn and Instagram.

# Bliksund Denmark A/S

Accessibility Control Room Integration Drones Resource Management

# Digital tools for emergency situations providing control, insight and common situational awareness

You depend on timely and correct information in emergencies and everyday work to make the best possible decisions. With Bliksund you get a better overview of routines, people, equipment, and the situation. Cathrine Thanning

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- & bliksund.com

Our field experience combined with customer insights enables us to deliver impactful solutions and innovative technology. We have experienced time pressure, stress, misunderstandings, and limited resources. Therefore, we create the best solutions to facilitate your workday with a human touch.

Bliksund is an international software company with its roots in the southern parts of Norway. Since we started up in 2010, we have delivered socially critical solutions which help emergency services both in daily operations and emergency situations. We are proud to say that the company has become an industry-leading vendor of digital solutions to emergency services and other industries internationally. The acquisition of Danish Incendium A/S in 2022 allowed us to add video streaming solutions tailored for emergency situations to our portfolio.

Many of our employees come from the field and have first-hand experience as former doctors, paramedics, nurses, firefighters and rescue workers or defence. They know what is at stake and how important intuitive and user-friendly solutions are to ensure control, insight, and common situational awareness. By using our electronic patient care record, real-time video, and a comprehensive operations management system, you get the necessary oversight and insight to ease and facilitate your daily work.

Regardless of sector, our mission is to make your work easier, safer, and more efficient. Read more about us here www.bliksund.com

Our solutions: IncidentShare - secure live streaming

#### BLIKSUND DENMARK A/S

IncidentShare is a secure, intuitive, and fast solution for reception, management and sharing of real-time video. It is developed in close collaboration with users within fire and rescue, police, healthcare, and insurance. Real-time video gives you a better overview of the incident and ensures that everyone quickly obtains common situational awareness.

Through virtual presence, you can free up valuable time and ensure quick exchange of information and efficient collaboration. You can manage the incident effectively, quickly assess the situation and coordinate appropriately, sending the right crew with the right equipment, skills, and training.

#### **GRID** - Operational management

GRID is a cloud-based operations management solution that gives you a holistic overview of resources and processes. You get an overview of your crew, resources, competence, and exercises, as well as shared procedures, guidelines, and communication support.

The solution is modular and developed in close collaboration with professionals from the emergency and healthcare services. It can be tailored to your organisation's needs, always keeping the user experience in mind.

GRID takes care of all your needs to keep track of vehicles and equipment as well as your staff's competence, courses, uniforms, and exposures. It also enables quick and efficient communication in a shift work environment where you can communicate directly with individuals or groups via SMS and news bulletins. It allows you to schedule your send outs with predefined distribution lists, or publish directly to information screens.

#### EWA - A complete ePCR solution for the prehospital area.

Bliksund EWA – Emergency Worker Assistant, is an electronic Patient Care Reporting solution for ambulance services and a real-time live view board for the emergency room providing updated patient status throughout the emergency care chain. The solution secures accurate and complete recording of patient information, effective flow of communication, and improved patient care and safety.

The system consists of a tablet-based app for use in ambulances, a live-view display in emergency departments, a medical record server for secure storage of patient data, as well as integration with emergency operations centres.



# **Bosch Service Solutions**

#### eCall Emergency Apps

Emergency Call Routing

Emergency Call Management

Third Party Services

**Bosch Service Solutions** is a leading global supplier of Business Process Outsourcing for complex business processes and services. Using the latest technology and the Internet of Things, the business unit develops integrated and innovative service solutions in the areas of Mobility, Monitoring, and Customer Experience. Around 10,000 associates at 27 locations support national and international

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customers in more than 35 languages, primarily from the automotive, travel and transportation, and logistics sectors as well as information and communication technology. We are consistently expanding our IT and consulting expertise to offer holistic service solutions from a single source.

In 2012 we started the Bosch eCall Service in Europe which makes an important contribution to road safety, in line with Bosch's guiding principle of "Invented for life". Today, Bosch eCall Service is active in more than 50 countries allowing rescue operations to be carried out in an even more targeted and rapid manner thanks to multilingual capabilities and the effective way in which false alarms are resolved. We are continuously developing our partnerships with PSAPs to provide the best service to all parties involved in the rescue chain. Currently our solution supports around 20 million vehicles worldwide and has already been able to help many people.

We want to continue to grow and expand our position as a leading provider of innovative mobility and service solutions for greater safety and convenience on the roads. In 2022 we expect well over 25 million vehicles equipped with Bosch eCall Service.



# Buehler

#### Project Management Specialised Consultancy

We are engineering consultants specialised in communication and information systems as well as in telecommunication and mobile communication systems.

We are management consultants specialised in organisation and corporate development together with process optimisation and project management. Hermann Bühler

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For complex critical infrastructure including public safety we are one of the few competence centres in Austria and Central Europe. Our range of services includes engineering consulting for electrical engineering, services in information technology as well as management consulting including business organisation.

We are an efficient team with extensive experience and high-level academic qualification. Profound and experienced understanding builds the basis of our expert opinions, analyses and studies, planning and implementation projects.

We are likeable, empathic, focussed and persistent. We stand for consulting for fact- based sustainable and economic implementations. We stand for engineering services with well understood conceptual and theoretical fundament.

We count small enterprises as well as large companies, governmental bodies, national and international service providers and private and public network operators for energy, telecommunications and mobile networks to our customers.

Innovation in technology and methodology is one of our core competences. We are actively taking part in innovation and research activities. We have close contact with the Universities of Technology in Vienna and in Graz at national level and participate internationally in projects in the COST-Framework (European Cooperation on Scientific and Technical Research).

From our office based in Mödling, just south of Vienna, we have been managing our national and international projects since our foundation in 1995.



# Cestel



CESTEL is also a leader provider for eCall Systems and video

interpretation service for deaf people (112 SVISUAL) allowing this collective to make and receive video calls to everyone including 112 Centers.

CESTEL has also developed 'DIFE' (advanced interaction service for emergency centers). DIFE is integrated with Deveryware-Ghale routing PEMEA system according to demanded services (multi language). Through DIFE, PSAPs can send useful information (environmental alerts, traffic restrictions, missing people alerts, etc.) to the configurable multiplatform APP and, at the same time, allows each citizen to send anonymized information back to PSAPs during the call (position, disabilities, age, gender, attention language preferred, allergies, blood type, etc.) something extremely valuable in emergency calls.

CESTEL's vision is to be a leader in mission critical customers, through the development of powerful interactive communication solutions to help institutions increase service and reduce operating costs. CESTEL has accomplished this through a talented and experienced staff, focused on exceeding customers' expectations for delivery, quality and professionalism. Furthermore, every application is developed using the latest proven technology or one that is developed within CESTEL's own hardware and software Research & Development labs.

CESTEL belongs to the CESTEL GROUP as well as NATURAL VOX (www.naturalvox.com), SYSCOM (www.syscom.es) and DTEC (www.dtec-bio.com), experts from these companies will join Cestel's tasks on this projects.



# CityGIS

Automatic Vehicle Location

CAD Disaster Management

GIS Public Warning

#### Custom fit 112 software

When every second counts

**CityGIS** provides sophisticated GIS software for 112 centers and its connected vehicles, creating a large overall 'common operational picture '. CityGIS systems have it all, from A to Z, from the incoming call at the Center to automatic navigation in vehicles, to transferring information, of the highest quality, designed for the mission critical 112 operations, and

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 Project Manager
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backed up by many years of experience. Every innovation we pursue is based on our mission statement: "To provide the best geographical coordination & information systems where every second counts." The results of this ambition are found in our wide range of products. For example: web based GIS, back office systems, automatic address retrieval, database, GPS, 3D, camera integration, communication, navigation, mapping, disaster management, personal locators, covert operations, ePCR, and a new vehicle multipurpose hardware platform with remote management and maintenance. Our products can be placed across the whole spectrum of critical communication, for example:

- CityGIS 8.0 powered by Orca is our latest version web based (HTML5) GIS and is designed for emergency centers and vehicles for dispatch. Within this dynamic and intuitive client the dispatcher can easily find needed information and share it with colleagues, with mobile systems in the vehicles or with other emergency centers. CityGIS 8 is designed to be easy to master and to get results fast without many actions. The systems' modular structure makes it easy to connect to new technologies or sources of information. It's built to evolve. This netcentric web based Geographical Information System architecture increases efficiency, cuts down costs and simplifies maintenance.
- **CityGIS Navigator** is a multiplatform navigation that quickly and safely navigates the vehicles to an incident. Meanwhile all necessary information about the incident, about victims, the surroundings and other need-to-know information is shown and easy accessible. The software also provides a platform on which a clear and direct communication between vehicle and control room is made possible.
- **CityGIS C&D (Calltaking and Dispatch)** is a web based (HTML5) version of our central emergency room system. The core principles of this development are efficient communication and an intuitive user interface, which can be deployed with the push of a button. The dispatched units will immediately receive all the needed information for a quick and effective operation.

Next to the described products we provide many more services over the whole scope of the critical network to make the work in the control rooms and on the streets more efficient and hence creating a better environment for the emergency services.

• CityGIS electronic Patient Report Form (ePRF), built in cooperation with our clients in the healthcare sector, enables paramedics and doctors to efficiently collect patient data that can be used to improve the level of patient care on the road and in the medical centers. The electronic Patient Report Form has been specially developed for the ambulance services. The touchscreen application enables paramedics to communicate with the control room, hospitals and billing systems. Due to the clear UI, ride and patient data can be registered and exchanged quickly. Ride and patient data are sent directly from the control room to the electronic Patient Report Form. Subsequently the paramedics are able to add extra information about the location or the patient. Once again, increasing efficiency of communication and saving valuable time.



Public Warning

# **Comtech Technologies**

Caller Location Emergency Call Routing

Comtech is a leading global provider of next-generation emergency systems and secure wireless communications technologies to commercial and government customers. From dense urban environments to regional and national deployments, Comtech designs, develops and deploys state-of-the-art communications solutions for public safety. Comtech's innovative solutions support thousands of agencies affecting millions of lives globally.

Com Magnusson Senior Director Tom.Magnusson@comtech.com

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Emergency Call Management

Comtech's emergency communications solutions are built on 40 years of research and innovation in the application of advanced hardware and software technologies for public safety. Purpose-built for public safety, Comtech's next-generation (NG) platforms provide modular, scalable solutions that seamlessly migrate legacy emergency communications operations to modern European Emergency Number Association (EENA) standards.

Comtech combines cloud-based caller location services with mapping and real-time data to provide a complete next-generation communications solution for public safety on a global scale. Emergency communication centers need accurate, quality, and holistic location data to respond to public safety calls for service. Comtech's platforms provide the most accurate location data available with caller information, realtime traffic, weather, routing, and public information into a single common operating picture. Comtech also has a wireless emergency alert solution that is currently employed by governments worldwide.

Streamlining processes and collecting critical information in emergency situations, Comtech's portfolio of public safety solutions and location technologies have been developed in accordance with rigorous industry standards and offer flexible, adaptable architectures that will scale to any organization's needs or EENA requirements. Comtech has a wide variety of solutions which include, but are not limited to:

- Virtual Mobile Location Center (vMLC) Our Xypoint<sup>®</sup> Virtual Mobile Location Center (vMLC) is a standards-compliant, commercially-available system used for the location of mobile devices connected to 2G, 3G, 4G-LTE, 5G NGC, and Wi-Fi networks. It is particularly applicable to public safety service providers and commercial applications.
- RF Signature Processing (RFSP) Our RFSP solution offers complementary performance in situations where other location technologies fail for many reasons, for instance, poor A-GPS coverage, device restrictions on allowed positioning methods, and lack of A-GPS capability in the device. This is especially useful in public safety, law enforcement, and a game-changer for commercial applications.

- Advanced Mobile Location (AML) Our Advanced Mobile Location (AML) solution leverages devicebased position estimates to support Emergency Responders. It can be deployed either standalone or enhanced with our network-based Location Platforms.
- **Comtech Passive Location** Real-time location that requires no device or network signaling and supports the most popular value-added services for application providers and provides turn-key location-based marketing and public safety solutions.
- Solacom Call Handling The most flexible multimedia emergency call management solution for Public Safety Answering Points (PSAP). Specifically engineered to streamline 9-1-1 call handling and processing, the IP-based solution enables the real-time collection of critical voice, text, data, and video information, and speed delivery of rich situational awareness data to first response teams.
- **Solacom Insights** A reporting and analytics application specifically designed to assist call taker staff to know their operations so they can better plan and manage their workloads.
- Solacom Messenger Readies call takers with the ability to collect, process and share previously unavailable live incident information such as text, photos, and video via short message service (SMS)/ multimedia messaging service (MMS), from one integrated desktop.
- **Solacom Cybersecurity** A turnkey, enterprise-grade service that combines a deep understanding of public safety operations with expertise and technologies from leading IT security companies designed to combat and protect operations against potential cybersecurity threats.
- SmartResponse<sup>™</sup> Real-time situational awareness in a common operating picture for security agencies and first responders using intuitive geospatial mapping interface and location intelligence to increase the efficiency of first responders in emergency situations.
- **Comtech Maps** Empowers first responders with an extensive library of map data that can be extended with customer overlays providing additional contextual data. This solution is tailored to any organization's needs.
- Wireless Emergency Alerts (WEA) Enables government officials to inform the public about lifethreatening events by automatically delivering emergency alerts to mobile devices using the government alert gateway.

Comtech's suite of dependable public safety solutions provides complete, end-to-end call control designed to manage emergency communications, from any device, at any time, from anywhere, and in any format — voice, data, or video. Our network-to-desktop solutions are built and designed for IP-based call routing, IP-based Customer Premise(s) Equipment (CPE) and database systems, and for converging traditional voice and data into the network.

Comtech has achieved many industry firsts in North America including being the first to deploy a statewide NG system followed by deploying the first province-wide NG system in Canada. Globally, Comtech completed the first continent-wide NG system deployment in Australia.

Comtech builds connectivity that sets ideas free. Comtech stands ready to improve public safety and security in Europe and worldwide.

# CreaLog Software-Entwicklung und Beratung GmbH

Innovative, successful, customer-centric

Cloud Services eCall Emergency Call Routing Next Gen Comms

CreaLog is a leading vendor of ICT carrier solutions and IMS cloud native service delivery platform solutions for communication service providers (CSP). With our concise expertise we help CSPs to implement new services and migrate their existing services to IMS and into the cloud.

These solutions include SIP application servers (SIP AS), net centric call recording, value-added services (voice, text messaging and mass calling), MRF, business voice VPN and others.

SIP AS: The main functions of the standards-based SIP application server are local number portability, enhanced call routing, conference bridge services, and unified messaging. It enhances IVR services with speech recognition and chat solutions.

We have been delivering innovative and reliable telecommunications solutions for almost 30 years and received multiple awards as a result. Customers in many countries in Europe and Africa trust our solutions. These include Deutsche Telekom, Vodafone, A1 Telekom Austria, Sunrise, Swisscom, POST Telecom Luxembourg, Monaco Telecom and Unitel.

## **Next Generation Emergency Call Steering & Termination**

CreaLog emergency call steering and routing significantly improves the accessibility of emergency call organizations and facilitates emergency call handling. The enabler is a routing system integrated into the CSP's voice and IMS networks as well as ESINET and NG112.

## Net-centric eCall Modem and Router

We enable telecommunication companies to meet the challenge of processing eCall emergency calls and their supplementary data in their respective mobile networks and routing them to the PSAPs according to EU specifications.





CreaLog's' net-centric eCall Modem and Router collects the MSD data, stores this data in the Location Information Service (LIS) and forwards the emergency call to the PSAP. This solution reduces complexity in the PSAP equipment and leads the path to NG112 in your country.

## Enterprise Communication Recording (ECR)

Our net-centric Enterprise Communication Recording (ECR) service ensures compliancy when recording emergency communication. This highly secure net-centric Telco service is invoked on calls of any registered employee when using his or her business phone as part of his or her job, be it in the office, on the move or in home office. The recordings can either be stored for compliance reasons, or used for quality assurance.



# CSAM Public Safety

Artificial Intelligence CAD Control Room Integration

n GIS Multimedia Comms

In emergency response situations, every second counts. Being in the right place with the right resources as fast as possible saves lives, reduces suffering and prevents property damage. All of this requires clear communication and smart management of limited public safety resources. Our complete software solutions provide just that – robust systems for managing every aspect of emergency response.

#### 🐣 Henrik Larsson

Vice President Sales and Marketing

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CSAM Public Safety has been supplying world-class emergency management software systems for more than 35 years – systems in which robustness and superior situational awareness are the key to success.

We provide high performance software products, develop client specific solutions and offer a wide range of professional services that help some of the world's most technologically advanced customers optimise their operations using real-time geospatial information.

In February 2021, CSAM Health Group AS ("CSAM"), the leading provider of niche eHealth solutions in the Nordics, acquired the Public Safety business of Carmenta Holding AB of Sweden. For more information see: CSAM Health Group AS acquires Carmenta's Public Safety Business – CSAM – The eHealth Company

#### **Our Customers**

Our customers use our High Availability products to build mission critical solutions used in national, regional and local operations within emergency call management, call positioning, resource management, rescue deployment, border surveillance and resource dispatch (ambulance, fire, police, etc.).

CSAM Public Safety have references in several countries, for example, in Sweden, Denmark, Spain, Slovakia, Croatia, Greece, etc. A relevant example is the national multi-agency system in Sweden, which manages, amongst other emergency services, call taking and dispatching for all emergency ambulances in the country.

In summary, we propose to you not only a well proven and true non-stop platform, but a future proof system that is continuously evolving according to the needs of our customers and the public safety industry.

By using the CSAM Public Safety solution, customers become part of an unique international family where experience with the system can be exchanged and new ideas generated for influencing the future direction of our solution.

Depending on the client's location and requirements, CSAM Public Safety can engage directly with the client or via a trusted system integration partner established close to the client.

## **Our Highlights**

- 35 years development and operations of Emergency Response Solutions (since 1986)
- Integrated end-to-end solution covering the complete Emergency Response workflow
- 100% proven up-time with CSAM Public Safety Continuous Operation technology
- Large national and regional installations
- Advanced multi-agency operation in the same system
- More than 3000 operator seats in live operation today
- Open solution with large flexibility for adaptation and system integration
- Highly scalable solutions build as you grow

#### **Our Approach**

Our end-to-end approach is to provide and manage a portfolio of high-quality software products that can be used to build a wide variety of customer specific solutions. Our product approach ensures that our customers have a well proven platform and, with our well-defined portfolio roadmap, a future proof partner for their most critical operations. Moving forward the systems will support more automized functionality to reduce the total time to response, efficient utilization of resources and communication. We are well prepared for the introduction of NG 112 services such as real-time-text, video and total conversation, leveraging our advanced IP based media communication platform.

The portfolio includes:

- Fully fledged C4IS system that integrates incident and resource management with communication systems, all in a single product
- Geographical information system (GIS) used in our mission critical solutions.
- Mobile applications intended for use in rescue vehicles providing full case information, navigation instructions and more information to the first responders leading the rescue operation
- Resource optimization using best-practice discrete event simulation

#### **Every Second Counts**

With the right decision making and resource coordination tools, the emergency response will be faster and more accurate. As efficiency increases, operating costs will start to decrease allowing a substantial saving for society, reduced suffering and lives saved.

## Our Offices and Staff

CSAM has 15 offices in seven countries, employing approximately 230 talented individuals. CSAM Public Safety is headquartered in Gothenburg, Sweden.

More info can be found at:

CSAM – The eHealth Company (csamhealth.com)



## Dejero

Disaster Management

nteroperability Solutions

Multimedia Comms Nex

Back up communications

## Resilient Connectivity for Mission-Critical Communications

More than ever, first responders and public safety agencies rely on advanced technology to improve situational awareness and response times. Transmitting real-time video and data between response personnel, incident command, and emergency communication centers requires a lot of bandwidth, and relying on a single connection leaves organizations vulnerable. Global Director, Business Development

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Dejero provides public safety agencies with resilient internet connectivity and cloud services to strengthen emergency communications.

Give your agency the most reliable connectivity solution with these benefits:

- Keep teams connected and safe on the frontlines with resilient mobile command connectivity
- Share real-time UAS video to improve situational awareness and response
- Increase your system's resilience to withstand natural and human-caused disasters recognizing that single fixed line carrier connections have limited performance and reliability
- Ensure that emergency calls are quickly and accurately delivered in three seconds or less
- PSAP resiliency to reduce 1-1-2 system outages and downtime eliminating the threat to critical operations if the hard-wired connection were ever compromised
- Easily integrate with existing IT infrastructure.

Where every second counts, Dejero delivers reliable connectivity to support real-time situational awareness to make mission-critical decisions—even when commercial and priority networks are congested, damaged, or have coverage gaps in urban and remote locations.

Unlike network failover solutions, Dejero's *Smart Blending Technology*<sup>™</sup> simultaneously blends multiple cellular and satellite connections to deliver greater bandwidth, expanded coverage, and enhanced reliability.

#### Resilient Connectivity Solutions for Mobile and Fixed Locations

Our GateWay devices are designed to deliver reliable connectivity for general-purpose applications including voice, video, and data while in nomadic or mobile environments, as well as add wireless connectivity to fixed locations.

Powered by Dejero *Smart Blending Technology*<sup>™</sup>, GateWay devices aggregate diverse connectivity paths from multiple providers to deliver enhanced reliability, expanded coverage, and greater bandwidth. With integrated moderns that connect to external antennas, GateWay devices provide optimal performance and support VPN tunneling for secure access to private networks.

#### Learn more: https://www.dejero.com/products/gateway

#### Real-time Video Solutions for UAS Situational Awareness

Dejero's mobile transmitters work seamlessly with your existing UAS solutions to send high-definition tactical video in real-time and perform in scenarios where infrastructure has been damaged. Combining diverse connections from multiple providers, Dejero intelligently manages the fluctuating bandwidth, packet loss, and latency differences of individual connections in real-time to enhance your connection bandwidth and reliability, while expanding the areas you can operate in.

The ability to deliver low-latency, real-time video and data creates new opportunities for UAS programs from improving situational awareness to enhancing search and rescue capabilities beyond visual line-of-sight.

#### Learn more: https://www.dejero.com/industry/public-safety/uas-situational-awareness

For additional information please contact Jehan Karim or visit our public safety website.

## Deveryware

#### Accessibility Emergency Apps

ps Emergency Call Routing

outing Multimedia C

Next Gen Comms

Bertrand Casse

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GHALE Business unit Director

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The Deveryware group, which includes our emergency services business unit, has joined forces with Flandrin Technologies, the cyber branch of the ChapsVision group.

Founded in 2003, Deveryware stands as one of the leading companies in investigative technology and global security services, and is committed to serving the security of States, companies and populations thanks to innovative digital technologies and high-value-added solutions.

The Group's offer, together with that of its subsidiaries, Tracip and Crisotech, covers judicial investigation and digital forensics, real-time geolocation platforms, cybersecurity, language analysis, anti-fraud services, crisis management and emergency communications.

Deveryware's capacity for innovation, commitment to values of respect for privacy and unprecedented experience and knowledge of the Homeland Security market, make the Company the trusted partner in public safety and security affairs. With a turnover of €41M in 2021 and its 160 collaborators, the Group is established in Europe, Africa, North and Latin America.

#### **Emergency communications**

Over the last years, Deveryware has gained considerable know-how and expertise in public safety, contributing to multiple European projects involving emergency services. Since 2015 Deveryware has created a platform, GHALE, that powers the services of the PEMEA standard (ETSI TS 103 478), delivering interoperability to emergency Apps, facilitating roaming and improved accessibility to emergency services for citizens experiencing disabilities or impairments.

The Deveryware GHALE platform is now in commercial deployments with the Emergency Services sector in several European countries such as Finland, Spain, Slovenia and Romania.

Furthermore, GHALE has successfully demonstrated full interoperability of PEMEA core services as well as advanced video calling with several other vendors during the latest ETSI Plug Test NG112. GHALE delivers PEMEA application multi-media communications from the public to PSAPs enabling Web-112. The idea of PEMEA is to offer App providers and PSAPs a stable standard based on typical web-based communication

(e.g. HTTP), as an alternative to the SIP-based communication framework defined by the NG112 standard. The implementation of both NG112 and PEMEA enables PSAPs to provide the best service to the public. Having both solutions enables the creation of shared and scalable multimedia services, in line with telephony operator networks and Internet application provider communication approaches.

In April 2022, after Italy, Finland, Romania and Spain, it is the turn of Slovenia to join the group of European countries that are adopting the PEMEA standard to modernize their emergency communications and exploit all the possibilities of technology for public safety. By design, the PEMEA network enables roaming. This means that Slovenian app users will be able to contact not only the Slovenian emergency centres but also the emergency centres of European countries when they are abroad. In the same way, users of other PEMEA compliant apps will be able to reach the Slovenian PSAP. The agreement was signed at the end of 2021 between the Authority in charge of emergency communications in Slovenia (Slovenian Public Safety Answering Point: ACPDR/ Administration for Civil Protection and Disaster Relief), the French company Deveryware, which is a supplier of the PEMEA network elements through its GHALE platform, and Telekom Slovenije, the leading telecom operator in Slovenia which is hosting the PEMEA network elements in its data centres and is providing highly secured communications. The deployment is planned to be finished during the first half of 2022. The population of Slovenia is 2.1 million people who will be able to benefit from PEMEA technology when contacting emergency services

### **Employee safety**

The team dedicated to GHALE has published in 2022, a white paper dedicated to emergency calling as part of business communications :

#### Difficulties related to the development of teleworking

With the development of teleworking, communications are increasingly done via collaborative applications (Teams, Zoom, Slack, etc.) built around Web technologies.

In many countries, regulations require that organizations accessing traditional fixed telephone networks (PSTN) also provide access to emergency services. But this presents significant technical challenges: Most enterprise emergency solutions work adequately for people making emergency calls in the office, where the caller's location is known. However, these solutions work less well when used out of the office.

Despite deployments of IP technologies in emergency networks, the further the caller is from the office, the more difficult it is for the telephone network operator to direct the call to the correct emergency centre.

#### Which solution for business communications?

Faced with these challenges, the white paper details the solutions provided by PEMEA (Pan-European Mobile Emergency Application), the standard that Deveryware supports with GHALE.

Location, video, chat, and text in real-time are therefore now available to companies and their employees for their emergency calls.

#### **Crisis management**

Deveryware has a crisis management department coordinated by its subsidiary Crisotech. The company specializes in advice and training in risk and crisis management and supports its clients through the entire crisis management process, from its preparation and anticipation, to its feedback. The company intervenes in missions relating to crisis preparation, advice and training, in particular through simulation. We are the first player to have invented in 2015, the "social room", to simulate the media pressure of social networks in the event of a crisis, the company is also recognized as the "Champion of France" of the crisis exercise. It also offers crisis assistance services (notably for cyber crisis situations) and crisis observation and feedback.

It also offers digital tools such as CAIAC, a geographic information system for risk and crisis management. This cartographic platform offers more than 400 layers of data on French territory, including 40 layers in real-time.



# **DS** Information Technology

Caller Location CAD

Disaster Management Emergency Call Management

DS Information Technology Co., Ltd. (short as DS) is a professional solution provider of public safety and emergency command, which founded in 1993, Shanghai, China. After 30 years of deep cultivation in emergency command industry, DS is ranked first in market share of the public security, firefighting, commanding and dispatch industry in China. With the vision of " Making Life Safer", DS is dedicated to innovation for emergency response

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technology. Meanwhile, on the way to develop better solutions and services for global customers, DS solutions always insist on end user-oriented and customizable.

As a specialist service provider of public safety and emergency solutions, DS integrates Cloud Computing, Big Data, AI, 5G, IoT, Converged Communications, which committed to providing a full range of services such as emergency command, decision support and early warning for governments and enterprises. In addition to the public safety and fire fields, specialized emergency solutions and integration services for large campus and urban governance are provided as well.

As the leading company in China's public security market, DS has been devoted to the global market. Since 2012, DS has exported the commanding solution to over 20 countries in Europe, Middle East, Latin America, Africa, and Southeast Asia, as well as the long-term service of consulting, operation, and maintenance. With all these successful experiences, DS has been kept at the forefront of urban emergency response innovation. According to the annual public security reports from the customers, the great contributing to policing efficiency and a significant increase in public sense of security and satisfaction has been made by DS' solutions and services.

For 30 years, the solutions of DS have served and been proven reliable by 500+ organizations domestically and internationally. We are willing to embrace change, fast respond to demands, deeply explore diverse scenario requirements, and take the advantage of industry knowledge, experience, and innovative technology to provide high-value solutions and services for our customers.

## All Business Scenarios Full Coverage

### **Alarm Reporting Stage**

#### Multi-Channel Alarm, Unified Access and Management

DS's self-developed communication platform has capabilities of multiple alarms access, voice and audio/ video dispatching.

- 1. Supporting a variety of alarms access, including fixed-line, mobile phone, SMS, email, and automatically alarm, etc., making multiple channels of alarm reporting available for the public.
- 2. Supporting social media alarm access. Through the public alarm APP and Facebook alarm application designed and developed by DS, the public can quickly report emergency to the command center, establish contact with the command center in the first time, and then upload evidence files such as pictures and videos related to the command center if necessary.
- 3. The **Computer Aid Dispatch** platform supports unified access and unified queuing to various channels of alarm reporting

#### **Call-taking Stage**

#### Positioning

- 1. Supporting real-time positioning of cell phones, automatically alarm devices positioning and Internet positioning.
- 2. Through the **Intelligent Positioning Platform**, the command center is able to send a SMS to the alarm reporter to request for his/her current location. After the reporter authorizes the request, his/her location will be sent to the command center and associated with the event ticket automatically, and displayed on the Geographic Information System synchronously.

#### **Standard Operating Procedure**

According to the event's category and level, the **Computer Aid Dispatch** platform can automatically pop-up the standard questions for call-taker that should be asked in the operation of call-taking, to ensure that the event-related information is recorded quickly, standardized and complete.

#### Alarm Reception, Rapid Entry of Event Information

The command center receives alarm through the **Computer Aid Dispatch** platform and then starts to record event information. Key information such as event location, phone number, and event's responsible jurisdiction are automatically entered into the event ticket through the Geographic Information System, greatly improving the efficiency of receiving alarms and speed of call-taking operation.

#### **Dispatching Stage**

#### **Onsite Situation Visible, Command Resources Visible**

- Based on the Geographic formation System(GIS), the scene situation is visual to the command center, the command operator is able to view the distributions of on-site units and vehicles, and track their real-time positions as well, which is conducive to resource allocation, accurate dispatch, and improve efficiency of command and dispatch.
- 2. After the event being located on the map, GIS can automatically display nearby cameras and onsite units, and available vehicles as well.
- 3. The command center is able to play the live videos from the nearby cameras and mobile terminals integrate with GIS.

#### Converged Video Conference, Efficient Collaboration

- Muti-Media Dispatch Platform provides video conference function for command center to handle major events or other situations which required muti agencies collaboration like command center, police stations, onsite responders, experts, and involve traffic agency, fire agency, hospital as well, supporting a variety of terminal devices access from different video monitoring platforms, so the command center and other relevant agencies are able to handle the event together timely and make decision better.
- The command center can use the Collaborative Platform to create a dynamic group (groups) to discuss how to handle a specific event, create tasks based on the event and assign to internal department operators or other department officers.

#### Releasing Instruction, Process Operation Automatically Recorded

- 1. At this stage, the command center can directly issue instructions by voice and video call to relevant departments and onsite responders through GIS and Multi-Media Dispatch Platform.
- 2. The Collaborative Platform supports the command center to create instruction ticket based on the event and allocate to involved department and onsite responders.
- The Computer Aid Dispatch Platform has capability of allocating event ticket and releasing instruction to relevant police stations or onsite responders which equipped a terminal device and deployed Mobile Dispatch Application (MDA).

#### **Event Disposal and Feedback Stage**

- 1. Division centres or police stations receive event ticket and instruction released by the command center through the Police Station Application (PSA), and then conveniently sign instructions and complete process feedback with **Mobile Dispatch Application**.
- With the Mobile Dispatch Application, onsite responders can directly sign for event tickets and instructions, complete disposal feedback, and upload evidences (text, pictures, audio, video) to command center if necessary.

#### Intelligent Analysis and Reporting

- 1. Report System provides the command center with functions of alarm-related information review, exporting and printing, including query and statistics of call-related data, event information, management-related and operators performance.
- 2. **Map-Based Police Analysis Platform** has capability of multi-dimensional data analysis, providing the command center with functions of event situational analysis, police force situational analysis, periodic and regional thematic analysis reports, and personalized export function is supported as well. It's convenient for the command center to conduct security trend analysis and comprehensive decision-making.
- 3. **Dashboard** displays the overall event situation to the command center, providing functions of multidimensional display of event-related situation and police resources-related data, such as focused event list, major event topic, and thematic analysis of responders. It supports command center to monitor the overall event process satus and responders' distribution, and it also can be used for work reports, and public media release.

## Multi-layer Command and Structures Full Coverage

#### Multi-layer Structures Coverage and Adaptation

DS's Emergency Command Solution has capability of multi-layer command and adaptation with multi-level, multi-agency, multi-business department and multi-role, so we can cover all kinds of customer's department structures and different command layers. According to customer's organizational structure, we provide suitable applications and matched function features for their relevant department or agencies, so all involved departments or agencies at different structure levels are able to joint operation, better collaborate and timely communication.

- 1. **Multi-level command mode**: the command center dispatches events and instructions to division centres, police stations and others.
- 2. Flat command mode: the command center dispatches events and instructions directly to onsite responders.

#### **Multi Modes of Event Process**

DS's Emergency Command Solution supports different event process modes based on customers' needs.

#### 1. Integrated Process Mode

The police operator handles the event process of call-taking and dispatching in one workstation. The police operator is responsible for answering the incoming alarm calls, filling in the event information, allocating the event ticket to corresponding jurisdiction and issuing disposal instructions, monitoring the event process and feedback.

#### 2. Separate Process Mode

With Computer Aid Dispatch Platform, the call-taker is responsible for answering alarm calls, and filling in event information, and then the event ticket can be allocated to specific dispatcher's workstation. The dispatcher starts to handle the event, such as event evaluation, analysis the event, and issue disposal instruction to relevant subordinate departments or field responders based on event category, or event's responsible police station or dispatcher's ID.

#### Voice and Video Convergence, Wireless Convergence

DS's Emergency Command Solution supports voice integration and video integration from different platforms and multiple terminals.

- 1. Realizing the integration of wired and wireless networks, supporting wireless command and dispatching.
- Supporting multi-terminal and across-network video conferences, realizing unified information transfer and share among different participants, such as onsite responders, experts, alarm reporters, dispatchers, and decision makers, etc,
- 3. Supporting video conference from multiple video terminal, including handsets, vehicle-mounted cameras, CCTV cameras, UAVs, iPad, etc,

Keep improving with continuous innovation, serving customer with latest technology and solution, we are committed to making life more efficient and safer.



# ELi-Technology



ELi Technology have patented a location methodology called Emergency Mobile Location, or EML (EMERGENCY MOBILE LOCATION), which provides dispatchable location to any device, anywhere, anytime. We resolve 112 challenges around inaccurate mobile location, ensuring full compliance with recent EECC (European Electronic Communications Code) directives and ETSI's TS 103 479 standard specification for NG112.

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EML provides:

- Accurate, real-time, indoor, rural, and urban location information
- A verified, dispatchable street address, including floor, apartment, and room number
- GPS (Global Positioning System) latitude and longitude

Over 80% of all emergency calls are from a mobile device and this figure will continue to rise. Accurately locating a mobile device's end-user remains a huge challenge for 112. A verified street address or "door to knock on" is not provided reliably or accurately enough which results in thousands of EU lives affected or lost annually.

Public Safety Answering Points (PSAP) rely on network and hand-set derived location (cell tower triangulation, ID, GNSS (Global Navigation Satellite Systems), and crowd-sourced Wi-Fi) for a caller's location. This information is provided on a "best-effort" basis and estimated search areas can vary significantly (30m – 3km). Additionally, privacy and data storage remain significant concerns.

The majority of 112 calls originate from inside a building as people spend over 85% of their day indoors. Current location technologies used in urban and indoor environments, especially multi-level buildings (e.g., apartment blocks, offices, schools), become inaccurate due to their limitations, GPS canyoning, distortion, and Wi-Fi crowdsourcing. Location information is always provided as horizontal (no useable real-time vertical location), meaning if an emergency caller cannot verbally confirm their whereabouts when calling from a 4th floor apartment for example, Responders must search. This search area could include several city blocks, multiple buildings, and numerous floors and rooms. This is time consuming and frustrating, leads to delays in help, and poorer outcomes.

Inaccurate location information causes further issues with 112 call routing, including proximity to EU Member State borders, and different regions, provinces, and jurisdictions. It also impacts transition to Next Generation Emergency Networks and will fail to support the 100 million+ EU citizens with a disability who instead must rely on voice only calls for 112.

These issues are so significant that on the 16th of December 2022 the European Parliament established supplemental regulations to Article 109 directive 2018/1972 (Commission Delegated Regulation (EU) 2023/444)) to build on improving the compatibility, interoperability, quality, reliability, and continuity of the emergency service in areas related to:

- Accurate Emergency Caller Location
- Accessibility for ALL EU citizens
- Routing to the most appropriate PSAP
- Transition to Next Generation IP-based network

This is where EML helps. Using GNSS and non-crowd-sourced Wi-Fi, EML turns Access Point (AP) identifiers (BSSIDs (Basic Service Set Identifier)) into networks of verified location datapoints. Each BSSID (Basic Service Set Identifier) becomes associated to a verified dispatchable address stored within a secure, encrypted database. EML pinpoints an end-user's location from inside a building to provide the correct street address, exact floor-level, and room number.

Offering the same level of location accuracy to mobile networks as for fixed telephony, EML uses existing Member State Wi-Fi infrastructures and is considered a bolt-on module to current emergency communications technologies. EML is GDPR (General Data Protection Regulation) compliant with all relevant data stored in-country. Its deployment would exceed ALL compliance requirements from EECC regulations and directives and ETSI (European Telecommunications Standards Institute) standards on handset-derived location plus enhance NG112 future-state readiness.

EML will support effective PSAP call routing, additional Next Generation ESN (Emergency Service Number) Services (including VoIP (Voice Over Internet Protocol), VoLTE (Voice Over Long-Term Evolution)) and full and equal accessibility to 112 for any persons with impairments or disabilities.

ELi Technology's vision is to support our Emergency Number Network, assisting in full EECC/ETSI compliance for each EU member state, and save lives through better location.

To learn more, review our video here: https://youtu.be/B71s\_t4w8yc or contact: jeremy.habberley@eli-technology.com or https://www.linkedin.com/in/jeremy-h-79204810/

ELI-TECHNOLOGY



# Enghouse Networks

Caller Location (

Multimedia Comms

Next Gen Comms Public Warning

**Enghouse Networks** is a world-class telecommunications, technology and solutions provider. We have a number of software applications to enable public safety and emergency communication services. Our focus is the enablement of digital transformation, ultimately building a connected global community.

Basheer Mohamed

VP of Demand Generation, Networks

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Enghouse Networks is a division of Enghouse Systems Limited (TSX:ENGH), a publicly traded Canadian software and services company established since 1984. Enghouse has 2000 employees and operates in 120 countries.

## Alert Broadcast Centre

Alert Broadcast Centre (ABC) is a flexible solution for wireless public alerting. It supports the geo-targeted, mass distribution of emergency messages to mobile subscribers via multiple different channels (Cell Broadcast, SMS, Push Notifications, MMS, USSD). It also supports all standard interfaces through which authorities may submit alerting campaigns (CAP, CMAS, WPAS) and can easily accommodate others.

Depending on the architecture specified for a national alerting systems, Alert Broadcast Centre can be offered as a central solution to the national authority or to the operators of public wireless networks to help meet their statutory obligations in support of national and local alerting.

Alert Broadcast Centre also supports the configuration and scheduling of commercial messaging campaigns that do not interfere with emergency alerting, which help operators to monetise their investment.

The Alert Broadcast Centre solution comprises of multiple modules, some of which may or may not be required, depending on the type of system specified by a particular national regulator.

NOTE: The majority of National Regulators specify public alerting systems based on Cell Broadcast. If SMS is specified, we include additional modules in the solution to support geo-targeting.

For further information on this product please Contact Us

#### Vidyo: Emergent/Urgent Care

The emergency department (ED) is one of the most expensive and resource constrained settings in healthcare. Health systems are turning to virtual care strategies to help them expedite triage, improve ED throughput efficiencies, centralize resources, reduce LWBS (left without being seen) metrics, and minimize unnecessary readmissions.

For health systems considering transforming their delivery model to include emergency department virtual care, Enghouse VidyoConnect Healthcare and vidyo.io provide an integrated approach to triage, on-demand specialist access, peer-to-peer collaboration, care coordination, and case management.

VidyoConnect Healthcare can be easily integrated with the provider's electronic health record (EHR) solution and workflows, browser and mobile-based patient portals, and existing scheduling tools. VidyoConnect Healthcare offers a unified user experience across mobile, desktop, and web platforms. This ability to connect from anywhere can enrich the patient provider experience with the addition of multi-participant capabilities, remotely operated pan-tilt-zoom cameras, medical exam cameras, and digital stethoscopes. VidyoConnect delivers the consistency, ease of use, and rich features that drive clinical adoption across the care continuum.

Learn More: https://www.enghousenetworks.com/Vidyo/

#### **Network Service Assurance**

Network service interruption can have dire consequences for a mission critical emergency communications networks. The Enghouse Service Assurance suite optimizes network performance by providing situational awareness. Empower your network to pre-empt, act on, and resolve network issues. Based on a two-decade history of innovation, Enghouse delivers a cost-effective, feature-rich solution for Service Assurance applications in wireless, broadband, fixed, and converged networks.

The Enghouse Service Assurance Suite is vendor agnostic, interfacing with all element management systems and active equipment in the network, regardless of the manufacturer or technology. Adding coverage of servers, databases, applications and environmental parameters provides a true end-to-end management capability on one platform.

Supporting high-volume event processing with advanced, flexible filtering and correlation, the Enghouse Service Assurance suite enables network engineers to find and focus on network issues. This happens without examining thousands of low-level events to isolate trouble spots and determine root cause, thereby saving precious time and quickly resolving network outages.

Learn More: https://www.enghousenetworks.com/ServiceAssurance

#### **Emergency Call Routing**

Most countries have a single number (such as 112 in Sweden) for emergency calls to the police, fire brigade and ambulance services. It is not only compulsory in many countries for operators to handle emergency calls from all types of users, including fixed and mobile phones, but for the emergency services to be fast and effective, different dedicated alarm centres are required to serve specific areas.

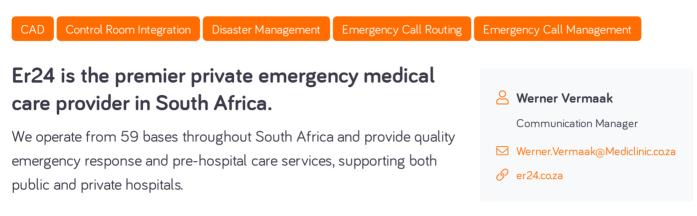
Enghouse Networks Emergency Call Routing (ECR) service application identifies the origin of emergency calls and handles the routing to the appropriate alarm centre. The operator can either send the correct routing number and information to the next carrier or route the call directly to the appropriate alarm centre.

Location information from the network can also be part of the emergency information to provide the Public Safety Answering Point (PSAP) with mobile positioning information.

For further information on this product please Contact Us



# ER24



ER24 is wholly owned by Mediclinic Southern Africa which represents

the Southern African operations of Mediclinic International which is ranked as one of the top 10 private hospital groups in the world. It has 107 hospitals and clinics worldwide.

#### National emergency contact centre

At ER24 we have one national emergency number – **084 124** – operated through a state-of-the-art emergency contact centre. Highly trained and dedicated operators, using sophisticated dispatching software, mapping technology and medical databases, manage the centre 24 hours a day. This comprehensive support network enables us to customise solutions to meet our clients' individual needs.

#### Customised contact centre services

ER24 provides customised contact centre services for stakeholders to integrate their emergency protocols using our highly skilled staff and leading contact centre software. These services give our clients peace of mind that highly specialised help is available at the press of a button.

ER24 is the South African operator for Vodacom and Cell C's 112 Emergency Centres.

A dedicated **Emergency Text Service** specifically for the Deaf, hearing and speech impaired is operated through the ER24 112 Centre for clients on the Vodacom cellular network. The disability/hearing impaired service was developed ER24 in conjunction with Mediclinic Southern Africa's ICT team and Tech Mahindra.

## **Operational solutions**

Operational solutions include a fleet of over 300 rapid response vehicles and ambulances. The aeromedical fleet includes helicopter and fixed-wing air ambulances in strategically located areas to minimise flight response time.

ER24's Global Assist services extend the capabilities of the aeromedical fleet and industry expertise. ER24

Global Assist is connected to an expansive network of emergency service bodies in an integrated scene management system which provides our global client portfolio with access to aeromedical evacuation services in Africa and abroad. The Site Based Medical Solutions division provides a medical assistance infrastructure to mitigate on-site accident risk hence minimising health and safety impacts.

For more on ER24's products and service offerings in South Africa and abroad, visit our website on https://er24.co.za



## Esri

Emergency Call Routing Big Data

Mapping Public Warning

Esri, the global leader in Geographic

Information Systems (GIS), is leading the way in emergency communications. The ArcGIS mapping and spatial analysis system supports computer-aided dispatch (CAD) and records management systems (RMS) with a suite of tools to manage address data, create service

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boundaries, perform advanced analysis of call data, and integrate disparate systems and sensor data in realtime. Esri is also on the cutting edge of next-generation 112 (NG112), including the integration of 3D building exteriors and 3D indoor floorplans that can be integrated into other emergency call taking applications. Esri technology is open and interoperable, configurable out of the box, and integrates with existing CAD/RMS solutions.



# eurofunk KAPPACHER GmbH

CAD Control Room Integration

tion Emergency Call Management

GIS Voice Comms

**eurofunk** is one of the largest system specialists for the planning, setup and operation of command centers and emergency call centers in the field of public safety as well as industry and transport. Our customers benefit from our holistic overview, comprehensive product portfolio and expertise in solutions. With our technologies and holistic system solutions our partners are optimally equipped to fulfil their professional safety remit. Alongside the best possible operational reliability, increases in quality and efficiency have utmost priority.

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International Sales Manager

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With this unique cluster of competencies, eurofunk is your **360° solutions** company for all matters concerning command center technology.

As a forward-looking family-run company, we are a reliable partner with a team of over 500 specialists focused on providing you with a comprehensive and top-quality service.

The needs of our customers as well as our drive to develop modern technologies for sustainable use motivate us to shape the safety of tomorrow together with you.

#### So you can understand how we work:

- **360**° **Solutions:** We are not a conventional system integrator. On the contrary, we create a **fully integrated operation center solution** for you.
- **360° Products:** We are also not a pure manufacturer of singular products sold by third parties. All our products of our **most comprehensive portfolio** of specialized **operation center products** fit into an integrated suite.
- **360**° **Service:** We are not an anonymous call center operator, where you feel your requests are lost in the service operations in search of competent support between the "interfaces". Furthermore, we offer you **a unique and personal** service, throughout the entire lifecycle of your custom solution

## eurofunk solutions and product portfolio in detail

## **Command & Control**

The correct and reliable information, at the right time, combined with experience, professional competence and thorough preparation are the success factors that make up an efficient and high-quality operations management. Our solution is designed as an **open Operation Center ECO system** that collects, processes and enriches the **countless amounts of information** from a wide variety of communication and information sources, in order to make it available to all mobile and central agents in the form of an **information hub**. All current and future communication and alert channels can be embedded in a flexible and service-oriented manner into the overall system.

#### Communications

Secure communication for an operation center is like the human central nervous system. Countless amounts of voice and data communication content must be collected, processed, stored and re-routed to a wide variety of information recipients via a network.

In our fully digitalized world, we only talk in the strictest sense of **IP-based data** (with communication content), which we merge in our **Unified Communications Cloud** and store in a revision-proof manner. The real-time availability of all communication channels in a **location-independent** and networked system, guarantees the high-availability architecture as well as the integrated **free-seating principle**.

Our solutions allow you to embed a **wide variety of current and future communication media** in our solutions in a **flexible and distributed manner**. In the traditional sense, this ranges from emergency call processing (112), business telephony (VoIP/ISDN), analogue and digital radio or public address and intercom systems to video telephony, new social media or messenger services.

#### **Multimedia Solutions**

The **intelligent and comprehensive provision and distribution of video, image and sound information** from various sources is key, especially in an operation center is an important factor.

To provide this, we will be happy to **plan multimedia collaboration systems for your operation center – e.g. video walls, video management software** or similar – which optimally support the sharing of information, regardless of whether they use internet streams, video images, TV or software applications. Using state-ofthe-art management software, the dynamic layout on media walls can be individually designed, and video camera images from a wide variety of sources can be displayed there or at the individual workstation.

At eurofunk, however, we understand multimedia solutions to be much more than that. For our customers, we **integrate and design** all types of **acoustic and building management systems**, such as **station alarms** (incl. surveillance display solutions such as **eurofunk Mission Information Display**) or building bus systems, seamlessly and IP-based into our high-availability solutions, in order to operate them automatically via touchscreen or in the operational process sequence.

### Control room design

For us, the **operation center room**, the **integrated design** and especially the embedding of the control center table play an essential role in operating a control center. That's why we are happy to advise and plan the **optimum control center room** with you according to your needs and equip it with the most state-of-the-art operation center equipment.

Focusing on workplace ergonomics we designed our **new eDESK** product family. It is a perfect combination of simple, elegant design and intuitive handling. True to the motto **"design meets technology"**, individual components have been united to create a complete mission control system with a balance of virtual and actual workplaces. The consistent implementation of the **"clear desk"** principle has helped us free the space of unnecessary distractions, thereby reducing psychological stress and increasing concentration levels.

## **IT** solutions

The availability requirements for **mission-critical operation center solutions require state-of-the-art IT platforms and data center architectures**, in order to be "online" at all times. Network concepts, virtualization architectures, cluster technologies, load balancers, databases, monitoring, deployment and analysis tools, IT security tools as well as redundancy mechanisms from the modern IT world **must be consistently designed in perfect union with the operation center applications and services** and made available as an **All-in-One solution**, in order to master and manage the complexity.

As a competent partner, eurofunk is **ISO:27001** certified and we will be pleased to provide you with your operation center IT solution.

### eurofunk 360° Service in detail

Our 24/7 service concept based on the ITIL framework offers you a contact person for your concerns around the clock. A professional service desk with technical support from experts, who provide all three levels of support in one place, is on call to ensure that you and your technical interface problems are not left high and dry with different suppliers.

With our **comprehensive field service**, we ensure that we can provide you with immediate on-site support in addition to our remote access technology.

Our **Customer Care Center** is the central dialogue and feedback partner for you, who, together with **Customer Consulting**, will advise you on your solution and all **your future challenges and opportunities**.



## Everbridge

CAD

Emergency Call Routing

Emergency Call Management

Public Warning

**Everbridge** Public Safety solutions are used daily by governments, public authorities, emergency management, civil protection to keep people safe when it matters most.

## **Population Alerting and Public Warning solutions:**

The Everbridge Public Warning platform provides a comprehensive, feature-rich, multi-channel, flexible, modular solution to help

Governments, Public Safety, and Security Authorities keep residents and visitors before, during, and after critical events. It includes:

- A universal multi-channel front-end console and gateway allows the creation of alerts that can be disseminated via any alerting system such as Cell Broadcast, Location-Based SMS, address based SMS, email, mobile app, sirens, TV, radio, digital signage, social media
- A proprietary one2many Cell Broadcast backend installed with the telecom operator
- A proprietary Location-Based SMS backend installed with the telecom operators
- PSInsightsTM that provides real-time visibility into an area affected by a critical event for quicker decision-making, faster emergency response, and more accurate communications.

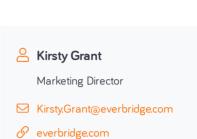
The Everbridge Public Warning platform is engineered, built, and supported in Europe, to meet and exceed the requirements of EECC Article 110.

Everbridge is the only vendor that can deliver both technologies recommended by BEREC in a single platform and without the need for any third-party dependency. Everbridge is the world's most trusted countrywide public warning solution reaching out to more than 2 billion people, including Spain, the UK, the Netherlands, Greece, Norway, Iceland, Germany, Estonia, Sweden, New Zealand, Australia, Peru, Mauritius, states in India, and in the USA.

## CAD, Emergency call routing, Dispatch, and Incident Response Management

Everbridge SAGA provides Public Safety Answering Points (PSAP), Emergency Call Centers (ECC), National and Local Security Services with an end-to-end Emergency Call management and Incident Response Platform to manage emergencies from call taking through triage, routing, to dispatch, mobilisation and activity tracking. The solution features:

Situational awareness



- Emergency call taking and logging (3 W's)
- Triage, transfer and routing
- Command & Control with Computer-Aided Dispatch (CAD)
- Intelligent resource dispatching (geo, availability, skills and competencies)
- Rally and Engage (communicate with resources, different messages/profile)
- Incident response plans activation
- Visual activity monitoring track
- GIS
- Reporting and analysis (workload management, resources utilisation optimization, analytics and trending)

Among other, Everbridge SAGA is used by France's National Police and Gendarmerie, 144 Emergency number in Switzerland, different national security services in the Middle East.

#### Disaster preparedness and response management

Everbridge all-in-one Continuous Preparedness System (CPS) platform helps Disaster Management agencies and public authorities throughout the entire incident lifecycle. Built based on International Incident Response System frameworks, it covers all phases of disaster management from Preparedness, though, Response, Relief, Recovery and Mitigation. The solution offers:

- Disaster preparedness and planning
- Strategic & tactical level decision support
- Dynamic incident response
- EOC plans activation
- Automated workflow & tracking
- Integrated communications & Notifications
- Resource and inventory management
- Recovery and reimbursement
- Built on India's DM Act, 2005 and NDMA IRS (2010) requirements

Among other, Everbridge CPS is used by Odisha State Disaster Management Authority, Gurajarat State Disaster Management Authority and Maharashtra State Disaster Management Authority.

## Trusted All Around the World

Everbridge, Inc. (NASDAQ: EVBG) is a global software company that provides enterprise software applications that automate and accelerate organizations' operational response to critical events to Keep People Safe and Organizations Running<sup>™</sup>. During public safety threats such as active shooter situations, terrorist attacks or severe weather conditions, as well as critical business events including IT outages, cyber-attacks, product recalls or supply-chain interruptions, over 6,300 customers in 76 countries rely on the Company's

Critical Event Management Platform to quickly and reliably aggregate and assess threat data, locate people at risk and responders able to assist, automate the execution of pre-defined communications processes through the secure delivery to over 100 different communication modalities, and track progress on executing response plans.

one2many, acquired by Everbridge in March 2020, is a leading global vendor of nationwide public warning solutions for governments and the telecommunications industry. The one2many Cell Broadcast System is the most advanced and high-performance Cell Broadcast System in the market, with more than 85 deployments worldwide. The combination of one2many and Everbridge creates the largest and only public warning system offering multi-hazard, multi-channel alerting including Cell Broadcast and Location-Based SMS.

**Techwan, acquired by Everbridge in 2020**, is a Swiss company and is a leading provider of public and private safety and emergency solutions. (*See separate entry for more information on Techwan's offerings*).



## F24 AG

Control Room Integration

n Disaster Mana

Emergency Apps

Public Warning

Head of Product Public Warning System

Amélie Grangeat

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## About F24 Group

F24 is the leading Software-as-a-Service (SaaS) provider for Incident and Crisis Management, Emergency Notification and Public Warning Systems in Europe.

Founded in 2000, the F24 Group has its headquarters in Munich, Germany. Along with its subsidiaries, it supports more than 3,000

companies and public organizations in more than 100 countries around the globe.

## F24 Mission Statement

#### "Our solutions enable you to save lives and values!"

With its solutions, F24 provides a highly innovative platform to help customers around the world to successfully and efficiently manage incidents, emergencies and critical situations - before, during and after a crisis.

## F24 Public Warning System

In December 2020 **Gedicom**, as a core expert for public warning, became a valued member of the F24 Group to strengthen its expertise in this area.

The F24 Public Warning System is fully compliant with the EECC, Article 110. It supports a multi-channel approach, that enables you to trigger a variety of alarming channels, such as

- Cell Broadcasting
- Location-based SMS
- E-Mail
- Social Media
- vocal messages
- notifications on apps
- sirens, digital signage

It is characterized by an intuitive user interface, as well as an extensive logic for

- rights management (who is allowed to do what and in which region)
- approval of alerts
- mapping of complex structures from federal, state and regional levels
- geographical delimitation of alerts based on digital maps
- planning of time-related alarms
- creation of predefined alarm plans

#### **Public Warning References**

Since 2016, Gedicom is in charge of the national Public Warning System in Belgium with more than than 6,000 users in 1,500 entities using it every day. Especially in the times of Covid-19 the system has proven to be a key tool to inform the public and flexibly manage a national crisis respecting local responsibilities.

More than 600 ministries, regions, cities, emergency services, police stations all over Europe are relying on the F24 Public Warning System.

#### Certifications

F24 Group was the first company in the world to be certified by 'The British Standards Institution (BSI) in 2010, for its integrated information security (ISMS) and business continuity (BCMS) management systems. The F24 AG and the majority of its subsidiaries are ISO/IEC 27001, ISO 22301 and ISO 9001 certified. F24 AG is the first and only European company listed in the Gartner report for emergency/mass notification services (EMNS).



# Ford

#### eCall

**Ford Motor Company** is a global company based in Dearborn, Michigan. The company designs, manufactures, markets and services a full line of Ford cars, trucks, SUVs, electrified vehicles and Lincoln luxury vehicles, provides financial services through Ford Motor Credit Company and is pursuing leadership positions in electrification, autonomous vehicles and mobility solutions. Ford employs approximately 200,000 people worldwide. For more

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information regarding Ford, its products and Ford Motor Credit Company, please visit www.corporate.ford.com.

**Ford of Europe** is responsible for producing, selling and servicing Ford brand vehicles in 50 individual markets and employs approximately 53,000 employees at its wholly owned facilities and approximately 68,000 people when joint ventures and unconsolidated businesses are included. In addition to Ford Motor Credit Company, Ford Europe operations include Ford Customer Service Division and 24 manufacturing facilities (16 wholly owned or consolidated joint venture facilities and eight unconsolidated joint venture facilities). The first Ford cars were shipped to Europe in 1903 – the same year Ford Motor Company was founded. European production started in 1911.

#### **Emergency Assistance Overview**

In the unlikely event of an accident, Ford's award-winning Emergency Assistance<sup>\*</sup> feature is triggered by an airbag activating or the fuel pump being shut off. As long as the user's mobile phone is connected to Ford's infotainment system, the technology can use it to help make a direct call to the emergency services, giving them crucial information, such as GPS coordinates, and the ability to communicate with vehicle occupants. Emergency Assistance won "Best Mobile innovation for Automotive Transport or Utilities" at the 2012 Global Mobile Awards and a 2012 Euro NCAP Advanced Award.

[\*] Ford Emergency Assistance operates in over 40 European countries. This feature works when paired with a compatible connected mobile phone that is with you when an airbag is deployed (excludes knee airbags) or a sensor that registers a crash deactivates the fuel pump.

### **Emergency Assistance Free Training Materials**

Ford Motor Company has prepared a comprehensive training package to help call takers answer Emergency Assistance calls confidently and professionally.

The website is designed to provide call takers with information about Emergency Assistance: emergencyassistance.ford.com. You will find a Call Taker Training Video, Quick Reference Guide, Frequently Asked Questions, and downloadable reference information in multiple languages.

## **Educating to Help Save Lives**

Every 112 Public Safety Answering Point is encouraged to share the website information with trainers and call takers to help prepare them for potential Emergency Assistance calls, and to include this information in all new call taker training.

## eCall Overview

eCall<sup>\*\*</sup> is a potentially life-saving feature that's designed to reduce the time between a serious accident occurring and assistance being provided by the emergency services. In the unlikely event of an accident, FordPass Connect can automatically place an eCall to the emergency services and provide them with your vehicle's location. You can also press an SOS button in your car to contact the emergency services directly if you witness an accident or require assistance in an emergency.

[\*\*] eCall is a European Commission initiative which mandates an in-vehicle system that calls emergency services if an automatic eCall event is activated by detection of a serious road accident, or if a manual eCall is triggered by a vehicle occupant.

#### FREQUENTIS

## Frequentis

Control Room Integration

Emergency Call Management

Multimedia Comms

#### tions Recording Solutions

# Experience and Innovation: Integrated Dispatch and First Contact Solutions.

Frequentis safety-critical communication and information solutions leverage more than seventy years of experience, driving innovation throughout the company's history with many 'industry firsts'. For more than two decades, it has been supplying Ivan Gojmerac
 Regional Sales Manager Central Europe | Public Safety
 Ivan.Gojmerac@frequentis.com
 frequentis.com

emergency services and critical infrastructure organisations with highly reliable, easy-to-use control centre solutions. As communication technology evolves towards more open and multimedia-oriented standards and platforms like NG112 and MCX, Frequentis is leading the way in defining and implementing these standards through active participation in industry organisations, such as EENA, NENA, APCO and TCCA. Find out more about our Public Safety achievements here: YouTube.

With an installed base of users across the globe, the company is serving some of the world's largest and most demanding public safety institutions:

- Building on its long-standing, successful relationship with the London Metropolitan Police Service as one of the most renowned public safety organisations worldwide, Frequentis has recently been tasked to support the realisation of the Met's "Total Digital Policing Strategy" with its multimedia communications platform 3020 LifeX<sup>™</sup>.
- In addition to single organisation deployments, 3020 LifeX<sup>™</sup> also has a proven track record in simultaneously supporting multiple organisations, e.g. in the PERLE project for the Hamburg Fire Brigade and Hamburg Police. In PERLE, Frequentis serves as a future-ready technology partner which increases both organisational efficiency and operator convenience, optimizing emergency communication with the citizens and the first responders.
- Apart from regional deployments, 3020 LifeX<sup>™</sup> also comprises a communication backbone for nationwide public safety deployments, e.g. for the ELKOS system by the Austrian Federal Police.
   ELKOS represents a unified, logically centralized, and highly georedundant system which supports Fire control rooms in Lower Austria and all Federal Police control rooms across Austria. Other nationwide deployments include the Ambulance Radio Programme in the UK and the Police Service of Scotland.

Based on this success, Frequentis has continued to expand its customers base in the international Public Safety market in recent years.

#### Highlights of the Frequentis portfolio include:

- The 3020 LifeX<sup>™</sup> multimedia integration platform utilises a service-oriented architecture (SOA) combined with multi-tenancy capabilities in order to support the virtualisation of control centre operations in hosted data centre deployments. It provides a fully-fledged contact centre solution for emergency call taking (including attribute-based ACD and IVR), radio dispatch (simultaneous connection to TETRA, MCX and other professional mobile radio systems) and seamless integration with common CAD/GIS and recording solution providers using standards-based interfaces. The use of web-client technology enables key information to be presented on any device (PC, laptop, tablet, mobile phone) with proper security authorisation, dissolving the physical borders of a control room. In addition, Frequentis 3020 LifeX<sup>™</sup> encompasses a fully integrated recording solution which covers all control room communication streams, incl. voice, video, chat, instant messaging as well as other social media channels.
- The DIVOS logging system collects and archives phone and radio communication, while also capturing screens, giving operators and investigators easy access to securely stored information.
   DIVOS scales from single to distributed logging systems and provides powerful web services for full integration with other mission-critical information systems.



## Genasys

#### Disaster Management

Emergency Apps

Public Safety Public Warning

**Genasys, The Critical Communications Company** is a leading provider of Mass Notification and Public Warning Systems, with more than 20 years of experience.

Our National Emergency Warning System, **NEWS**, employs all the expertise we have gained in deployment of critical solutions all over the world. These solutions have already proven to be successful, having sent more than 100 million emergency messages.



#### Mobile-Based Multi-Channel Public Warning System

Genasys NEWS is a mission-critical, efficient, modular, and scalable solution, which allows the use of multiple communication channels to maximize population coverage, attention rates, and alert comprehension by sending information in different languages.

Our objective, to provide an effective system that saves human lives, becomes achievable through our multichannel approach which includes:

- Location based SMS and Cell Broadcasting Messages: 100% of mobile phones are covered by SMS without the need for any subscription procedures. Cell Broadcasting is the fastest way to reach devices that are compatible with it.
- The Genasys Mobile Application: to receive more in-depth warning content and to improve accessibility.
- Integration with our Genasys Long Range Acoustic Devices: increases alert coverage and acts as a contingency plan for the mobile based channels by ensuring that populations receive warnings even when mobile phones are switched off and/or if mobile networks are down.
- Integration of other communication channels which are compliant with the Common Alerting Protocol, CAP.
- Social Media, Massive Mail, Voice Calls, WhatsApp

#### End to End Solution

Genasys NEWS covers the whole value chain for a Public Warning System, fulfilling every need for both Emergency Agencies and Telcos:

#### Highly Customizable and Flexible

NEWS can be totally adapted to the emergency management command and control hierarchy of any country, being able to integrate the different administrative levels and divisions as well as include different types of users for the same hierarchical level.

Moreover, its internal structure allows the deployment of any requirements regarding the escalation of emergencies.

#### Easily Integrated into Current Emergency Agencies' SW Deployments

In order to achieve the most efficient deployment, Genasys NEWS can be integrated into existing emergency software stacks through various methods, minimizing the time and effort needed to define and execute emergency warning campaigns.

For more information please visit us our website https://eu.genasys.com and follow our social media at https://twitter.com/Genasyseu and https://www.linkedin.com/company/genasys/

#### **Advanced Situational Awareness**

Genasys NEWS makes the most out of the data collected from the various communication channels and, in combination with its broad experience in GIS and data analysis algorithms, provides essential information for first responders, helping them maintain control during any kind of crisis.

#### Fulfilling the new EECC Directive, Article 110

Genasys NEWS fulfills and exceeds all requirements put forth in Article 110 of the European Electronic Communications Code for a Reverse 112 system, allowing a quick and efficient deployment of this life saving system in the EU.



# General Motors OnStar

#### Emergency Apps Emergency

Emergency Call Routing

Emergency Call Management

Next Gen Comms Triage

**OnStar** is the world's leading provider of connected in-vehicle safety and security services. We provide OnStar and Connected Services to 20 million members in the U.S., Canada, China, Mexico, South America and the Middle East.

The telematics system is imbedded in the vehicle and combines cellular communications, global

#### Jim Lanier Manager - Global Public Safety Engagement and Strategy OnStar Emergency Services

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positioning system (GPS) satellite location and live human interaction with OnStar advisors to provide assistance to people in need. It offers Automatic Crash Response, a red SOS button for 24-hour Emergency Call Service, a blue Service button for non-emergencies. Customers can also request remote door unlocks and Stolen Vehicle Assistance.

OnStar also offers the OnStar Guardian App, which is designed to give members key safety services in or out of any vehicle. Wherever they take their smartphone across North America, they have a little peace of mind in the palm of their hands providing mobile crash response and an SOS button for those potential emergency situations.

OnStar has been a trusted partner of emergency services (including emergency dispatch, law enforcement, fire and rescue services) in the US and Canada for over 25 years. Our unique approach to this relationship is to work with emergency services, doing what is best for those in need with open lines of communication. This collaboration resulted in enhanced processes for handling and triaging emergency calls. This helps streamline the interaction between emergency service personnel and the OnStar advisor, which minimizes impact on the finite number of emergency responders and resources. OnStar also offers First Responder training related to Electric Vehicle safety and emergency response.

OnStar has a dedicated Public Safety web site where you can find answers to your questions about how we work with public safety. In addition, we have developed web-based OnStar Public Safety Training. This hour-long self-paced interactive training in English contains a course completion certificate and has been approved for continuing education credit. It is available at no cost.

#### WEBSITE:

#### USA: https://www.onstar.com/us/en/home/

Canada: https://www.onstar.com/ca/en/home/

Mexico: https://www.onstar.com.mx/

South America:

- Brazil: https://www.chevrolet.com.br/servicos/onstar
- Argentina: https://www.chevrolet.com.ar/onstar
- Colombia: https://www.chevrolet.com.co/onstar
- Ecuador: https://www.chevrolet.com.ec/onstar
- Paraguay: https://www.chevrolet.com.py/onstar
- Perú: https://www.chevrolet.com.pe/onstar
- Uruguay: https://www.chevrolet.com.uy/onstar
- Chile: https://www.chevrolet.cl/onstar

Middle East:

United Arab Emirates & Kuwait: https://www.onstararabia.com/en/home

#### GEOCOMM

### GeoComm

#### Caller Location Cloue

Cloud Services

Mapping Next Gen Comms

GeoComm, provider of Public Safety Location Intelligence®, has a national reputation as a leading provider of public safety GIS systems. These systems route emergency calls to the appropriate 9-1-1 call center, map the caller's location on a call taker or dispatcher map, and guide emergency responders to the scene of the accident on mobile displays within police, fire, and ambulance vehicles. Over the last 28

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years, GeoComm has grown to serve local, regional, statewide, and military agencies in forty-nine states, helping keep more than 100 million people safe. Through the years our statewide NG9-1-1 GIS project footprint has expanded to include seventeen statewide projects across the country. More recently, GeoComm's innovative solutions are enhancing emergency response situational awareness by empowering emergency responders with a visual representation of indoor spaces for key buildings in their response areas and by converting raw z-axis position measurements into a dispatchable location. To learn more about GeoComm and our Public Safety Location Intelligence offerings, visit www.geocomm.com.



# GINA Software s.r.o.

Automatic Vehicle Location Disaster Management Emergency Apps GIS Mapping

**GINA Software** is a technology company developing and providing a public safety and security management system called GINA. The company was established in 2010 and since then has become a specialist in provision of AVL systems and field response applications used by Public Safety Agencies and Law Enforcement Organizations. Our AVL is tailored to be used by both small organizations as well as large enterprises in need of monitoring and coordination of their staff and assets.

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The goal of the company is to improve the efficiency of both daily and large-scale operations using technology to minimize the damages and to prevent casualties.

The ultimate tool for reaching this goal is an interactive map providing constant real-time visibility of all units from variety of sources including radios, smartphones, GSM or satellite trackers, UaVs and sensors combined in a single interface with advanced features such as history of movement, data visualization, automatic reporting, video surveillance and data analysis.

In addition to that, GINA has developed an in-vehicle public safety field response application featuring incident information, navigation, live data feeds, video streaming and field informational support.

**GINA Tablet** is a field response smart application designed in cooperation with first responders. Thanks to direct integration to local PSAP systems, GINA Tablet seamlessly communicates with operation centres and provides commanders with decision support tools including real-time updates. GINA Tablet is used during all phases of an incident response. Thanks to a built-in emergency navigation GINA Tablet navigates the first responders en route to the scene, provides live data feeds, video streaming and information support directly on scene and serves for reporting and evidence collection after the response. In combination with GINA Central all data captured during the incident can be used for further evaluation and educative purposes.

**GINA Central** is a modern tactical AVL software providing real-time information designed for management and coordination of emergency vehicles and first responders. GINA Central serves as a unified collaborative platform connecting various technologies such as radios, GSM and satellite trackers, smart applications, UaVs and sensors into one interface. GINA Central is complementary to primary PSAP systems and thanks to its tactical features GINA Central is an ideal tool for management of search and rescue missions, large scale incidents or during disaster relief operations.

**GINA GO** is a personal safety assistance mobile application designed for law enforcement officers or humanitarians operating in challenging environment available for iOS and Android mobile phones. GINA GO features movement tracking, emergency button with automatically recorded audio message increasing personal safety and allowing to send real-time data directly from field thanks to custom forms and questionnaires. GINA GO supports geo-fencing features ensuring that field staff avoids potentially dangerous areas and facilitates encrypted communication between the field staff and dispatchers. The app is designed for broadband networks and supports offline mode for proper work in areas with poor signal coverage.

#### **GINA System offers:**

- Vehicle and staff monitoring
- Field response
- Coordination
- Security Management
- Incident Management
- Data collection and Reporting
- Early warning system
- Video Surveillance

#### With key features such as:

- Real-time tracking
- Geo-fencing
- Collaborative mapping
- Points of interest
- Information support
- Navigation to scene
- Task planning
- Live streaming
- Reporting
- Data analysis

GINA System is a unique field response solution ready to be integrated with any local PSAP system to extend the operations to the field level. We save lives through technology.

For more information or integration requests please visit www.ginasystem.com

# Google

#### Big Data

Caller Location Cloud Services Emergency Call Routing

Accurate emergency location can be the difference between life and death. When emergency services get a call, they need to know the caller's location to send help and save lives. Today, over 80% of calls to emergency services come from mobile devices, but locating these callers can be difficult. In most countries, emergency location, if it exists, relies on cell tower location (which can have a radius of up

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to several kilometers) or assisted GPS (which can fail indoors, and suffers from urban canyon, multi-path, and weather reception

Google created Android Emergency Location Service (ELS), as a supplemental service, and offers it free of charge to emergency services and public safety so first responders can act faster during an emergency. ELS uses the Android Fused Location Provider to quickly estimate more accurate emergency locations, both indoors and outdoors and transmits that location data -- together with any additional emergency, if appropriate -- to emergency services when a user calls or texts an emergency number

ELS is built into Google Play Services as part of the Android operating system, and works on over 99% of active Android devices (running Android OS version 4.4 and up).

#### **Benefits**

- ELS is not a mobile application and doesn't require any special hardware, downloads or updates.
- ELS is activated only when the user contacts emergency services.
- Location is computed on the Android device and sent to Emergency Services.
- Location data is sent via Data SMS or HTTP (per AML specifications) which are both open, OSagnostic protocols.

Google partners with mobile network operators, public safety vendors and government agencies responsible for public safety to deploy ELS. ELS is activated once a partner completed the testing process and is able to receive FLS data

Google's goal is to make ELS available globally, to keep Android users safer and improve the state of emergency services around the world. For more information, contact android-emergencylocation@google.com.

GOOGLE



### GridGears

#### Caller Location Cloud Services Emergency Call Routing Next Gen Comms

#### Living in an Interconnected World

In today's interconnected world, data in public safety becomes a valuable asset to improve situational awareness and is key to fast and efficient emergency services. Next Generation standards, such as NG-911 and NG112 provide blueprints for modern, interconnected and IP-based architectures. Michael Pröstler
 CEO
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**GridGears** was founded in 2017 with the goal to contribute to those standards and enable better, more integrated and more efficient emergency services. We truly believe in standards and are deeply convinced that the aggregation of multiple services, provides much greater value than the sum of it's parts. This core value is even reflected in the company's name, where we see that the **Grid** - *the aggregation* - of multiple **Gears** - *the services* - drives the motor of innovation.

#### **Digitalization of Emergency Services**

Future emergency services need to keep up with and take advantage of the ever-growing digitalization. They must utilize this trend and its new possibilities to provide more accurate and efficient help to those in need. To achieve the best possible solution, these state of tomorrow systems need to interconnect with multiple components within and outside of the emergency network. Efficient and cost-effective exchangeability and interconnectivity between those components can only be gained by moving from proprietary interfaces to well defined and recognized standards.

#### **Our Products**

GridGears provides multiple Next Generation Core Components, including **Emergency Call Routing Function** (ECRF), **Policy Routing Function** (PRF), **Forest Guide** and **Location Information Service** (LIS) with **Advanced Mobile Location** integration. Our products support on-premise, cloud-based or even hybrid deployment options to allow easy and cost-efficient integration into existing systems. The interfaces and protocols adhere to the standard and were evaluated during multiple ETSI Plugtests from GridGears' earliest beginnings. GridGears' products were also an essential part of the *Cross-border ESInet and LoST Hierarchy Emergency Services Testing* (CELESTE) consortium in EENA's **Next Generation 112 Project**.

#### **Future Emergency Services**

Technology and their level of integration and acceptance is moving at an enormous speed. Nobody can predicate how we will communicate and interact with technology in the future. Therefore, it is even more important to establish a stable foundation for future innovations in public safety. At GridGears we believe that NG112 and NG9-1-1 are the foundation for integrated, multi-vendor and cross-border solutions and we are strongly committed provide standard conform solutions, which enable the best possible emergency services, whenever and wherever you are.



# Heartrunner Sweden AB

AED Emergency Apps Interoperability Solutions Public Warning Resource Management

**Heartrunner Sweden**, established in its current form in 2016, was founded by resuscitation experts, researchers and techies with a strong belief in the power of citizen responders. The Heartrunner system is a reliable supply-and-demand system that recruit citizen responders in case of out-of-hospital cardiac arrest. We started in 2010 and since 2014 we run on the current app platform. Over 24 000 alerts on suspected cardiac arrest have been sent since the start.

David Fredman
 PhD, Operations manager
 david@heartrunner.com
 heartrunner.com

We know that citizen responders can be a valuable complement to ambulance and other resources in the first critical minutes of a cardiac arrest.

Citizen responders who downloaded our app can be alerted when they are nearby a victim, and perform CPR and use an AED to increase the chance of survival. Our system locates both citizen responders and AEDs nearby the victim.

The Heartrunner system is currently active in Sweden and Denmark with over 180 000 users ready to save lives. If your region or country want to benefit from this system it's easy to configure it for your technical needs and policy for distribution, i.e., you can let anyone who have CPR skills join, or you can select specified individuals within your organization.

Our system can be incorporated with any CAD software and alerts are sent through an API to our MissionServer. This is a hassle-free solution with no build in buttons or switches. It's a redundant system built on Microsoft Azure servers and there are no bottlenecks in number of alerts handled or number of citizen responders in the system. The app is designed as a white label solution, to be branded in compliance with regional or national concepts. The MissionServer handle the logistics in selecting candidates to alert nearby the location of a suspected cardiac arrest. We can easily incorporate data from a national or regional AED network in the alerts to further increase the effect on survival.

The Heartrunner system is developed in a research environment and we currently support research at Karolinska Institutet, KTH, Royal Institute of Technology, Stockholm School of Economics, Linköping University, Linnæus University and Copenhagen university. We can support your region regarding research and evaluation of the effect of citizen responders in case of cardiac arrest.

We provide real-time feedback to the region in terms of number of volunteers and their actions and you can quickly see the benefit in terms of increasing rate of bystander CPR and defibrillation.

In a Swedish randomized controlled trial, the bystander CPR rate was increased by 32% with citizen responders first on scene.

https://www.nejm.org/doi/full/10.1056/NEJMoa1406038

In 2020 from Copenhagen, a threefold increase of bystander defibrillation over 12 months was shown in OHCA cases where citizen responders arrived before the ambulance. https://www.jacc.org/doi/full/10.1016/j.jacc.2020.04.073

Join us and make sure that your region makes the most use of the power of citizen responders. Let CPR trained citizens and publicly available AEDs come to use!

Together we save lives!

# Helmut Wittmann Consulting

Disaster Management eC

eCall GIS

Next Gen Comms Specialised Consultancy

**Helmut Wittmann Consulting** entirely focuses on the support of emergency services organizations and public authorities to execute their strategies for command control centre solutions and for crisis and disaster management. Due to the founder's unique competencies and experience, the emergency communications requirements between citizens and emergency services organizations, like emergency number (112/110/911...) implementations and emerging emergency communication channels, build a key component in the service portfolio.

Helmut Wittmann
 Founder
 he\_wittmann@gmx.de

The ever-accelerating development of innovative technologies such as broadband mobile networks and smart phones, coupled with the implementation of EU regulations, directives and delegated acts, calls for the continued development of emergency management systems by authorities, agencies and emergency services organizations. To make matters even more challenging, social change as an overarching issue impacts the interface and the collaboration between citizens and the public authorities.

Helmut Wittmann Consulting offers emergency service organizations and authorities superior public safety consulting services that covers the lifecycle from the early knowledge of new technologies and regulations to the final project implementation in the operational environment - end-to-end.

Needs assessment to determine improvement gaps and to foster project and program decisions:

- Customer needs assessment and analysis, as-is analysis
- Conducting surveys, preliminary studies, and high-level concepts
- Market and technology analysis
- Proof-of-Concept (PoC)

Requirements management to ensure conformity with legal, technology, and process requirements:

- Customer / system requirement collection and evaluation
- Preparation of requirements specifications and system specifications
- Execution of cost / benefit analysis and feasibility studies
- Vendor and technology selection support

#### Implementation and rollout support services to reduce risk of implementation:

- Project management and controlling
- Feature and vendor coordination
- Migration and rollout concepts
- Test management including regression and conformance testing

**Communications and reflection** to evaluate the operational impact and gain further insights into the improvement potential:

- User survey and impact assessment
- Identification of improvement potentials
- Preparation and execution of publications and presentations (decision support, training, conferences)



# Hexagon's Safety, Infrastructure & Geospatial division

AED CAD

Cloud Services Disaster Management

#### The formula for public safety success

#### A new approach to digital transformation

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. We are the global leader in public safety solutions, helping to protect 1 billion people worldwide. Building on our longNick Chorley

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standing leadership in computer-aided dispatch, we provide a public safety platform for data collection, management, analysis, collaboration and response.

Public safety and security organizations need to achieve and maintain high levels of service, while managing the expectations of citizens, the mandates of public officials and regulators, and the impacts of new forms of technology, including AI, social media and mobile communications.

And public safety agencies need the right information at the right time to plan and deliver vital services. However, legacy technologies, shrinking budgets and staffing pressures, a lack of technical resources, and resistance to change create challenges for organizations. Hexagon's Safety, Infrastructure & Geospatial division can help. By improving the quality, accuracy, and availability of critical information, our integrated solutions increase performance and productivity, while reducing the total cost of ownership for missioncritical IT investments and the staff that use them.

All over the world, public safety agencies are undergoing a process of modernization, needing to radically rethink workflows by leveraging next-generation technologies. Organizations are challenged to digitally transform, build more trust and engagement with the communities they serve and retain and increase their skilled workforces – all while dealing with new pressures and increasing calls for service.

Agencies are no longer questioning if they should invest in digital technology, but how, by what method and with whom.

So, what does an agency need to be successful on its digital transformation journey?

Agencies should have an integrated, innovative and flexible ecosystem of digital capabilities to serve as a foundation, as well as a trusted, experienced partner with the right experts to guide them through modernization and transformation.

#### Experience is everything.

In these rapidly changing times, public safety agencies need more than just technology. They need a trusted partner with a proven platform they can count on when crises hit, demand spikes and times get tough. Their partner must have the experience to help them improve their services and digitally transform at their own pace.

#### Formula for public safety success

#### **Proven experience**

Agencies need a technology provider with decades of experience – one that is not going to disappear after the sale. With more than 30 years of public safety experience, Hexagon is proud to partner with more than 420 active public safety customers in more than 40 countries.

#### **Platform ecosystem**

Agencies need a technology provider with a modern, advanced and integrated public safety platform. Hexagon is proud to offer a flexible platform that is built for the user, available on-premises or in the cloud, delivers next-gen capabilities and provides innovative AI technologies.

#### Partnership mindset

Agencies need a technology provider that is also a partner and advisor – one they can count on when times get tough and doesn't need to be replaced every few years. We believe a true partnership enables agencies to be successful by providing unique client enablement tools combined with our consultative, relationship-driven approach.

#### People

Agencies need a technology provider with experts – people who not only understand the specific challenges of the public safety industry, but also the unique needs of each customer. Hexagon's people understand our work is more than technology; it's about developing relationships and solutions that will be in place for years to come and helping agencies meet their goals and protect their communities.

#### Let's do this together!

Is your organization looking for a partner to help achieve and maintain excellence, while also innovating at your own pace? Do you need guidance from trusted advisors who know what questions to ask, how to consistently deliver reliable products and ensure your organization is successful?

Let us be your trusted advisor and put the formula for public safety success to work for you. Let's do this together.

Learn more about Hexagon's public safety platform for today – and tomorrow: https://hxgnpublicsafety.com

#### Hexagon's next-generation public safety product portfolio

Hexagon next-generation software portfolio **HxGN OnCall** offering flexible, out-of-the-box, capabilities in a browser.

The HxGN OnCall portfolio helps public safety agencies of all sizes be more agile and resilient through modernized capabilities spanning call-taking and dispatch, records, analytics, major event management, and mobility.

Deployed on-premises, customer-hosted, or Software as a Service (SaaS) in the cloud, HxGN OnCall helps organizations deploy these capabilities more easily anywhere across their ICT estate so they can make more informed decisions; easily connect devices, systems, and people; and harness next-generation technology to better meet future challenges. A redesigned User Experience provides streamlined workflows allowing agencies to deliver the right tools and information more easily, increasing flexibility, and adapting more quickly and easily to changing needs and technology.

Accessed via browsers and mobile apps, HxGN OnCall products are easily configurable, allowing agencies to adapt the software to their unique and changing needs.

The HxGN OnCall portfolio is the perfect foundation for building safer, smarter cities.

**HxGN OnCall Dispatch** is a flexible suite of next-generation incident management capabilities. Supporting on-premises, customer-hosted or Software as a Service (SaaS) deployments, the intelligent software suite provides superior incident management capabilities in the public safety answering point (PSAP), emergency control room, station, unit or anywhere first responders need to go.

**HxGN OnCall Dispatch | Smart Advisor** leverages artificial intelligence (AI) and machine learning to fill operational blind spots in complex, unfolding emergencies. HxGN OnCall Dispatch | Smart Advisor supports continual, autonomous assessment and gives users richer, actionable insights that would otherwise go unseen.

#### HEXAGON'S SAFETY, INFRASTRUCTURE & GEOSPATIAL DIVISION

**HxGN OnCall Analytics** provides police, fire, emergency medical services and dispatch centers with intelligent data visualization and analytics tools for evidence-based reporting, analysis and communications. HxGN OnCall Analytics helps public safety agencies overcome the challenges of raw, fragmented, incomplete or incorrect data by transforming it into valuable reports. With it, agencies can see their data in new ways to better assess performance, allocate resources and improve operations.

**HxGN OnCall's field mobility solutions** feature task-focused apps that connect emergency responders and patrol officers with dispatch and records capabilities to ensure safe, efficient and effective operations.

**HxGN OnCall Planning & Response** is a web application for managing major incidents and events. The product suite integrates and coordinates resources, procedures and communications for individual agencies or across jurisdictions and tiers of command and provides a single, unified solution for all needs and stages of operation.

**HxGN OnCall Security | Guardian** is a suite of tools that integrates data from alarms, sensors, IoT and intrusion devices and video data to provide unprecedented situational awareness for real-time event monitoring and response. It can help integrate data from disparate systems to provide unprecedented situational awareness, reduce the lag time between threat identification and response, and to centralize and coordinate physical security operations across geographically dispersed organizations. This solution goes beyond basic alarm monitoring and retroactive forensic response. It offers one common operating picture for continuous, real-time assessment across all events, applies broader and more robust detection methods, and integrates with computer-aided dispatch (CAD) solutions for immediate response.

**Physical security software by Qognify – part of Hexagon.** In late 2022, Hexagon acquired Qognify, a leading provider of video management software (VMS) and enterprise incident management (EIM) solutions. Qognify extends Hexagon's real-time monitoring and security reach to detect, assess, and respond to incidents, providing a more robust offering to the markets. The solutions link business and operational workflows with video data to minimise the impact of security, safety and operational incidents. The video management software (VMS) leverages video analytics from camera feeds and cloud technology to provide a single video monitoring solution. The enterprise incident management (EIM) software integrates real-time information from video feeds and many other diverse systems into a single dashboard. By correlating and analysing disparate data, customers can derive meaningful insights that ensure incidents are managed effectively and efficiently to avoid business disruption. These solutions complement Hexagon's offerings, including HxGN OnCall and HxGN Connect.

# Hexagon's cloud-based workspace for citywide and intraregional collaboration

**HxGN Connect** enables organizations to easily share and act on data in a secure environment to power realtime crime, incident and operations centers. It brings data and people together into a unified view for shared awareness, collaboration and action. A cloud-native, real-time incident center as a service, it allows you to securely share information and coordinate action based on different types of data, including assets, events and incidents, units, cameras, alarms and more.

HxGN Connect complements organizations' existing systems, providing a richer, unified view of information with built-in messaging and tasking to enable both unplanned, ad hoc engagement and ongoing, daily structured collaboration.

Easily connect and update data, message and assign tasks to users, and break down barriers between departments, organizations, cities and regions.

#### **Incident & Resource Management**

Our incident management solutions coordinate critical information and resources and track developing situations in real time. Through immediate and complete information about events and units, our solutions help police agencies, fire and rescue services, and emergency medical services respond to and resolve incidents with speed and efficiency.

With our computer-aided dispatch system, call-takers, dispatchers, and supervisors benefit from streamlined tools to field calls, create and update events, and manage resources, including multiple agencies and jurisdictions. Field personnel increase productivity through mobile applications and data, including access to pre-incident plans.

Our police, ambulance, and fire & rescue CAD supports agency-specific as well as cross-agency workflows and enables key capabilities.

Our police solution includes unit and personnel recommendations and records and criminal database queries.

Our ambulance and fire & rescue solutions include response plan creation, unit recommendations, incident perimeters, and hospital routing. Interfaces to station alerting, printing, and paging systems enable quicker turnout, while integration resource optimization systems streamline operations.

Whether in the communications center, the station, en route, or on scene, police, law enforcement, fire and rescue personnel can access actionable information whenever and wherever needed.

#### Intelligence-led Analytics & Reporting

Proactive law enforcement agencies apply data analytics to problem-solving for intelligence-led policing. Our police analytics software suite leverages computer-aided dispatch systems, records management systems, and other data sources for evidence-based decisions that improve operational efficiency, optimize resources, and reduce crime.

#### HEXAGON'S SAFETY, INFRASTRUCTURE & GEOSPATIAL DIVISION

Our business intelligence software helps agencies to mine, monitor, and analyze massive amounts of operational data and report the results for better resource planning and deployment. Our crime and incident analysis and mapping software enables agencies to visualize and analyze information for crime prevention, post-incident analysis, and more.

Hexagon's virtual user assistance, HxGN OnCall Dispatch | Smart Advisor helps each role in the comms center see the unseen. Call-takers and dispatchers are expected to handle complex, unfolding emergencies at a rapid pace. The nonstop influx of data is nearly impossible to sift through and categorize manually. These challenges cause information gaps and can lead to an overburdened workforce missing crucial connections. Modern computer-aided dispatch tools, especially those leveraging artificial intelligence (AI) and machine learning, help personnel identify hard-to-spot, complex emergencies earlier and make connections between seemingly unrelated events. Hexagon's Smart Advisor – the industry's first assistive AI technology designed to work within dispatch software to help public safety agencies detect and respond to complex emergencies sooner. Assistive AI helps comms centers run smoother with timelier response and delivers a clearer picture of the situation for informed decision-making and a staff empowered to perform at a higher standard.

Hexagon's tools for real-time and historic reporting and analysis help police increase intelligence, target problem areas, and improve public safety.

#### **Resource Allocation & Planning**

Fire and rescue services must meet response time standards and monitor and measure performance. Our fire service analytics software leverages computer-aided dispatch systems, records management systems, and other data sources for better reporting, analysis, and evidence-based decision-making.

Our business intelligence software helps agencies mine, monitor, and analyze massive amounts of incident and response data and report the results for resource allocation and growth planning. Our incident analysis and mapping software helps agencies visualize and analyze information for location intelligence. With tools for real-time and historic reporting and analysis, we help fire and rescue services identify trends and determine personnel, apparatus, and station needs.

#### **Crisis Management & Emergency Operations**

Natural disasters and large-scale public events create challenges far beyond the scope of day-to-day incidents. Our solutions provide emergency operations centers (EOCs) and multiple organizations with reliable information, clear and unambiguous communications, and tools to adapt to rapidly changing situations.

#### HEXAGON'S SAFETY, INFRASTRUCTURE & GEOSPATIAL DIVISION

With our computer-aided dispatch system, agencies can create special zones, implement predefined standard operating procedures, and operate additional control rooms, including remote or mobile command centers. With our major events and geospatial software, emergency operations centers, command staff, and multiple, diverse organizations can collaborate, sharing and accessing critical information during planning, response, and recovery.

Learn more about Hexagon's public safety solutions: https://hexagon.com/products/product-groups/public-safety-platform



### Huawei

Big Data Cloud Services

Emergency Call Management

agement Multimedia Comms

Network Hardware

Huawei is a leading global information and communications technology (ICT) solutions provider. Driven by responsible operations, ongoing innovation, and open collaboration, we have established a competitive ICT portfolio of end-to-end solutions in telecom and enterprise networks, devices, and cloud computing. Our ICT solutions, products, and services are used in more than 170 countries and regions, serving over one-third of the world's population. With more than 170,000

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employees, Huawei is committed to enabling the future information society, and building a Better Connected World.

By leveraging our strong R&D capabilities, comprehensive technical expertise, and continuous technical innovations, Huawei is committed to building an open, flexible, resilient, and secure platform in the enterprise market to orchestrate a sustainable, multi-win ecosystem. Huawei provides a series of C-C4ISR Safe City solutions that support the collaborative public safety vision to help public safety customers build digital platforms and improve inter-agency and community collaboration. Effective prevention, accurate resource deployment, fast analysis and decision, visual command, and efficient collaboration between multiple departments help governments reduce crime rates, improve crisis prevention and emergency response capabilities, and ensure safe and predictable security.

Huawei's public safety solutions are now serving more than 700 cities in over 100 countries and regions, helping governments accelerate digital transformation of public safety. Huawei's public safety solutions are now serving more than 700 cities in over 100 countries and regions, helping governments accelerate digital transformation of public safety.

Huawei public safety solutions overview is as follows:

#### Building the world's first visual and converged command system

• **Visualization**: visual on-site conditions and resources (police and emergency resources); unified command on the same GIS map

• **Convergence**: converged communication methods – seamless video (video surveillance, video conferencing, mobile phones, and trunking terminals), voice (eLTE broadband trunking, TETRA narrowband trunking, and the Internet), and data (GIS and SMS) interaction across terminals; collaborative management of a single incident across agencies

# Creating awareness, informative analysis, and diverse warning methods, enabling comprehensive security protection

- Awareness: Huawei's all-scenario access network implements data backhaul from various sensors
- **Analysis**: the collaboration among open smart cameras, IoT gateways, and video analysis platform featuring device-pipe-cloud incorporates industry-leading intelligent analysis algorithms
- Warning: Comprehensive warning platform intelligently links massive numbers of sensors

#### Industry's unique distributed cache technology used in high-performance computing, setting up a leading cross-regional, multi-level shared video cloud platform that enables leads to be identified within seconds

• **Cross-regional, multi-level sharing**: enables tens of thousands of users (such as police officers, government officials, and first respondents) to watch on-site videos concurrently

# Establishing an advanced broadband trunking system that allows dedicated trunking and real-time video dispatching on the same network

- **Dedicated trunking**: TCCA mission-critical standards, industrial-level design, IP67 protection, Ex ic IIC T4
- explosion-proof certification, -40°C to +65°C working environment for CPE
- **Real-time video dispatching**: a single base station supports the upload and distribution of 27 video channels
- **Unified network**: one eLTE network replaces two networks (TETRA narrowband trunking and broadband access)
- Supports multi-platform mobile devices to manage and respond to emergencies anytime, anywhere

# Providing local delivery and a maintenance platform across more than 170 countries and regions

- Global delivery and maintenance platform: 3 global and 9 regional Technical Assistance Centers (TACs), as well as 45 logistics and spare parts centers, implementing delivery and maintenance across 170+ countries and regions
- Rich partner resources: 100+ ICT partners, 550+ certified service partners, and 120+ authorized service partners

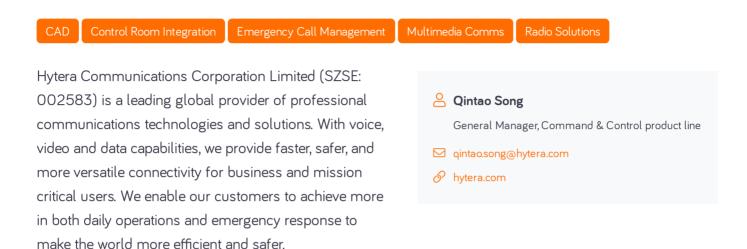
#### **Success Stories**

- Safe City Project for Kenya: This project created an all-in-one Safe City solution that combines call taking and dispatching, eLTE broadband trunking, video surveillance, and intelligent analysis (license plate recognition and traffic violation detection). Devices were provided to more than 10,000 police officers, enabling full visual command. On November 26, 2015, the project ensured security during Pope Francis' visit to Kenya.
- Thailand RTP emergency communication: Huawei built the world's first 3GPP-based broadband trunking emergency communications system, with more than 45,000 terminals. The system supports the next-generation of visual command and surveillance, promptly shares the dispatching and policing affairs information, and leverages various mobile apps to improve law enforcement efficiency. After its successful deployment, the system provided multimedia communications support in rescuing the Thailand 18 youth soccer team members who were trapped in a cave, and safeguarded Rama X, the royal family, and governmental leaders in the Bike Un Ai Rak event.

For more information about Huawei's Safe City solutions, please visit the official website: http://e.huawei.com/en/solutions/industries/public-safety/safe-city/safe-city



# Hytera Communications Corporation Limited



**Hytera is committed to innovation and provides user-orientated critical communication products.** Fully understanding the communication challenges the industrial users are facing in Public Safety, Energy, Transportation, Utilities, Commercial and other industry verticals, Hytera continuously invests in technology development and application innovation, and is committed to promoting most open communication standards from narrowband to broadband, including TETRA, DMR, PDT and LTE.

Across multiple technologies and standards, Hytera provides feature-rich, multi-media broadband applications, while ensuring reliable mission critical voice communications through narrowband technologies, to help customers be their best by improving their situational awareness, fostering multi-agent collaboration, and enhancing decision-making process.

Hytera has more than 100 offices worldwide and more than 40% of our workforce is engaged in engineering, research and development. There are 10 global innovation and development centers located in China, Germany, UK, Spain and Canada. The centers collaborate to keep Hytera at the forefront of the communications industry and are dedicated to developing leading technologies into solutions that our customers can count on to meet their real time communications challenges. With its extensive network of dealers and partners, Hytera is proudly serving customers in over 120 countries and regions around the world.

Hytera is committed to delivering reliable products with a high standard of quality. Hytera's smart factory in Shenzhen incorporates intelligent warehousing and logistics systems. Another important part of the global supply chain is the manufacturing center in Zaragoza, Spain, which focuses on customizing our products to meet the specific needs of our European and American customers.

Hytera also incorporates many leading sub-brands within the industry. Sepura, headquartered in Cambridge, UK, manufactures a leading brand of TETRA terminal products in Europe; Teltronic, headquartered in Zaragoza, Spain, is famous for developing TETRA systems in the rail transit industry; Norsat, headquartered in Vancouver, Canada, is the world's leading provider of professional satellite communications equipment and solutions; Sinclair, headquartered in Toronto, Canada, is the world's leading smart antenna brand; and HYT provides a brand of analog products under the Hytera umbrella.

#### Public Safety Command and Dispatch

For police, fire, emergency and other public safety management departments, provide a full range of products and solutions such as intelligent response and handling, visual command and dispatch, speed 110, major event security, integrated dispatch console, and integrated communication support system, covering the entire business process of the command center and Application scenarios, and provide the overall construction plan of the command center.

#### **Unified Communication and Dispatch**

As the world becomes more connected than ever before, requirements on seamless communication and instant coordination are growing. Leveraging years of successful experiences in the Private Mobile Radio (PMR) network, Hytera has launched self-developed, industry-leading multimedia unified communication platforms. Empower your dispatcher to communicate across multiple standards and multiple PMR and public systems, including DMR systems, TETRA systems, and PSTN systems, and deliver a wide range of audio, video, and data services. The platform is thoughtfully designed to ensure that your work force across radios and systems are interconnected and enable your dispatchers to coordinate efficiently. It is a wise choice for daily command and control, emergency command and control, and security protection for major events.



## **IES Solutions**

#### Cloud Services Interoperability Solutions Resource Manage

*IES Intelligence for Environment & Security* – *IES Solutions (IES)* is an Italian SME, based in Rome, Catania and Oxford, that designs, develops and delivers services and technologies for the Environment and for the Safety and Security of citizens.

The Company has a proven expertise in turning research into innovative solutions; thanks to the participation in several EC-funded projects, IES has gained a significant expertise in implementing solutions and

CEO

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evaluating the impact of ICT solutions in many different domains where data gathering, data interoperability, communication, alerting and an efficient visualization of information are key.

IES strongly believes in the power of interoperability for improving communication between authorities and citizens, particularly during emergencies. Pursuing this vision, IES has developed a suite of products called JIXEL, which is based on the CAP (Common Alerting Protocol), an XML data format originally developed by the OASIS Consortium. CAP has been adopted by the Italian Ministry of Interior as Italian national standard for exchanging data and ensuring interoperability between Emergency Control Rooms.

Jixel is a suite of Cloud solutions for the management of both daily business and emergencies. Jixel implements an intuitive Command and Control System, which allows a standard-based seamless sharing of information between actors, being them on the field or in Control Rooms.

#### Jixel offers real-time information using:

- Geography, localisation, dynamic maps
- Information about personnel and resources within the area of the event or approaching it, including their status and assigned task.
- Contextual information and potential risks in the area impacted by the event

Jixel automatically adapts to the data communication available in the area of the event, dynamically varying the in-transit data accoriding to the available bandwidth. Thanks to a set of apps, Jixel can use videos created by both citizens and professionals using their smartphones.

Jixel is a complete web-based virtual Control Room, featuring tools for the visualisation of information, for data sharing and data management; it can be used on every class of devices, from PCs to smartphones.

Jixel aggregates information from on-the-field sensors, Open Data, Social Media and dedicated apps: for all practicual purposes, it makes Big Data integrated in the framework **Smart Cities** and Smart Government.

Jixel is applied in 7 different solutions, specifically designed for **Cities, Regions, Agencies, Groups, Companies** and **System Integrators**, plus a specific solution developed for the **eCall** domain.

The platform implements all the needed information flows with four specialised products: between organisations (*SHARE*), within the same organisation (*MANAGER*), from sensors, apps and open data (*AGGREGATOR*) and with citizens (*ALERTER*).

JIXEL-ALERTER can also be configured for mass warning via the radio channel: in combination with the JIXEL-RADIO unit, it empowers the direct audio broadcasting of CAP alerts as sent by the alerting authority.

JIXEL also covers the Social Media domain with specific modules for information gathering, sentiment analysis as well as alerting.

IES supplied JIXEL to the Italian Ministry of the Interior – Fire Fighters Dept., which is using it all over Italy since 2014; the system currently covers 97% of the Italian Provinces and 98% of the population (May 2017).

In 2016, JIXEL has been supplied to the Regional Civil Protection of Sicily (Italy) implementing the GECoS system for emergency management and interaction with volunteers. Citizens can also be part of GECoS via the "Anch'ioSegnalo" App by sending alerts directly to the control room.

IES also provides services based on the analysis of EO-images for the assessment of the presence of asbestos in buildings, for the identification of burnt areas and for the assessment of susceptivity to fire.

Since 2017, IES is involved in a DG-ECHO project called ALPDIRIS, based on communication interoperability, which aims at improving cross-border mountain search and rescue between Italy and Slovenia.

IES has developed a CAP-based standard solution for the implementation of information exchange between PSAPs (Public Safety Answering Points) and with TPSPs (Third Party Service Providers) under the eCall initiative (I\_HeERO project).

IES is also currently involved in a feasibility study on a Galileo-based population alerting service.

IES is member of the Advisory Board of EENA (European Emergency Number Association) and founder member of PSCE (Public Safety Communication Europe). It is an active member of the task-force of B-APCO for the development of the MAIT (Multi Agency Incident Transfer) protocol and is on boardnthe Technical Committee of the OASIS (Organization for the Advancement of Structured Information Standards) Emergency Management standardization group.



# IHM

#### CAD Control Room Integration Emergency Call Management Radio Solutions Voice Comms

IHM A/S is a Danish provider of intelligent solutions for emergency calls since 1982. Our solution for emergency control rooms and radio communication covers almost 80 % of the Danish market. For the Scandinavian market we provide OEM solutions primarily.

Our state-of-the-art solutions manage and streamlines mission critical operations at alarm centres and control rooms. Our systems are certified for SINE, RAKEL and Nødnett security systems at the Danish, Swedish and Norwegian market.



The IHM AMS platform manages critical alarm tasks and resources automatically, providing a full picture of the incidents, whether it is a fire alarm or technical alarm.

The system automatically calls out the right, and sufficient, crew and equipment, based on risk-based dimensioning. Simple controls give the on-duty officer a clear picture of the accident, enabling staff to focus quickly and effectively on organizing and coordinating operations at the incident site.

The system also ensures automatic registration and archiving of incidents to meet requirements for documentation and statistics.

#### Your emergency operation center handle:

- Receipt of emergency response and automatic fire alarms via the alarm network
- Automatic or manual crew call-out
- Pagers and/or TETRA terminals with call-out
- Automatic, intelligent call-out, optimising call-out based on risk-based dimensioning
- Automatic logging of calls
- Two-way communication with groups, and one-to-one communication
- Service agreement with 24/7/365 support

# IHM CAD and IHM GIS can be added to the solution, including the following functions:

- Status registration (TETRA)
- Visual summary of resources crew and equipment (TETRA)
- Visual summary of the geographical position of alarms
- Compatibility with TETRA, coordination of operations with ambulances and police
- Video surveillance
- Redundancy (backup) with double server and duplicated system with reciprocal updating

IHM offers a range of solutions, both large and small, and all can be scaled up or down according to your specific requirements. Our solutions include IHM Communications Centre, (Integrated Control room System, ICS), IHM CAD (Computer Aided Dispatch), and IHM AMS (Alarm Monitoring Software).

# The following functions can be added to the standard solution for fire and rescue:

- Anti-theft alarms
- Emergency calls, for example to domiciliary care services
- Personal attack alarms, for example for traffic wardens
- Lift alarms
- Technical alarms, AIA (installations and pumps)
- Call-outs via LTE pager (IHM PAM)



# IMA

eCall Emergency Apps

Emergency Call Routing

Emergency Call Management

Third Party Service

The IMA Group is an international assistance company wich has develop a 25-year experience as TPS e-Call in western Europe with close relationship with PSAP organizations. Since 2017 the SNSA and IMA have been designated PSAP eCall for the handling of 112 eCall in France in cooperation with emergency services and Public authorities. The IMA Group designs, assembles and

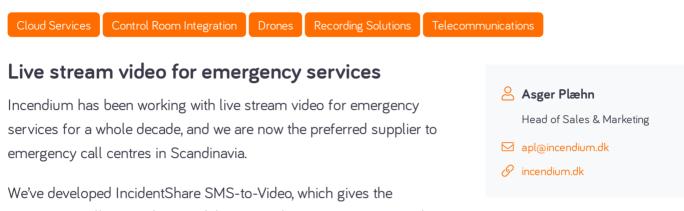
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implements assistance solutions and services adapted to its shareholders and customers. We are committed to providing help, support, and guidance 24 hours a day, 7 days a week, anywhere in the world. Our talented people are hard at work every day in four areas of expertise: Mobility, Home, Wellness, and Legal.

We devote all our attention to our shareholders and their beneficiaries as well as our partners and customers whenever they need it. In 2022, the Group generate a turnover of €1006 million. It covers over 45 million beneficiaries and has more than 5 400 employees.



# Incendium



emergency call centre the possibility of sending a text message with a

link to the caller and then receiving video images directly from the caller's phone. A live video feed is thus created between the caller and the first responders within a few seconds.

Our software has been developed in close cooperation with emergency call centres, fire services and police forces, and we now have a product that is second to none in terms of providing value for first responders.

We believe that by challenging the way we communicate, we can create greater common understanding and security in everyday life.

#### Fast, easy add-on for emergency calls

Our solution is really extremely simple. It's called IncidentShare SMS-to-Video, and it is entirely browserbased, with an intuitive structure. In practice, this means that the set-up can be in operation for you within a few days. IncidentShare rapidly establishes a live video feed directly to first responders (ambulances, paramedics, etc.), who can thereby see the situation with their own eyes. This allows them to mentally prepare for the task they have been called out for, and to provide correct advice on the basis of the live video before they reach the site of the accident.

#### The proven solution

IncidentShare is the result of a comprehensive collaboration with leading emergency services in Scandinavia since 2012, through which we have delivered live streaming solutions. Our team of dedicated in-house developers is continuously improving the solution in close dialogue with our users.

The software is scalable and may be used as it is without further adjustment, but it can also work with existing setups. It comes with built-in integration for a variety of VMS industry standard systems. If this is not sufficient we also have a strong API, so there is great integration flexibility.

All of the communication takes place via secure, lightning-fast encrypted channels. The solution can be run at your own premises, or via our secure hosting environment in Frankfurt or Denmark. In other words, you can be completely secure with regard to personal data.

#### Video saves lives!

The average duration of a video call to the emergency call centres is three minutes – and that has proved enough to save lives. We supply a software solution that our partners describe as value-adding for their work.

Not only does IncidentShare help to save lives – it also makes it possible to prioritise resources. Emergency call operators find that video calls can change their perception of the situation, and have led to scaling the operations down or up. As a result, ambulances and rescue helicopters can be sent to where they are most needed.

Call centre decisions can be made on a more secure basis when video is available from the caller, and this improves the working environment. SMS-to-Video provides a simple, fast and effective way to obtain an overview and alleviate a stressful situation, and it helps to reassure the caller when a professional is watching along with them.

Incendium has two offices in Denmark and has been growing continuously since 2013 – for the past three years with an average revenue increase of 50%. We stand proud as the market leader in Scandinavia.



# InnoSeven Technologies

#### Project Management Public Safety Specialised Consultancy

**JSC Innoseven technologies** provides a wide range of services related to Public Safety Answering Points (PSAPs) and Call/Contact centers starting from feasibility studies, design and the technical solution implementation of the centers, organizational matters of such centers backing it up with the preparation of detailed technical, functional requirements and specifications and further support.

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Innoseven technologies has deep experience in design of organizational

processes, regulatory and legislative environment of PSAPs, interoperability of emergency handling agencies and is providing consulting services to PSAP organizations for implementation of the quality standards and processes based on best practices of the emergency handling field, EENA and ISO 9001 standards. Innoseven technologies is an active member of the EENA organization gaining up-to-date knowledge and experience from the conferences, official publications and discussions with other members, partners and PSAP organizations.

Specialists of Innoseven technologies have gained huge experience in building IT solutions for Call/ Contact and Emergency Response Centers (PSAPs) during long years in this industry from 2001. Specialists of Innoseven technologies have been managing project implementations, providing technical designs and work projects, installing and configuring various related equipment, software components and solutions, performing administrator and end-user trainings, performing solution testing and acceptance. Deep experience has been gained for the specification, design and implementation of various integration interfaces with other emergency and non-emergency agencies.

During the projects in Lithuania specialists of Innoseven technologies have gained huge experience in implementation of recent PSAP related services such as eCall services, AML, caller location based on Timing Advance and Round Trip Time methods and others. Innoseven technologies is providing support and maintenance of the implemented systems in 24x7x365 mode with high SLA commitment (less than 4 hours back-to-service).

We are sales and service partners for Siemens SBT, Unify and Retia. Nevertheless our experience and knowledge is not related to the respective solutions only and Innoseven technologies is capable in providing services for a wide variety of different solutions from different vendors.



### Intersec

Big Data Caller Loca

ion Emergency Apps

Emergency Call Routing

Public Warning

Founded in 2004, **Intersec** is a global pioneer in mobile data and location intelligence solutions, locating, tracking, and mapping 1 billion mobile devices 24/7 for 75 customers in 45 countries. Its fast data platform allows public authorities and telecommunication companies to turn massive amounts of cellular data into actionable insights, in real-time.

**GeoSafe** by Intersec is a rich portfolio of public safety and missioncritical ready-made solutions, including:

- 1. Early & Public warning system (EWS/PWS) and situational awareness
- 2. Emergency call location and routing
- 3. Location investigations for LEAs

#### Leading PWS provider in the European Union

- Leading PWS provider in the European Union, covering 30% of the EU population (France, Germany, Portugal, Croatia, Luxembourg)
- A strong proponent of combining Cell Broadcast and Location-Based SMS to communicate much more effectively with the population and stay ahead of the crisis management
- A fully integrated and modular national public warning architecture, at both governments and mobile carriers levels
- Future-proof and scalable platform, ready to integrate Galileo EWS
- Tailored for both on-premises deployments and Cloud/SaaS model

"We were attracted by the completeness of Intersec's solution, by its experience in delivering messages on a very large scale depending on the real-time location of recipients, and by the willingness of its teams to keep this solution at the cutting edge of technology over the years to come." - Romain Moutard, Program Director, French Ministry of the Interior



#### Emergency calls: the most advanced positioning engine on the market

On December 16, 2022, the European Commission published a directive requiring competent regulatory authorities to establish, by 5 March 2024, the caller location accuracy and reliability criteria to be met through network-based and handset-derived technologies, to bridge the gap for Advanced Mobile Location (AML) corner cases.

- Our emergency call location solution combines multidimensional cellular and non-cellular locating capabilities to provide emergency services and first responders with critical, up-to-date information, allowing them to save more lives. It complements the AML technology in any case, reducing blind spots.
- Intersec has been recognized by Gartner in 2022 as a key location intelligence player. To deliver the best accuracy to PSAPs, Intersec orchestrates its extensive stack of location technologies including GMLC, SMLC, SAS, e-SMLC, LMF, real-time passive geolocation, LRF/RDF, CLF, and AML Gateway.

#### Intersec at a glance:

- Founded in 2004
- 150 employees around the world
- 19 years of telco experience
- 1 billion mobile devices located 24/7
- 75 customers in 45 countries
- The most comprehensive set of location techniques on the market
- Privacy by design
- Simplicity, reliability, relevancy
- Modular, interoperable, and highly scalable solutions
- 5G-ready platform powered by AI and fast data
- Network-vendor agnostic
- Compatible with any cellular network design



# Intrado

Caller Location eCall

Emergency Call Routing

Emergency Call Management

Next Gen Comms

**Intrado** is an innovative, cloud-based, global technology partner to clients around the world. The company's Life & Safety division is a leading provider of emergency communications technology solutions for traditional phone companies, wireless carriers, satellite and cable operators, VoIP providers, and public safety and government agencies. Backed by over 40 years of world-class network engineering focused on the needs of public safety, Intrado manages the entire emergency

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response continuum through data management, reliable networks and a deep understanding of public and personal safety emergency response protocols.

Intrado connects people to protection and security by enabling organizations or agencies to locate, route, transport and deliver emergency communications to help save lives. We develop, implement and support all aspects of emergency communications network and solutions, facilitating more than 420 million emergency transactions each year.

The communications industry has exploded with new technologies such as IP, Voice over Internet Protocol (VoIP), text messaging, cloud computing, M2M communications and more. Intrado continues to evolve, leading the industry by providing users of both traditional and emerging technology with high-quality, reliable access to emergency assistance.

# Intrado improves emergency response through data accuracy, pinpoint location identification and highly available, highly reliable network

The ability to accurately determine the precise location of a mobile device within a network is critical to emergency response operations. With continued emphasis on providing emergency personnel with the most accurate information needed to respond efficiently and effectively in emergency situations, Intrado is committed to continually enhancing and improving the location data we deliver.

Our sophisticated technologies for location services, IoT and VoLTE help enterprises of all sizes meet regulations and provide a better class-of-service to their subscribers and end-users. Wireless carriers, VoIP service providers, telematics operators, cable MSOs, alarm companies and satellite phone providers depend on Intrado for location determination and routing services to meet emergency communications requirements.

Intrado provides a comprehensive hosted platform that seamlessly integrates current handset and networkbased mobile location technologies; our location determination services automatically apply precise locating methods to deliver the most accurate results available.

Intrado delivers location information to Public Safety Answering Points to determine the exact location of emergency wireless phone calls and deliver multimedia call capabilities, allowing text, images and video to be sent from those in need of emergency assistance. It is our mission to ensure that every piece of technology works seamlessly with each other, so that every request for help can be delivered from the sender to the emergency call taker, providing the highest level of location determination accuracy in the market and the most up-to-date emergency call routing capabilities.

Intrado's systems and services touch millions of lives every day. We take that responsibility seriously.



# Ipkom

CAD

#### Control Room Integration

Interoperability Solutions

s Next Gen Comms

Public Safety

Established in 2008, **Ipkom** is a company where fresh ideas are interlaced with varied experiences of skilled workers. Our company pools experts with long standing experiences in the field of informatics and telecommunication. Our work is focused above all on idea realization and filling up newly formatted needs in the sphere where informatics and telecommunication interweave.

Bostjan Rupnik
 CEO
 bostjan.rupnik@ipkom.net

At Ipkom we offer a wide range of services and solutions, anywhere

from simple to complex ones. Focusing our work on the area of public safety, we can rely on a great deal of experience in this field. Our mission is developing new telecommunication / information techniques and methods. We realize that your business success relies upon quality information solution, therefore with our solutions we look after your needs and let you focus on your work. Care for our customers is expressed by high quality support since our goal is to have content clients with long-term cooperation.

### QUARK

Call-Taking and Dispatching communication center Quark was designed specifically for critical use cases, which are subject by the public protection and disaster relief (PPDR) authorities. The Quark system offers a unique product solution which is designed with the goal to enable citizens to reach a 112 authority by using a legacy system based on Voice call, SMS, WAP, as well as the next generation communication systems such as VoIP, Video and eCall.

In critical environments, where every second counts, the solution that offers interoperability between emergency services and providing both voice and data information exchange, has the utmost importance in supporting the incident role. By providing software modularity, highest level of adaptability, open standard approach and architecture flexibility (distributed and cloud-based architecture), together with agnostic OS client installation, Quark as a Call-Taking and Dispatching systems has already been set as a Next Generation 112 system.

As a system, Quark has been in operational usage for many years as a central 112 management system in Slovenian Administration for civil protection and disaster relief, evolving from basic Call-Taking console up to a full scale communication center, which now connects local call-takers and dispatchers into a nationwide operational center. Quark achieves this by providing seamless voice and data experience through different regions, services and organizations (emergency units, fire brigades, police, intervention headquarters etc.).

### Key features:

Operating system agnostic clients (works in Windows, Linux, any other platform)

#### Flexible server architecture

• modularity of Quark system enables end user to set up own preferrable, custom configuration Cloud based

#### **Distributed solution**

- local, regional or national level
- interoperability of levels
- redundant
- 112 datapool feature, enabling external units to be a part of the system, as well as providing an additional form of data redundancy

Seamless over-border communication (lightweight client for non-operators and API's for nongreenfielders)

#### **Execution of Action Plan algorithms**

- action plan algorithms offer a rapid, user friendly access to an appropriate action plan for an incident taking place
- hierarchical usage of location and event type
- short action plan time to activation

#### Operator working place customization

**Communication services and support for**: CS voice, VoIP, radio, paging, SMS, AML, eCall, Video, GIS, WAP, local CRM databases,

PSAPs for: SMS, eCall, redundant

#### Operator diary

- detailed user activity log
- operator shift switch documentation

#### General internal messaging

• clear insight of internal communication between operators

#### Statistical data and presentation

• for all supported type of services



# **IPS** Consultants

CAD Disaster Management

ment Emerge

Emergency Apps GIS Specialised Consultancy

**International Public Safety** is a boutique consulting firm in the Public Safety and Technology Sector.

We understand the Public Safety & Security domain in Europe and worldwide having deep industry expertise. Our Clients are governments, Public Safety agencies and companies providing technology for the Public Safety market. Artner

- ☑ michael.justus@ips-consultants.de

Our Team is comprised of senior executives and consultants each of them having extensive experience in the Public Safety and Technology Sector.

Our Specialties are Strategy, Technology, Management, M&A, Programs & Projects, Operations, System Engineering.

We deliver strategies and concepts having a strong focus on implementation. Our work is characterized by an effective and efficient project work as well as active participation during the implementation phase.

Basis of our consulting work is our expertise of state-of-the-art software centric technologies:

- Software Development Environments
- Data Management & Storage
- Cloud Infrastructure & Cloud Computing
- Mobile Communication and Mobile Apps
- Geographic Information Systems
- Safety & Security

We understand the use of these technologies for all key Public Safety & Security Application areas:

- Command & Control
- Incident Command
- Records Management

By combining our technology expertise with our understanding of the Public Safety & Security domain we

- create Business & Technology Strategies,
- support M&A activities,
- run Management, Programs & Projects,

- help with Operations,
- do System Engineering

for our clients.

# International Public Safety is providing expertise in Strategy, Technology, Execution and Operations, while creating lasting value.

International Public Safety is a founder of moPS GmbH, Mobile Services for Public Safety. moPS is providing mobile Apps supporting Public Safety & Security workflows on any mobile Device!

#publicsafety #technology #consultingfirm #mobileapps #mopsapps



# Issured

Artificial Intelligence Cybe

Cyber Security

es Information Analytics

**Issured** provide world class digital transformation working in partnership with our clients to turn their strategic 'Vision into Reality' and to deliver tangible value. Our blend of high-level skill and delivery experience enables us to design and deliver effective solutions to meet all the requirements of clients.

Amanat Hussain
 Executive Chairman
 Amanat.hussain@issured.com
 issured.com

Specialised Consultancy

We have a proven successful track record of working as a trusted independent partner in enabling our clients to implement the right blend

of digital services, people centric processes and cultural change to allow efficient and effective operation in an ever-evolving digital landscape. Our major client in the United Kingdom is the National Police Chiefs Council where we are working across all 43 forces and Counter Terrorism Policing to deliver significant improvements in the Law Enforcement operating model.

We have delivered major modernisation and change programmes, worked in very demanding international locations, designed and led international training programmes and are a true digital transformation specialist organisation. Our staff were involved in the design and implementation of the Safe City projects in Islamabad and Lahore and we have delivered similar projects in Kenya, Nigeria, Ghana and the UAE.

An example of this has been working for the National Police Chiefs Council where we have been identifying and developing a new operating model for policing that joins up initial public contact and organisational tasking, introduces the new ways of working for investigation, intelligence when operating in a Digital landscape. These enhancements are further developed to ensure the right digital linking to Courts with the supporting evidential requirements of an evolving digital Law Enforcement environment. We have led the development of the "Digital Learning & Knowledge Base" business case with the College of Policing which is key to supporting the embedding of digital led change.

For Safer City programmes, Issured supports organisations to modernise their operating platforms to effectively service their evolving safety and security needs. The Safer City platform provides an integrated suite of technologies, innovative Concept of Operations, quality focused processes and staff capabilities to proactively manage the security situation and to professionalise the security response to incidents.

### Mea: Connexus – A Unique Digital Engagement Platform

In order to support emergency services, Issured has introduced Mea: Connexus, an innovative digital engagement platform, that offers the following unique capabilities:

- **Blockchain Immutability** Where the evidential integrity of recorded video interviews is of paramount importance, Mea: Connexus uses Blockchain technology and SHA-256 hash algorithms to create a sealed "digital evidence bag" around the content of the interview. This will mean you can always evidence if the content has been edited or changed in any way.
- **Case Management** Recognising that investigations are largely undertaken in teams, Mea: Connexus will provide the ability for organisations to create groups of users that replicate their teams. Team members can create interviews for others and review and comment on each other's video interviews.
- **Mandatory Recording** Mea: Connexus records all video interviews from the point of entering the interview to the closing of the interview session. All engagement between participants is recorded for future review and presentation.
- Time-coded and named transcription Mea: Connexus converts each participants speech to text and presents the hosting organisation with a full transcript of the entire video interview that sequentially provides who was saying what and the time that they said it.
- Secure video, chat, media sharing and storage Mea: Connexus uses 256-bit AES Encryption to secure your video interviews and any chat and media shared with participants throughout the interview. All video interviews and shared materials are securely stored with encryption in the cloud. Mea: Connexus has been assured to UK OFFICIAL and aligns with the UK's National Cyber Security Centre SaaS and Cloud principles.
- Organisational Branding Your customers want to be confident that they are talking to you. Mea: Connexus allows you to use your own corporate identity, logo's, crest's and badge's and by provides participants with your own privacy policy and consent notices.
- Device Agnostic Mea: Connexus works with all desktop and mobile operating systems and their default browsers. Participants do not need to download any application on their devices.
- Blockchain Validation Mea: Connexus provides both users and external parties the ability to validate the content of a video interview to demonstrate and ensure that the record of the video interview has not been tampered with in any way. With the ability to produce "deep fakes" and the editing of video content becoming easier and easier, Mea: Connexus provides validation and authenticity of the video interview.
- **Reporting** Mea: Connexus provides easy to use and understand dashboards and management information that gives customers all of the information they need to manage their organisations use of the Mea: Connexus service.



# ITA Group Bulgaria



after that started developing into one of the leading system integrators in Eastern Europe with its headquarters in Sofia, Bulgaria. In 2020 the company celebrated its 30th anniversary on the international IT/ Telecom system integration market. Today the group consists of 9 companies, that are a 100% privately owned, debt-free and politically Emil Botusharov
 Managing Director
 office@itagroup.bg
 itagroup.bg

independent. ITA provides its customers with turnkey IT/Telecom expertise, where a selection of best of breed hardware and software products assure the delivery of a fully optimised, operational, user-friendly and price competitive solutions where no compromise on quality and reliability is made. The group has its subsidiaries in Bulgaria, Macedonia, Germany and Austria.

As one of the most trusted experts, ITA has proven its qualitative performance in numerous projects related to early warning and emergency handling solutions, smart city solutions, intelligent transportation systems, solutions for the underground railways, digital mobile communications, mobile networks deployment, digital mobile communications etc. Undoubtedly, we work to provide reliable communication to our customers.

Our company is mainly focused on tailor-made, customer-oriented, vendor agnostic solutions empowering and improving everyday operations, preventing incidents and reducing the impact of disasters on the employees and the society and above all technology that saves lives.

Our expertise, wide product and solutions portfolio can be of benefit to any type of governmental or nongovernmental organization, across any industry to successfully digitally transform and move to the next level while following the best practices.

Our focus and partnership with EENA strives to provide solutions for early warning and emergency prevention. Our company has been designing, delivering, deploying and maintaining one of the largest centralized early warning systems in Eastern Europe – The Nationwide Early Warning System of the Republic of Bulgaria, which is in operation since 2008. The system comprises of two sub-systems:

A centralized fully digital siren early warning system, that have a control center network structure, including main- and sub-control centers, integrated into complex civil defense and disaster prevention network architecture. The digital electronic sirens used in the system are qualified to meet the requirements of effective and reliable public warning and notification. We provide the necessary infrastructure for controlling and monitoring a TETRA radio-based siren system. The siren warning system, which since 2008 is in operation and control by the Ministry of Interior of the Republic of Bulgaria, currently covers 35 % of the population in 11 regional cities and the 30 km zone around the Nuclear Power Plant (NPP) Kozloduy, Bulgaria. Currently the system is ongoing expansion and modernization with another 109 centers, in order to cover 50 % of the population of the country.

The second sub-system that is also going through a full modernization in 2023 and is a part of the NSEW comprises of a series of Digital Alarm and Communication Servers in all of the 28 regional cities of the Republic of Bulgaria. Given that in emergency situations, it is vital to act fast and that most of the time, people react irrational, hasty and take improper actions in stressful situations, the system implements an automatic alarm system that monitors and steers predefined processes.

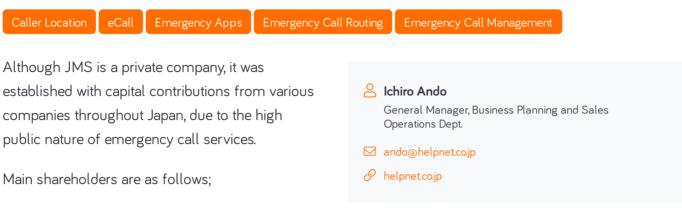
The Digital Alarm and Communication Server is an alarm server system that notifies, informs and mobilizes employees, governmental and non-governmental officials and others in emergency situations. Via text-to-voice announcements, text and multimedia messages, telephone conferences, group calls, and many other functions, the DAKS is the main communication channel in emergency situations.

Our company has also designed and implemented the Advanced Mobile Location (AML) for the Emergency calls number 112 in Bulgaria, providing a 24/7/365 SLA for the system for Emergency calls number 112, the Bulgarian Nationwide Tolling System, Sofia Underground and other critical and non-critical public and private infrastructure projects.

For more information about us, please visit our website at www.itagroup.bg.



# Japan MayDay Service



- All of the car manufacturers in Japan
- Three major telecommunication carriers in Japan (NTT, KDDI, Soft Bank)
- Almost all of the major car navigation manufacturers in Japan
- Major Banks, Insurance companies, etc.

JMS started the "HELPNET" service in September 2000, and has been providing it over 20 years all over Japan.

As of March 2022, JMS supports nearly five million vehicles, and receives seventy thousand emergency calls annually from all over Japan.

In Europe, #112 covers both Police and Ambulance, but in Japan, there are two different emergency call numbers: #110 for Police and #119 for Ambulance.

Based on this situation, Japanese government issued "Guideline for the Third-Party Service Providers on Emergency calls from Vehicle" in May 2018.

JMS is the only company that almost meets this guideline and can connect each emergency call quickly to most appropriate Police/Ambulance head office.

Only JMS can send accident/vehicle data and voice calls to 52 police and 723 ambulance head offices all over Japan through its leased line network.

At the AECS 3rd meeting held in February 2014, the Ministry of Land, Infrastructure, Transport and Tourism introduced JMS as "the PSAP in Japan".



# King ICT

#### CAD Caller Location Drones Emergency Call Management

ent Ergonomics

**KING ICT** is the leading system integrator in Croatia and one of the largest in SEE, with number of successfully developed and implemented innovative solutions for enterprises and public authorities.

Headquartered in Zagreb, KING ICT is present in the Adriatic region, with offices in Bosnia and Herzegovina, Serbia, Macedonia and Kosovo. We

#### Dražen Pavlić Executive Operations Manager, Management Board Office

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- $\mathscr{O}$  king-ict.com/en

have developed a network of service centres in Croatia that are available to our customers 24/7. We are part of the M SAN Group, which employs over 1.500 people.

KING ICT is the founder of several specialised companies, *Aktivis* - specialised in document management; *Smart Energy* - specialised in the design and implementation of electrical and mechanical installations; and *Planet IX* - specialised in the use of artificial intelligence and its applications in data processing in robotics, drones and unmanned aerial vehicles.

Our primary drivers are knowledge, expertise, creativity and motivation to improve businesses and to create added value. Through innovative ICT solutions, KING ICT aims to build a more connected and digital future for our and future generations.

The solutions we deliver range from highly specialised ones to those used by a great number of users in everyday life. Our customers come from a range of different branches, such as *transport, energy, agriculture, health care, education, judiciary, trade, finance, telecommunications* and many others.

*Our innovative enterprise solutions* are based on new technologies, cloud and mobile first principles. We build data centres, optimise IT infrastructure, implement security solutions and research and develop new ways of managing information, which has led to the creation of systems such as the BI system for business reporting and the GIS solution for the exchange of spatial data.

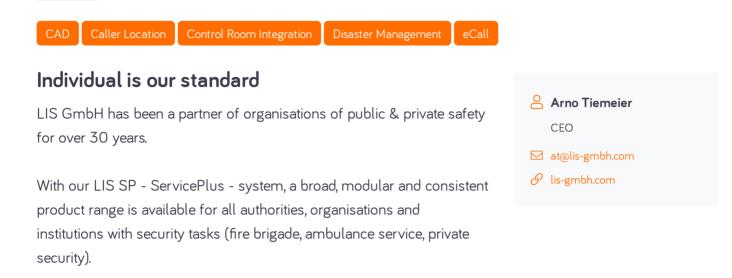
New technologies, combined with our knowledge, skills and individualised approach enable us to develop solutions that contribute to the quality of operations, and correspond to customer needs. We offer support and consultation services on digital transformation, through the implementation of adequate technological solutions.

### **KING SFERA**

*KING SFERA* is a software solution that enables communication, coordination and management in emergency situations. Based on the received information, and in accordance with the action plan, operators at emergency services are able to display spatial data and mobilize the necessary services to the site depending on the type and location of the situation. The system records data of the situation in a single database, enabling all services in the field to have access to complete information and thus efficiently resolve unexpected situations. *KING SFERA* also offers possibilities such as eCall and upgrading with NG 112 services (audio, video and text emergency call over internet). The flexibility of the solution enables links with communications systems to other emergency services, to ensure more detailed collection of information and most effective response to emergency situations.



# LIS (Leitstellen-Informations- System GmbH)



The modular system consistently maps – beside alerting - many processes to administrate an organisation. Data entered in one module is immediately available to other products. Duplicate entries and the associated possible incorrect entries are avoided. Another aspect is the time saving.

A modular system means, to start with one product and having the security of being able to expand the system in all directions as requirements increase.

An excerpt from the product range:

- CAD Dispatching
- Disaster management
- Interfaces to alerting, communication systems and to external systems (e.g. eCall, AML)
- Operational documentation / accounting
- Personnel management / roster tool
- Management / maintenance of tools & devices with mobile devices
- Daily journal documentation of daily events and much more.

Our solutions for administration offer a multitude of interfaces to other PSAP systems, mobile data collection in emergency services as well as to various municipal systems, e.g. to transfer accounting data or personnel data.

We develop individual solutions based on the existing standard and thus offer a high degree of investment security

### Your solution from a single source



# Locus Solutions

CAD Emergency Call Management

Resource Management Triage

When time is of the essence, the emergency services are dependent on clear communication and accurate information. That is why they choose software solutions developed by Locus Solutions.

Crond Nerdal

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- 🔗 locus.no

Since 1991, Locus Solutions AS, a company in the Enghouse Group, has developed business-critical IT solutions for emergency vehicles, rescue

services and security companies. We know that when an accident strikes, time is a scarce resource. That is why we develop technology that empowers emergency responders to make the right decisions at the right time.

Together, we are on a mission to save lives.

# Utilizing Safety-Critical Data

During emergencies, we believe that clear communication is the key to a safe outcome.

Emergency dispatchers, who initially assess the situation, are forced to make crucial decisions regarding the urgency of the call, which symptoms require which type of medical help, and where to send the emergency services. These decisions can separate life from death.

With a reliable and high-quality solution from Locus, emergency dispatchers are able to make better decisions faster by utilizing our safety-critical data. Our job is to gather the relevant data, analyze the information and predict future patterns. The results are yours to act upon.

#### • LocusEmergency:

LocusEmergency is a reliable and comprehensive system designed for receiving, registering and handling all types of enquiries and alarms to the emergency services. By combining information from multiple sources, we are able to provide a clear and complete overview of the emergency situation.

This information empowers the dispatchers to make the best decisions in difficult situations.

#### • LocusMobile:

LocusMobile is a mobile application that emergency services can benefit from in the field. This solution handles navigations and receives mission-critical information for emergency services, such as fire brigades and ambulance services.

With our solution, the information is continuously updated, meaning that you always have the most accurate and detailed overview of the situation.

### Scalable technology for tomorrow's challenges

We believe that accurate information is our best weapon when we are working against the clock. That is why we create robust, highly scalable and technologically advanced software solutions that can seamlessly manage emergency responses – both those of today and those of tomorrow.

#### Your safety is our biggest concern.



# Logis Solutions

Logis Solutions design and provide cutting-edge CAD and PSAP solutions for EMS, Fire and healthcare services globally, helping them to deliver high-quality and efficient service.

Established in 2000, Logis Solutions now has offices in Copenhagen, Texas and Seattle. During the past 20+ years, Logis has become the preferred supplier of EMS calltaking and dispatching for a growing number of US as well as European EMS services, helping them optimise services for the patients, being at the center of all we do. Dennis Bang Andersen
 CCO/Chief Commerical Officer
 dba@logis.dk
 logis.dk

Today we offer the most advanced, feature rich and elaborate product suite for CAD and Calltaking, and covering all aspects of EMS call-taking and dispatching, the product portfolio includes:

#### • Logis Intelligent Decision Support (IDS)

Intelligent CAD Solutions for 911 & Public Safety, Mobile Healthcare & Non-Emergent Medical Transport, including:

- Predictive AI Deployment
- Advanced Emergency Recommendations
- Automated Planning
- On-Premise Or In the Cloud

Logis IDS is a game-changer for call centers, PSAPs and emergency communication centers. Once configured to your preferences, Logis IDS will automatically schedule tasks, communicate tasks to crews, and dynamically update the entire plan with vehicle status. Pre-populated caller data and easy-to-understand visual displays also reduce stress on telecommunicators, allowing them to focus on caller engagement.

Always on, IDS' real-time background planning ensures operations are optimized based on available information. Logis' planning engine continuously evaluates and adjusts to changing conditions, even predicting where a unit will be in 60 seconds – when the task will be received and acted on – not just where it is right now.

Welcome to Logis IDS. Welcome to the CAD of the future.

To learn more about Logis IDS click here

#### Logis Voice

Streamlining phone, radio and push-to-talk communication, Logis Voice reduces workflow inefficiencies by consolidating all voice communication into one solution. Features include:

- Improved Dispatcher Workflow
- Consolidated Interface
- Easily Recorded & Archived

When integrated with standard phone systems, Logis Voice collates call data and pre-populates key information in the appropriate screen, saving dispatchers time and allowing them to focus on other critical tasks. Easy-click-to-dial feature within the solution allows efficient outside connection without exiting the CAD system.

All calls are stored and tagged for for integrated reference with IDS, using Metadata. This enables the user to Utilize enhanced searching and historical playbacks for reporting, legal and performance management needs.

To learn more about Logis Voice click here

#### Logis Inventory

Track, manage and maintain resources quickly and easily. Logis Inventory puts your vehicle, equipment and consumable inventories in one place. Together with Logis IDS, Logis Inventory gives you a complete overview of the status of your system with one click, at any time, from any device.

- Simplify Asset Control
- Customize as Needed
- Manage Inventories Large & Small

Whether for day-to-day operations or the next pandemic, Logis Inventory lets you quickly determine and report the status of your equipment, from ventilator inventories to fire and rescue supplies. This means, you can prepare for any emergency, ensure all medical equipment is maintained, and all stocks are in place. At the end of the day, knowing you have ready-to-use supplies is critical for both staff efficiency and satisfied patients.

To learn more about Logis Inventory click here

Our team of veteran emergency services and information technology experts has partnered with organizations in North America, Europe and across the Pacific to implement software solutions that improve operational efficiency and effectiveness. We look forward to partner with your organization, enabling your potentials and optimizing your CAD anc PSAP workflows.

LOGIS SOLUTIONS



# Meditec Ltd.

Control Room Integration CAD

Emergency Apps Emergency Call Management

Meditec is a leading healthcare industry and emergency services information technology developer in Latvia with 24 years of work experience and more than 100 e-health projects of national importance. Meditec has 2 main business centres:

1. Ārsta Birojs (eng. - Doctors Office) specializes in developing information system solutions for health care institutions ranging from simple financial accounting tools to highly specialized systems for

Egils Trumpe Emy Business Centre Manager egils.trumpe@meditec.lv & meditec.lv

university hospitals. In cooperation with partners, we have improved and continue to optimize the health care system in Latvia, making it accessible to everyone.

2. Business centre - Emy is the only full-service business support system developer in Latvia, which is a one stop shop for emergency services dedicated to:

- NG112 contact center management,
- dynamic call plans to ensure fast and reliable information gathering during the call taking process,
- AML and eCall integration,
- dispatching, resource management, and monitoring,
- emergency services specific to GIS,
- advanced emergency services specific route planning,
- enhanced data exchange and analysis,
- long and short-term work shift planning solution,
- team/crew planning (working time, location, specialization) and status that changes according to availability,
- artificial intelligence tools for advanced emergency services data analysis and prediction.

Emy serves the whole emergency medical service (EMS) and currently is being implemented in other emergency services – State Police, State Fire and Rescue Service and State Border Guard.

Within EMS Emy is used by 200 simultaneous users, and more than 1000 IS users in total. Emy provides EMR integration with hospitals.

Implementation in other emergency services will create a common environment for all emergency services – the seamless integration of tickets, common call management, resource monitoring and exchange of all necessary information. After implementation in 2023, the number of Emy users will exceed 10,000, managing 2 million calls and 1 million events a year.

In order to provide an even better service, we are proud of our additional support systems:

#### Emy Android app - extension of Emy to support responders' business process:

- work orders management,
- response data gathering and management,
- healthcare and law enforcement process support,
- seamless integration with Emergency services navigation software.

#### 112 mobile app (iOS/Android) and 112.lv website

Enhanced two-way communication:

- hazards and emergency information provision,
- assistance for early warning systems,
- structured crime reporting,
- user authentication with eID credentials,
- communication support for deaf persons

#### Emergency services navigation software (Android App)

- Emergency services specific routing regular traffic, emergency (left turns where physically possible allowed), extra emergency (opposite driving on one-way streets allowed) routing options
- Specific GIS data layers.

**eHealthPoint - patient portal and mobile application** as one stop shop for all health and healthcare related issues, starting from assistance during emergency call till doctor's appointment.

- More opportunities to monitor and plan health care and related documents. A fast, secure, and convenient way to manage own and your family's health data
- 300 000 registered users, more than 45 000 appointments a month

#### Main Emy Advantages:

- Effective communication between all involved parties,
- High level of sensitive data protection,
- Reduction of time spent on report filling and work management,
- Transparent workflow,
- Fully electronic document flow,

- Integration with other information systems,
- Accessibility of information from anywhere anytime



# Microsoft

Big Data

Cloud Services Control Room Integration

Cyber Security Multimedia Comms

### Keeping Our Cities and Communities Safe

A common operating picture and real-time information are critical for enabling first responders to provide a proactive, coordinated, collaborative and informed response to protect the citizens they serve. 🐣 Kirk Arthur

Sr. Director, WW Public Safety and Justice

karthur@microsoft.com

🔗 microsoft.com

Over the past decade, challenges to public order, malicious use of

social media, the advent of cyber-crime, and increasing natural and man-made emergencies and disasters have underscored the vital role police, fire and rescue, mountain and sea rescue, and civil defense officers play in increasing the safety of people and the security of the communities they serve.

Due to first responders operating in this complex and ever-changing working environment, digital transformation will be essential to maximize their operational effectiveness and efficiency.

Agencies will need to enable remote working and facilitate cross agency collaboration. First responders can best mitigate the risks of local emergencies and national disasters when they have access to a common, dynamic operational picture and real-time intelligence which can collectively help them plan, manage, and make informed and timely decisions from anywhere to enable them to respond to man-made and natural disasters in both urban and rural areas. When first responders can communicate and collaborate in real time, both within and between crews and organizations, they are better prepared to coordinate their responses and act in a timely manner and they enhance their ability to save lives and mitigate damage to property and infrastructure.

Public safety and justice agencies must hold themselves responsible for delivering trusted and secure services to build community trust and engagement. Agencies will be expected to secure information, protect infrastructure and ensure regulatory compliance.

Microsoft and our partner cloud and mobile solutions such as Mobile Patrol, Video Management, Call Centres (PSAP), GIS, Computer Aided Dispatch and Records Management Systems, together with Data/ AI and IOT technologies such as body-warn cameras, CCTV, drones and sensors can significantly help improve operational effectiveness and efficiency for first responders and law enforcement.

On-premises and cloud-based solutions, enabled by technology from Microsoft and its partners, help coordinate response and enable real-time information sharing across agencies, breaking down silos, enhancing real-time communication and collaboration, and deepening citizen interaction to share intelligence and proactively accelerate intelligence-led lifecycles.

Furthermore, in the advent of social media and mobile apps, first responders can both receive immediate insights from the public as well as using these latest technology mediums to send out notifications and mass warning alerts to the public in both urban and rural areas.

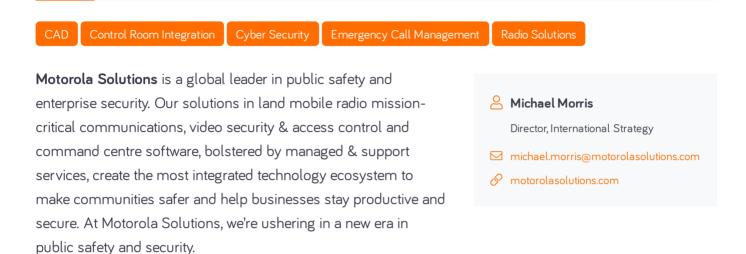
Unified communications technology can help to automate the management and sharing of inbound incidentbased information across multiple agencies. It can empower staff from multiple agencies, assembled for incident response operations, with the familiar tools they use to support their other daily operations. The broad use of Microsoft technology across agencies provides a level of familiarity with solutions to help ensure that responders can leverage the capabilities they rely on every day.

Another important consideration is to minimize learning time for responders and operators by providing familiar communication and collaboration tools that assist rather than impede effective response. Furthermore, first responders can share information with enhanced-security and mobile features to collaborate in real-time within and between multiple agencies, as well as on route and at the scene of the incident.

For additional information please contact Kirk Arthur or go online and visit our worldwide government website.



# Motorola Solutions



# Know what matters, when it matters - Experience software integration from call to case closure

# **Emergency Call Handling and Computer-Aided Dispatch**

Transform your control room operations by combining mission-critical security and availability with ondemand capacity, with integrated voice, data and multimedia. Increase your operational flexibility, remove obsolescence and reduce risk.

The purpose-built application handles voice calls, text and multimedia messages simultaneously and streamlines workflows so that call takers and dispatchers can focus on managing the incident at hand without being distracted by the complex technology that surrounds them.

With the scalable, highly configurable and integrated CAD software, dispatchers can quickly identify and send the nearest available and most appropriate resources to improve incident outcomes. The integrated CAD lets you manage each incident effectively based on workflows and protocols.

### **Post-Incident Investigation Analytics**

Our investigative platform provides actionable intelligence for public safety organisations of all sizes. It includes one of the most comprehensive, advanced suite of automatic number plate recognition (ANPR), facial recognition, analytics and commercial data available to improve safety for officers and communities.

### **Digital Evidence Management**

Investigating officers can maximise the value of their digital evidence with a cloud-based solution that provides access to all the digital content your organisation collects, intelligently organising it to help simplify content management, make case evidence quickly reviewable and then shareable to ensure justice is achieved.

### Cybersecurity

Establishing and implementing a cybersecurity strategy comes with many considerations. Your organization needs to understand and apply the cybersecurity industry standards and risk governance frameworks pertaining to your sector.

ActiveEye Managed Security Platform provides continuous insights to security relevant activity with autonotifications, daily email summary and monthly reports. The flexible architecture evolves with modern IT.

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# NetDesign

#### Cyber Security Ne

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NetDesign is one of Denmark's largest IT consulting firms, with more than 30 years of experience.

The last 12 years, NetDesign has been part of TDC Erhverv, so we have a lot of experience to draw on. At the same time, we have one of the industry's most modern delivery organizations, which ensures high quality in the end-to-end solutions and Managed Services we deliver to our customers. NetDesign is experts in helping companies with their business-critical IT systems ∠ Jesper Winther Sorenson
 Account Executive
 ✓ jwso@tdc.dk
 ✓ netdesign.dk

Our vision is to take an active part in digitization in Denmark. We want to be your trusted advisor - a partner you can trust. Digitization affects all industries and creates opportunities for innovation and efficiency. NetDesign's solutions give you optimal collaboration opportunities and state-of-the-art customer management based on a modern and secure network. These are key factors in a highly competitive environment. Our solutions are the basis for your company's development and affect your employees' and customers' everyday life every minute.

With our many highly specialized technical experts and our skilled business consultants, we have the knowledge to offer our customers the best advice and sparring on the market regarding the latest technologies and how they can create value for our customers' businesses.

NetDesign are known for our great technological and business insight and understanding, which means that we can deliver high quality in the services we provide, which give our customers optimal opportunities to get the most out of their network, IT security, communication and collaboration, and contact center solutions.

We take responsibility and understand the importance of IT working - always.



# NGA

Emergency Call Routing Emergency Call Management Information Analytics Interoperability Solutions Next Gen Comms

### Next Generation 9-1-1 is all we do!

**NGA** is a global company with employees and customers around the world. We have provided standardized solutions for "Next Generation Emergency Calling", NG112 in the EU, Emergency Call Handling in the Philippians and NG911 in the US & Canada.

➢ Rebecca Dungey
 Head of Marketing
 ➢ Rebecca.dungey@nga911.com
 ♂ nga911.com

Bringing the most extensive range of solutions to address their public safety challenges.

**Our Mission**: To provide the highest level of redundancy, resiliency, and availability for the 9-1-1 community. Ensuring the accurate and hi-performance transmission of voice, text, and media in emergency telecommunications. Built 100% in the cloud with call-takers and PSAP's needs as our top priority. Through:

- Improved reliability
- Innovative features
- Meeting highest industry standards
- Enhanced capacity
- Shared resources
- Reducing downtime

Our Next Generation Emergency communication **NEXIS** Solutions allow you to receive calls through different channels (voice, video, Text, RTT, apps, and IoT devices...) into your call routing network, to quickly routing emergency callers to the right Public Safety Answering Point (PSAP) every time.

### Cybersecurity

After rigorous research, discussions, and testing; NGA's solution to Cybersecurity and achieving 99.999% or "five nines" is AWS Cloud Security. AWS Cloud Security was the obvious choice, for reasons too numerous to count. AWS security services and solutions are focused on delivering the following key strategic benefits critical to helping NGA implement optimal security.

- Prevention Define user permissions and identities, infrastructure protection and data protection measures for a smooth and planned AWS adoption strategy.
- Detection Gain visibility into our organization's security posture with logging and monitoring services. Ingesting this information into a scalable platform for event management, testing, and auditing.
- Response Automated incident response and recovery to help shift the primary focus of security teams from response to analyzing root cause.
- Remediating Leverage event driven automation to quickly remediate and secure your AWS environment in real-time.

### \$200M+ Contracts

- Business to Government
- California Largest US Contract
- 9-1-1 Association of Central Oklahoma Governments (9-1-1 ACOG)
- Multiple state contracts

### **Technology Platform partnerships**

- AWS Partner
- DATAMARK
- NextNav
- DoD

### Members and Industry Association Support

- Co-Chair of NENA's 9-1-1 Core Services Committee
- Co-Chair of the i3 Architecture Working Group
- Founding member of NENA's Next Generation Partner Program (NGPP)
- Corporate National Emergency Number Association Member (NENA)
- Corporate Association of Public-Safety Communications Officials-International Member (APCO)
- Multiple State 911 Boards
- Founding Board Member to Friends of 911

### **Intellectual Property**

- 2019: Brain of NextGen 9-1-1 Patent
- 2014: Personal Emergency Response Patent



# nWise

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Next Gen Comms

Telecommunication

### nWise

nWise is a global provider of specialized technology that enables people who are Deaf, DeafBlind and Hard of Hearing to make direct calls to access Emergency Services using Real-Time Text (RTT). We are experts on RTT, having delivered critical long-term installations worldwide in accordance with the RFC 4103 standard since 2005. Something that is essential for the approximately 395 million people around the world that Thor Nielsen
 VP, Global Sales
 thor.nielsen@nwise.se
 nwise.se

have deafness or hearing loss and can't access Emergency Services in an effective way.

Read more: Total Conversation with RTT

### nWise RTT Bridge

Our technology nWise RTT Bridge is integrated into the existing NG112 infrastructure where RTT calls are handled effectively and according to established processes. This saves time, and in a critical situation saves lives.

nWise RTT Bridge is a key element in Next Generation Core Services (NGCS) for effectively connecting RTT calls to a PSAP. It has been developed to meet the requirements of ETSI EMTEL and NENA i3 standards.

We deliver an effective integration of RTT into the Emergency Services infrastructure by connecting multiple parties using RTT in a single call flow.

- nWise RTT Bridge conforms with the European Electronic Communication Code (EECC- EU directive 2018/1972): Real-Time Text, Total Conversation and Relay Services.
- It is designed in accordance with the technical requirements in ETSI EMTEL standards, TS 103 479 and TS 103 201.
- It uses SIP according to RFC 3261
- It follows ITU-T T.140 payload according to RFC 4101
- It uses RTP-Mixer Formatting of Multiparty RTT according to RCF 9071
- It is a SIP-aware bridge with support for several methods of connection: WEB RTC data channel, MSRP, SIP message. It supports the use of WebRTC data channels as a transport for T.140, as described in RFC 8865.
- It is compatible with TS 103 871 (PEMEA RTT).

# Benefits of using nWise RTT Bridge

- It is easy to connect to a current infrastructure. API:s SIP/SDP methods for bridge control, statistics/ log for bridge logging and status queries.
- It has High Availability (HA) via shared sessions and multiple active nodes. Microservices architecture where exposed services are stateless e.g. RTP-endpoints and can be restarted without disruption of service.
- It is Secure. SRTP (SDES) according to RFC 3711, DTLS-SRTP according to RFC 5764.
- It has call recording in a dedicated component to allow central or distributed recording.

Read more: Accessible Emergency Calls with RTT

### The time is NOW for accessible emergency calls

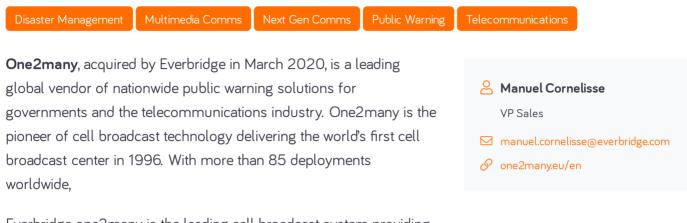
According to the new EU directive, EECC 2018/1972, work must be done to make Emergency Services accessible to the Deaf, DeafBlind and Hard of Hearing on the same terms as anyone else. This also puts emphasis on the importance of using standardized RTT. With nWise RTT Bridge you integrate incoming RTT calls with the infrastructure of the Emergency Service, minimizing changes to the operational environment. Contact us or visit our website to find out more about how nWise RTT Bridge can help you with accessibility to emergency services.

Every person counts. Every call counts. Every second counts.

Read more: Implementation of RTT in Europe



# one2many, an Everbridge company



Everbridge one2many is the leading cell broadcast system providing the most advanced, high-performance technology for emergency alerting.

### About one2many, an Everbridge Company

The combination of one2many and Everbridge creates the largest and only public warning system offering multi-hazard, multi-channel alerting including cell-broadcast and location-based SMS. Customers are assured that no matter which technology they select, Everbridge is the proven expert for meeting and exceeding EECC Article 110 and other global initiatives for countrywide population alerting.

One2many's main office is in the Netherlands, with support offices on 4 continents and a world-class expert team of different nationalities available around the clock to support our customers.

One2many enjoys more than 20 years of experience in high profile, mission critical projects, with over 85 installations, at more than 55 customers in more than 32 countries.

One2many's unique domain expertise, products, technology, experience and methodology has resulted in industrywide recognized and leading examples on how to implement national public warning successfully.

One2many's specialized service and product portfolio towards governments and authorized authorities include the delivery of high-performance public warning systems in accordance with **article 110 of EECC**, multi-hazard alerting systems and multi-channel early warning system.

One2many's main focus is to deliver comprehensive end-to-end public warning solutions by providing the necessary infrastructure and technology also for the dissemination of warnings and alerts to the maximum number of people in the shortest possible time over the widest range of available channels.

One2many's Geo-targeting and Geo-fencing dissemination channel product portfolio is the most extensive in the market and includes amongst others: **Cell Broadcast System**, CBE, Multimedia Broadcast Multicast Service Centre, CAP Gateway, SMS Gateway, Voice Gateway, Social Media and Mobile App gateways.

All one2many products are inhouse developed, maintained, managed on cloud or provided in-network, with intellectual property rights 100% owned by one2many resulting into high quality projects with short delivery times.

One2many has close relationships with all mobile network infrastructure companies, major SIM vendors, leading handset manufacturers and industry standardization organizations, and has a unique combination of both theoretical background and practical experience in public warning. This has resulted in the most mature and innovative Public Warning products available in the market.

Last but not least, one2many is an award-winning active member of standardization bodies like ETSI, 3GPP and ATIS (CMAS) significantly contributing to the standardization of public warning worldwide.

### Unique Advantages of one2many, an Everbridge Company:

- Capable of delivering a full end-2-end nationwide public warning system by providing the necessary infrastructure for towards Governments and Telecommunication Providers, enabling their own stateof-the-art software products and sharing their proven experience and know-how.
- Has the greatest number of recent successful deployments of end-2-end national public warning systems in the world.
- Has the unique combination of both theoretical background and practical experience of running nationwide public warning services on all continents e.g. in The United States, The Netherlands, Taiwan, Philippines, Chile, UAE, Oman, Greece, Mauritius and New Zealand.
- One of the most internationally experienced and respected Public Warning solution vendors; for Governments, Telecommunication providers, handset manufacturers, Telecommunication network equipment vendors and standardization bodies.
- Has more than 20 years of experience in providing Telecommunication products towards mobile operators with subscribers ranging from 1 million to over 70 million each.
- Has the most mature Cell Broadcast product available in the market including support for 5G networks (AMF) and Device Based Geo Fencing (WEA 3.0) functionality.
- Product design paradigms are based on high availability, high performance, interoperability with every major product from every major vendor, open standards, cloud and NFV ready.
- Actively involved in standardization committees like ETSI, 3GPP and ATIS (CMAS/WEA/EU-Alert).
- One of the main contributors to and editor of ETSI's EU-Alert standards.
- Winner of the 2015 ATIS Outstanding Achievement award for its contributions to the North-American Public Warning (CMAS) standards.
- Has strong company values for social responsibility and business ethics.

#### ONE2MANY, AN EVERBRIDGE COMPANY

**Everbridge** (NASDAQ: EVBG) is a global provider of public safety and public warning solutions that helps governments and public authorities to keep their populations safe when it matters most, at anytime, anywhere. During public safety threats such as severe storms, earthquake and tsunami, wildfires, flooding, pandemic, industrial accidents, civil unrest, and terrorist attacks, over 5,700 global clients, many countries, states or organizations rely on the company's Critical Event Management solutions.

The company's platform sent over 5 billion messages in 2020 and offers the ability to reach over 800 million people around the world, including the entire populations of Australia, New Zealand, Taiwan, Singapore, The Philippines, Cambodia, Peru, Chile, Greece, Iceland, Sweden, Norway, The Netherlands, Mauritius, Oman, Saudi, UAE and several of the largest states in India.

As a pioneer in public alerting technologies, Everbridge developed the first cell broadcast and location-based SMS solutions and to date has been awarded 16 patents, we continue to be active in driving standardization of public warning worldwide through 3GPP, ATIS, ETSI and EMTEL.

The company's critical communications and enterprise safety applications include Public Warning, one2many, SAGA, Mass Notification, Incident Management, Safety Connection<sup>™</sup>, IT Alerting, Visual Command Center<sup>®</sup>, Crisis Management, Community Engagement<sup>™</sup> and Secure Collaboration. Everbridge has offices in The Netherlands, United Kingdom, Switzerland, France, Germany, Spain, Finland, Denmark, Norway, Sweden, Middle East, China, India, Singapore, Australia and New Zealand, Los Angeles, New York, Lansing, San Francisco and Boston.



# **Opencode Systems**

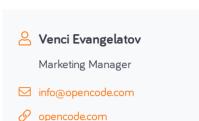
#### Caller Location Disa

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ms Public Warning

Telecommunication

With over 20 years of experience in building telecommunications solutions, **Opencode Systems** is one of the leading providers of cell broadcast and SMS-based public warning systems (PWS). Our solutions, based on a market-leading, patented telecommunication technology, have been deployed in Europe, Asia, South America, the Caribbean and the Middle East.



Opencode wireless mass notification suite provides Public Authorities with Early Warning Broadcast capability over 2G, 3G, 4G and 5G mobile networks. Critical safety information can be simultaneously broadcast to millions of mobile users in a whole country or just to a geo-fenced area of interest.

Opencode alerting solutions are conveniently deployed in centralized, distributed or mixed architecture. In a centralized deployment the solution is managed and owned by a relevant public agency. In a distributed deployment, service providers are responsible for the solution's operation, while providing secured broadcast access to authorities. The mixed architecture provides numerous different options including multi-tenant deployments, where several MNOs can share the system.

By design Opencode PWS is omni-channel. This advantage allows to quickly extend mission critical wireless reach to more population segments using additional broadcast channels such as radio, TV, IPTV, social networks, public info panels, digital road signages, sirens, etc.

The public warning alerts are managed via a rich and intuitive user interface. This interface includes interactive online and offline country geo-maps that allow users to visually define, broadcast and manage alerts. It is also the administration point for different agencies, service provider users and networks. The interface comes with superior security, restriction and validation functions allowing usage to remain simple and protected from breaches and unwanted behaviour.

Over the years Opencode Systems has delivered telecommunications solutions in 50 countries generating value to world-class service providers including Vodafone, Orange, Telenor, Ooredoo, Etisalat and many others.

Opencode Systems has a staff of 160 engineers worldwide with the main offices being in Bulgaria, France, Malaysia and Tunisia.

# Oracle Communications

Cyber Security

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## Meet Oracle Communications

Oracle Communications provides integrated communications and cloud solutions for Service Providers and Enterprises to accelerate their digital transformation journey in a communications-driven world.

We understand that emergency response services cannot be interrupted, not even briefly, and all communications must be secure Ahmed Hamdani
Sales Consulting Senior Manager

- 🖾 ahmed.hamdani@oracle.com
- 🔗 oracle.com/index.html

Voice Comms

and clear – this is why having Session Border Controllers and Service Delivery solutions built for missioncritical environments are crucial. Oracle provides the specialized communications solutions that ensure the high reliability and high quality that satisfy these demands.

Read more: Oracle Enterprise Communications solutions

# **Oracle Service Delivery**

Our Service Delivery solutions provide a unified intelligent cloud based framework to fulfil the needs of next generation public safety organizations throughout the world. Our solution enables multi types of communications like voice and video from various sources over a wide range of transports (3G, 4G/LTE, 5G, WiFi, VSAT) into our intelligent centralized control application server based on real time communication requirements.

Read more: Telephony Application Server | Oracle

# Oracle Session Border Controller

The world's most demanding real time communications networks utilize our industry-leading session border controller (SBC). SBCs are a key component of NG112 networks, where they play the Border Control Function (BCF) role, securing the network perimeter of the ESInet and the PSAPs. The Oracle Enterprise Session Border Controller utilizes a purpose-built architecture to deliver best-in-class capabilities for the mission-critical, real-time communications needed for emergency services.

- Secures telephony service during emergencies, call bursts, DoS attacks & more
- Scales up to the largest, most complex environments
- Protects **QoE** by assessing QoS & utilizing dynamic routing

- Protects media quality with dedicated, fast path resources (multiple processors)
- Prioritizes emergency calls to ensure the highest QoS
- Nearly **eliminates** service outages with best-in-class HA
- Enables recording & analytics with an integrated, standards-based interface
- Simplifies VoIP monitoring & troubleshooting
- Can be deployed in small and large scale on appliances, virtual and cloud

Read more: Oracle Enterprise Session Border Controller



# Pert Telecom Solutions Private Limited

Disaster Management Emergency Call Management Public Warning

PertSol, is a leading global provider of IT and Telecom solutions that drive quality and productivity improvements across Telecom, Government & Law enforcement agencies in providing specialized solutions, Customized Software Applications, Professional and Project Management Services. Headquartered in Mumbai, India, PertSol was established in 2014 with a vision of building innovative future-ready solutions for the revolutionary telecom infrastructure with intelligent

🔗 Gurjot Sandhu Director & Chief Business Officer gurjot.sandhu@pertsol.com 𝔗 pertsol.com

connectivity to empower the entire ecosystem which is globally recognized and harmonized.

As innovators, we understand the current technology trends and predict changes in the market to build effective and scalable solutions that help our clients to achieve their business vision and deliver value to their customers.

With a highly skilled and proficient team on our side, we always analyse our Customer's business ideology, their requirements and infrastructure, and then finalize the best ways in which we can help them. PertSol philosophy has always been to provide prompt and effective service to our customers.

PertSol has the capacity to manage all elements of solution delivery- from planning and installation to maintenance and troubleshooting.

Our unique portfolio has plethora of products and services which includes:

## **1. Location Enabled Emergency Services**

#### iLocator - Location Intelligence Platform

PertSol's iLocator is an ultramodern Location Intelligence Platform, designed and developed to cover all location tracking needs of Emergency Response Teams and other National Security Agencies. iLocator helps to capture the distress callers' locations regardless of their handset model (Smart phone or Feature phone), telecom network type (GSM, CDMA, GPRS, 3G, 4G/LTE, voice only) and telecom infrastructure (GMLC or no-GMLC). We offer complete location intelligence platform which includes GMLC, SMLC, SAS, e-SMLC, AML integration, HLR Integration, 3rd party GMLC integration; customer may select solution modules based on their requirements.

Our platform is already handling 275,000 calls per day across multiple deployments.

## 2. Mass Alert & Messaging System

#### iAlert- Location Based Mass Alert & Messaging Platform

PertSol's iAlert is a Location based Mass Alert & Group Messaging Platform, designed & developed to send messages in the form of text SMS/Voice messages to pre-determined set of phone numbers or to all mobile subscribers present in the vulnerable area (geo-fenced area) to be affected by Cyclone or any other natural Disaster. iAlert disseminates timely & meaningful information to masses through multiple communication channels such as SMS, SMS-CB, voice call, TV/ Radio, social media, siren, VMS & more.

### 3. Telecom Core Network

#### iMDEG - Intelligent Mobile Data Exchange Gateway

PertSol's iMDEG is a next generation Packet Data Gateway that provides packet data services for 2G, 3G, 4G and also supports 5G, which is built from the ground up and is optimized for Virtualized Environments. It is an IP based core network infrastructure that enables IP-based communications and services over wireless. PertSol iMDEG can perform multiple network functions in a combination of multiple elements, depending upon the access technology like:

- 1. Packet Data Network Gateway (PDN-GW)
- 2. Serving Gateway (S-GW)
- 3. Mobility Management Entitiy (MME)
- 4. Policy and Charging Rules Function (PCRF)
- 5. Gateway GPRS Support Node (GGSN)

#### iHSS - Home Subscriber Server

PertSol's iHSS is a complete solution for managing subscriber information that contains subscriber information, device profile and state information. It has been designed to cater authentication, authorization and mobility management functions for various networks i.e. GSM, UMTS, LTE, IMS, WiFi and IoT network.

#### IMS - IP Multimedia Subsystems:

PertSol has complete IMS core solution which includes CSCF, TAS, MRF, Access Gateway, MGCF, BGCF and IBCF.

### 4. Telecom Regulatory Compliance Management

#### iNterceptor - Lawful Interception System

PertSol's iNterceptor is a unified Lawful Interception System for network operators and service providers which is fully compliant to the international standards and has a proven track record. It is a complete solution which is capable of handling both circuit switch and packet switch traffic from both legacy as well as latest telecom technologies including PSTN, 2G, 3G, 4G, LTE, NGN, IMS etc.

#### iSecureHL - IP Log Management

PertSol's iSecureHL is a fully automated solution that offers consistent and high-quality IP Logs across operator's network domains. It is a web-based system which fetches data from various sources like Internet Traffic, GTP traffic, CGNAT Logs, AAA traffic etc. and stores them in the form of IPDR.

#### iGMLC - Gateway Mobile Location Centre

PertSol's iGMLC is a part of PertSol's location services solution, which define the process of mapping the received coordinates (latitude and longitude) in a well-defined universal format, to the geographical area and sending this information back to the requested services.

#### iSMLC - Serving Mobile Location Centre

PertSol's iSMLC is also part of PertSol iLocator product suite which caters CSP's location service requirements. iSMLC manages the overall coordination and scheduling of resources required for the location of a UE (User Equipment) that is attached to RAN.

#### iRAS – Remote Access System

PertSol's iRAS offers scalable, mobile-ready secure access to enterprise applications and cloud services for any user, anywhere and on any device. It is a robust solution for secure remote access to a network.



# Priority Dispatch

#### CAD Triage

# WE INVENTED EMERGENCY MEDICAL DISPATCH AND STILL BLAZE THE TRAIL 40 YEARS LATER.

We pioneered giving medical instructions over the phone and have 150 patents to prove it. YOU are the reason we've never slowed down. Every emergency call is different, and it's your job to make sure the right response is sent—every time. You're responsible to

#### 😕 Louise Todd

Director of UK & European Operations

- 🖂 louise.todd@prioritydispatch.co.uk
- & prioritydispatch.net

maintain a high standard of service across your agency with every call. Impossible? Not with the right tools. Your peers found solutions with the Priority Dispatch System and we're here for you, too.

# TRUST SCIENCE. AND HUNDREDS OF MILLIONS OF CALLS.

ProQA software and the entire Priority Dispatch System are built around protocols created by the International Academy of Emergency Dispatch<sup>™</sup>—the most studied, scientifically validated, updated, and dynamic protocols in the world. Did we mention they're used in 3,500 agencies in 46 countries and 24 languages worldwide? Plus, in over forty years, neither Priority Dispatch nor any properly licensed user has been found liable in a negligence lawsuit.

# PTOLEMUS Consulting Group

#### Automatic Vehicle Location

Caller Location eCall

Interoperability Solutions

Specialised Consultancy

**PTOLEMUS** is the first strategy consulting firm entirely focused on connected mobility services and the Internet of Things. Present in Europe and North America, PTOLEMUS helps leading car makers, their suppliers, insurers and aftermarket service providers define and execute their telematics strategies.

Frédéric Bruneteau
 Managing Director
 foruneteau@ptolemus.com
 ptolemus.com

With an extensive knowledge of global and European connected mobility markets (12 years of experience, 160 consulting projects), the consulting

group regularly assists companies with strategy definition, investment assistance, procurement strategy, innovation management, business development or product strategy deployment. It capitalises on :

- A strong understanding of the adoption of connected and data solutions by large stakeholders
- 10 years of experience in emergency services (112, eCall) with 25 projects including for the European Commission (Help 112, AML deployment)
- A strong reputation in the mobility & emergency domains
- A track record of success in connected insurance (80 projects) and roadside assistance (18 projects) including for major players such as Allianz Partners, AXA Partners and Europ Assistance and the FIA
- A large network of relationships in the European mobility markets (both direct relationships and many executives in the database of 20,000 contacts we have built in the last 12 years)
- Experience of business development & strategic partnerships in mobility
- Relationships with all key xCall providers in Europe
- And last but not least, a good understanding of competitive solutions in the eCall, bCall, SVR and concierge markets.

PTOLEMUS also conducts market research activities and is the author of many widely praised reports:

- The Vehicle Data Market Global Study 2020, the future of car data sharing from concept to mass adoption, the first analysis of OEM strategies and car data hubs.
- The Fleet Insurance Telematics Global Study 2019, the complete reference report on commercial line insurance telematic featuring how fleets have embraced telematics, and how insurers will seize the opportunity
- The OEM readiness for Autonomous Vehicles, The global roadmap of OEMs' deployment of driverless cars, investigated 16 car makers in North America, Europe and Asia.

- **The Global Mobility Roadbook 2019**, the first holistic analysis of future mobility in 168 countries, guiding the industry from transportation to mobility.
- The Connected Fleet Global Study 2018, the unique strategic decision-making tool assessing the potentials and partnership models in the commercial transport market.
- The Usage-Based Insurance Global Study, the 1200-page reference document whose 3rd edition was published in January 2016.

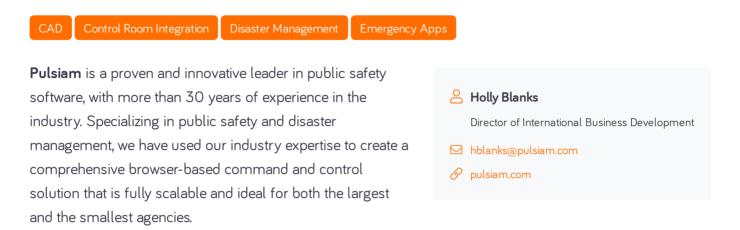
For more information on research, please contact Andrew Jackson on ajackson@ptolemus.com

#### PTOLEMUS was also a member of the HELP112 consortium.

For more information about the consortium and the activities related to location based emergency assistance, contact Alberto on alodieu@ptolemus.com



# Pulsiam



At Pulsiam, our focus is staying on the cutting edge of innovation through product development and, more importantly, by creating interfaces to the best mobile applications and software to hit the market.

The public safety industry is full of new, ground-breaking ideas, and with Pulsiam's SafetyNet applications and extensive interfaces, you can choose exactly the right solution for your agency.

Pulsiam has installed the SafetyNet suite of public safety software at more than 90 locations worldwide, serving nearly one hundred million people. Pulsiam's flexible architecture allows our support team to make changes to customer systems and databases on the fly, without interrupting operations 90% of the time.

Pulsiam's primary goal is to save lives: its fully integrated software and mobile application suite ensure that valuable, life-saving information is always in the hands of emergency response and disaster management coordinators and response teams as soon as it is available.

As an international company, Pulsiam meets the communication standards, certifications and protocols which are accepted worldwide.



# RapidSOS

Big Data Ca

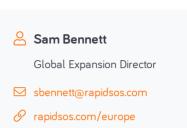
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Emergency Call Management

Next Gen Comms

In partnership with public safety, RapidSOS has created the world's first intelligent safety platform (the RapidSOS platform) that securely links life-saving data from 500M+ connected devices, sensors, and apps directly to 112/999/911 and first responders, providing them with real time, incident specific data in an emergency. The RapidSOS platform is an NG911 standards-compliant Location Information Server and Additional Data Repository, which is accessible to all authorized Public



Safety Answering Points (PSAPs) through integrations into all major call-taking equipment, mapping software & CAD products.

The rich data available to PSAPs with access to the RapidSOS platform, empowers them to provide more efficient and effective emergency responses. It provides secure access to accurate device location data from millions of iPhones and Android devices, without the need for the caller to use an app. Additional emergency data is also available from databases of user profiles (e.g. medical data from MedicAlert), smartphone apps (e.g. Uber), wearable devices, connected cars, connected buildings and security systems. You can learn more at rapidsos.com/public-safety-products/.

#### There are two ways to access the RapidSOS platform:

#### Get access with RapidSOS Portal

RapidSOS Portal is a web-based method for PSAPs to access the RapidSOS platform within a matter of weeks. PSAPs with RapidSOS Portal can receive the benefits of all existing and newly added data sources available on the RapidSOS platform. They can also access training and admin tools, and view real-time data for their agency's jurisdiction on a single map view. Simply sign up at RapidSOSPortal.com to authorize your PSAP and get started.

#### Integrate with your existing PSAP software

PSAPs can access data from the RapidSOS platform through direct integration with their existing CPE, CAD, or mapping software. When a call comes in from an enabled device to a PSAP with the RapidSOS integration, the platform is automatically queried for location and additional data. Information is presented to the user as supplemental data and is streamlined into existing dashboards and PSAP workflows for ease of use and effectiveness. RapidSOS is partnered with all major PSAP technology vendors, enabling integration with the RapidSOS platform through a simple software update. Contact RapidSOS and your software provider to get started.



# Regola

CAD Caller Location

Control Room Integration

Emergency Call Management

Public Warning

🔗 Marco Parigi

🖂 m.parigi@regola.it

International Business Development

**Regola** is an ISV (Independent Software Vendor) specialized in designing, manufacturing, maintaining mission-critical platforms and software-level system integration (Radio comms, Phone systems, invehicle equipment, 3rd parties, etc.) for **Emergency Response Organizations and Public Safety Authorities.** 

Regola's professionals are committed on customer intimacy, service rapidity, quality and efficiency of any provided solutions, while having

a DNA of innovators that anticipate modern demands and shape a technological vision projected towards the future.

Regola combines **IT software specialists with international domain experts** in its Teams, aimed at creating the perfect mix between technology and domain-specific complexities.

Regola offers a native **Hybrid Public Safety** approach that leaves Customers choosing any preferred environment(s) combination among SaaS, Cloud and on-premises.

Internationally acknowledged **certifications**, sector **standards** and **interoperability** patterns are essential elements of Regola and a guarantee of the quality of products and services provided.

**Regola** operates as an **international technology supplier** and has the privilege of supporting its long-term partners and end-customers in **3 continents** (North America, Europe, Australia).

Since 2022, Regola is **member of the Frequentis Group**, a global supplier in the field of Public Safety worldwide.

This prestigious achievement is the certification of **25+ years of technological excellence**, a quality that cannot be renounced today, in order to satisfy a market which is increasingly focused on the value and completeness of the platforms adopted.

We are perfectly aligned with Frequentis Group's mission **"For a safer world"**, due to our continued efforts to increase the awareness with which **Public Safety systems** are selected by Bodies and Organisations involved in protecting the public. The new synergy is the natural meeting point between our outstanding attention to details and the **solid market experience of a Group of international standing**.

**As part of the Frequentis Group**, Regola offers its customers a quality of service in line with the most stringent international standards. And the guarantee of choosing a reliable supplier, capable of managing complex operational and technological processes, even on nation-wide software platforms.

## **Unique CAD Suite**

A future-proof Cloud-native Computer Aided Dispatch product family, able to provide intelligence at the PSAPs, interactive decision-making support, offline user-experience, interface to modern medias and external services, custom-defined Agency response configurations.

Proudly 1st in Europe and 2nd Worldwide to get the top-quality recognition of **ProQA Paramount TITANIUM Certified** for its seamless integration with internationally-validated call taking protocols (Fire - Medical – Police - Multi-Discipline) produced by Priority Dispatch Corp. and regulated by the International Academies of Emergency Dispatch (IAED).

#### Explore the multi-modular and Agency-specific software solutions:

- Unique CAD, Remote Light CAD, Mobile CAD & Event Reporting Context-driven CAD for Control Room, Stations, remote working positions, tablet and sat-nav apps.
- Unique **One** for unified Call taking, as well as Multi-Agency
- Unique EMS for Ambulance and Emergency Medical Services
- Unique **Fire** for Fire Brigades
- Unique Police for Police & Law Enforcement
- Unique **Crisis** for Civil Defense, as well as Crisis & Disaster management
- Unique Care for healthcare continuity / low-acuity management

## **Emergency Mobile Link**

A **real-time Web-based** emergency mobile link providing dynamic location acquisition (HTML5), multi-party chat, multi-lingual operations, multiple-choice answers, document sharing, picture sharing, live video streaming, inter-agency and cross-responders operations and more.

Selected by the Italian Authorities as the official **nationwide service for the deaf** people when **accessing 112**, our emergency mobile link specializes on the ability to bring enhanced and richer data to the PSAP(s), extending the range of operations with live communication and dynamic eyes on scene evidence, without the need of downloading nor any pre-installed Mobile App in the device.

# **Alerting Crowds and Responders**

A comprehensive multi-purpose and multi-modal system for Alerting, designed for:

- IoT-integrated intelligent early warning, in combination with ad-hoc integrations.
- Public broadcasting, notification and social dissemination to the population.
- Private alerting and mass mobilizing, for internal call-out and command-chain alerting.

ensuring compliance to standards and the official legislation, voted by the European Parliament, on Reverse 112 Public Warning as per DIRECTIVE (EU) 2018/1972, 17 December 2018.



# S&T Iskratel

#### Control Room Integration eCall

nformation Analytics

s Next Gen Comms

With over 70 years of experience, **S&T Iskratel** is the leading European provider of communications solutions for the digital transformation of the telecommunications, transport, public safety, and energy industries. With its own R&D and manufacturing centres, S&T Iskratel meets the demands for carrier-grade and mission-critical connectivity of fixed and mobile operators worldwide, as well as those of large-infrastructure industries, such as railways and power utilities. From roads to rails, from

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Public Warning

cities to countryside, from mine to factory, our aim is to make connectivity and operations smarter and safer. Member of the global technology group **S&T**, S&T Iskratel has a local presence in more than 50 countries and is consistently expanding its market position, especially in Western Europe.

S&T Iskratel's **public safety solutions** are designed to provide officials with a complete and instant overview of activity on public roads, venues and spaces, allowing them to spot, handle or avert danger ahead of time.

**Emergency communications** with **112 solutions** complement existing emergency communications infrastructure with next-generation operational centres to increase public safety. S&T Iskratel's PSAP (Public-Safety Answering Point) solutions fill in the gaps in today's public safety network and lay a simpler, more-efficient and cost-effective path for handling future emergency situations. S&T Iskratel has made a confident step towards 5G technologies to complement various emergency services with a rich set of benefits of 5G networks while leveraging existing radio networks.

**eCall Node** is a scalable, flexible, and future-proof platform suitable for upgrading existing PSAPs with eCall functionality. Providing advanced features eCall Node is also fit for cloud service models and the provision of value-added services on top of eCall. In a scenario of an accident, it may provide MSD data to operating centres in the responsible municipality or highway patrol in the area. S&T Iskratel proudly presented its **NG eCall Node** at a co-hosting event NG eCall Plugtest 2020 – ETSI, where it acquired a design confirmation. S&T Iskratel as well contributed to design architecture specification of the eCall over IMS within the sAFE project.

**Safe City solution** offers cutting edge, end-to-end security with ubiquitous network access, a convergent operations centre, and a video-surveillance management system. The solution integrates information modules and communications such as voice, video surveillance, geographical information system (GIS), and a variety of sensors to enable efficient emergency response and inform tactical manoeuvres in various situations.



# ShadowFocus

Caller Location eCall Emergency Apps	Specialised Consultancy	Third Party Service	s
ShadowFocus Consultancy was formed	d in 2014 due to the der	nand for	
its founder's unique skills and knowledge in the implementation of			💁 Andy Rooke
Intelligent Transport Systems and Services (ITTS) within an Emergency			Director
Services operating environment. We support the development of			☑ andy@shadowfocus.com
effective partnerships between Emergency Services customers and			S shadowfocusconsultancy.com
suppliers of ITTS, so that technical solutions are developed that will be			
effective within the operational realities of the Emergency Services, in			
particular, eCall (Public and Private) App development.			



# Softil

Emergency Apps

Interoperability Solutions

Multimedia Comms Ne

Voice Comm

**Softil** is a privately held company headquartered in Tel-Aviv, Israel with offices around the world.

Softil is the leading enabler of IP communications solutions for missioncritical telecommunications products and services. Softil's BEEHD framework (SDK) is the key enabling technology behind a wide range of broadband and mission-critical communication solutions, devices, and products, as well as rich media applications for Enterprise and IMS/ Amir Angel
 VP, Global Sales
 amir.angel@softil.com
 softil.com

VoLTE. With more than 800 major corporations across the globe as customers, Softil's many technological achievements include the pioneering of Voice and Video over IP, combining its unique expertise in standardsbased signaling, multimedia and IMS. Softil's award-winning suite of developer tools ensures simplified development and earliest roll-out of new products to market.

- Experience. SOFTIL (Formerly Radvision TBU) has 25+ years of experience in the Voice and Video over IP (V<sup>2</sup>oIP) communication market, with a large and growing number of customers worldwide (more than 800 development partners). SOFTIL's customers include Avaya, Siemens, Capita, Cisco, Comtech, Ericsson, West/Intrado, Motorola, Nokia, Qualcomm, Samsung, LG, AudioCodes, Rafael, Elbit, SONY, Foxconn and many others.
- Leadership. With a large global customer base, SOFTIL is undisputed industry leader in broadband mission critical and IP communications technologies, developing Protocol Stacks and frameworks. The technology behind our award-winning developer tools is the foundation of the company's strong portfolio of carrier-grade unified communications products that deliver high-quality solutions and across-the-board connectivity, from dual-mode radios to LMR/MCPTT gateways to control room and dispatch systems to advanced MCX applications and devices to the MCX testing solutions.
- Standardization and Interoperability. SOFTIL is at the forefront of standardization of IP communication technologies from contributions to 3GPP, ITU and IETF standards to providing the most comprehensive SIP, IMS, VoLTE, and MCX Developer Solution available on the market. Softil is an active member of ETSI, TCCA, PSTA, iCERT, EENA and other industry organizations. Softil solutions had being tested at hundreds of industry interoperability testing events including all of the ETSI MCX and FRMCS Plugtests to the date.

- Innovation. SOFTIL is committed to keeping its products compliant with the evolving ITU, IETF and 3GPP communications standards, as well as continuing to add innovative media algorithms and flexibility for customization in order to ensure full compliance, thereby adding unique value for its customers, while keeping Softil SDKs fully backward compatible, allowing Softil customers to easily upgrade from one 3GPP release to another.
- Support and Integration. SOFTIL's support includes maintenance releases, including bug fixes and updates, technical support during your working hours, upgrades and training through the SOFTIL training program. SOFTIL's Professional Services team is available to help meet development and deployment needs throughout the entire product or service deployment lifecycle and to help integrate voice and visual communications into the network infrastructure or terminals.

## Softil product portfolio includes:

- BEEHD Framework for developing SIP, VoLTE/ViLTE, and MCX communication solutions
- Enabling Technologies for developers of IP communications
- WebRTC Interconnect Framework

## **BEEHD MCX Framework:**

Softil BEEHD solution provides a feature-rich, flexible and extensible MCX framework (SDK), including signaling, media, application logic and management, providing full interoperability with other MCX systems. It enables customers to tailor and tweak the user interface and the application without the need to deal with signaling or media complexities.

This revolutionary and unique software framework takes care of all voice/video/data communication requirements—from signaling to call control and media components. With media quality and user experience in mind, the BEEHD is easy to integrate and manage. Softil has the field-proven developer solutions and expertise needed — from network backbone to handheld mobile devices, terminals, purpose-build hardware devices, LMR/MCX gateways, control rooms, user-centric MCX applications, MCX testing solutions, train terminals/cab radios, in-vehicle devices, and more.

BEEHD is 3GPP MCX release 16 compliant and supports MCPTT, MCVideo and MCData, and all of the management interfaces. BEEHD supports multiple OS - Android, iOS, Windows, Mac, and Linux. The BEEHD offers number of unique algorithms, including some with special patents, to deliver best audio and video quality. BEEHD helps developers to accelerate time-to-market and reduce the effort.

## Enabling Technologies for developers of IP Communication Solutions:

Softil provides enabling technologies for developers of IP communications that are used in today's Enterprise, ng911/e911/ng112, IMS/VoLTE, and Mission Critical Communication industries.

Our award-winning suite of Protocol Stacks (ToolKits/SDKs) includes SIP IMS, MSRP, ICE, Advanced RTP/ RTCP, XDM and many others. Softil ToolKits provide the core technology behind rich media applications and products for the communications industry, and greatly simplifies the development of all types of VoIP, WebRTC, and LTE/5G multimedia applications and services.

Softil ToolKits are fully standards compliant, offer rich, flexible, multilayered and extensive set of APIs; feature modular design and exceptional market-proven performance. These toolkits offer wide range of optimization options, for performance, size and more; support for all major operating systems, but also easily portable via Common Core OS dependencies encapsulation. Softil ToolKits are open-source free, come with extensive, award-winning documentation; written in pure ANSI C code and come with the best-of-the-breed support.

## WebRTC Interconnect Framework:

WebRTC Interconnect framework is based on Softil SIP, A-RTP/SRTP and ICE ToolKits and allows to connect WebRTC clients directly to SIP Enterprise systems using WebSockets and DTLS/ICE/SRTP/SRTCP multiplexing.

SOFTIL



# SS8 Networks

services with:

 Caller Location
 Disaster Management
 Information Analytics
 Public Warning

 Delivering Location Intelligence to Help Maximize
 Lives Saved Emergency Caller Location | Public
 Public

 Warning | Track & Trace
 VP, Marketing
 VP, Marketing

 As a leader in Lawful and Location Intelligence, SS8 helps make
 Societies safer. Our location intelligence solutions provide emergency

- Accuracy: SS8 offers the highest audited network location accuracy worldwide
- **Reliability:** our reliable, network-based solution also leverages device-based location technologies such as AML to generate the most accurate location, every time
- Speed: SS8's solutions deliver device location in real-time
- Coverage: we locate all types of mobile phones, everywhere, including roamers
- Visibility: our platforms include a comprehensive location audit capability

### Supporting emergency services worldwide

Accurate and timely location information can mean the difference between life and death. Solutions based on cell tower technology alone can only locate subscribers to within several kilometres, while device-based techniques lack consistency due to bad weather, poor signals, or user disablement.

SS8's LocationWise combines multiple technologies to provide real-time and historical location intelligence. We are a global leader in mobile network location solutions for Emergency Services, delivering consistent, measurable, and auditable results with the highest accuracy worldwide. We support Emergency Services by offering:

- Accurate caller location from the network or the device
- Public Warning Systems Cell Broadcast and Traceable Disaster Alerts
- Track & Trace Solutions to monitor and control pandemics

## Standards-based 2G to 5G solutions with the highest location accuracy

LocationWise is a location-based services platform that encompasses active and passive location solutions for 2G, 3G, 4G and 5G networks. It is a standards-based software solution that extracts data from the network and uses highly precise, patented algorithms to locate all mobile devices with significantly improved accuracy.

LocationWise supports NG-112 (Europe), NG-911 (USA, Americas) and M/493 emergency response architectures. The solution also supports 4G IMS networks with LRF/RDF nodes required to handle emergency calls on LTE networks (VoLTE), as well as VoNR (Voice over New Radio) to enable 5G emergency call location.

LocationWise can be provided as a standard, cell-ID only, or a high accuracy SAS with optional support for control plane A-GPS and SS8's proprietary Accuracy+ network-based location solution.

## **About SS8 Networks**

As a leader in Lawful and Location Intelligence, SS8 helps make societies safer. Our commitment is to extract, analyze, and visualize the critical intelligence that gives law enforcement, intelligence agencies, and emergency services real-time insights to help save lives. By providing high performance, flexible, and futureproof solutions, we also enable mobile network operators achieve regulatory compliance with minimum disruption, time and cost.

Intellego<sup>®</sup> XT monitoring and data analytics portfolio is optimized for Law Enforcement Agencies to capture, analyze, and visualize complex data sets for real-time investigative intelligence.

LocationWise delivers the highest audited network location accuracy worldwide, providing active and passive location intelligence for emergency services, law enforcement, and mobile network operators.

Xcipio<sup>®</sup> mediation platform meets the demands of lawful intercept in any network type and provides the ability to transcode (convert) between lawful intercept handover versions and standard families.

#### To learn more, contact us at info@ss8.com



# Telefónica

#### CAD Control Room Integration

Emergency Apps GI

S Radio Solutions

**Telefónica** is one of the largest telecommunications companies in the world in terms of market capitalization and number of customers. With its best in class mobile, fixed and broadband networks, and innovative portfolio of digital solutions, Telefónica is transforming itself into a 'Digital Telco'.

The company has a significant presence in 21 countries and a customer base that amounts more than 327 million accesses

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Emergency Services Product Manager

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- & telefonica.com/en/home

around the world. Telefónica has a strong presence in Spain, Europe and Latin America, where the company focuses an important part of its growth strategy.

Telefonica has more than 15 years of experience in the market of emergencies and public safety providing products and services to its customers. It is specialized in different types of solution for emergency centers, providing first solutions for the some of the most important emergency centers in Spain. Over 65% of emergency calls generated in Spain are attended using systems provided or powered by Telefónica.

Telefónica is also expert in deploying radio communications like **SIRDEE**, which is the communications systems (based on TETRAPOL) used by police officers and other security forces in Spain.

As a global service and communications operator and emergency system integrator Telefónica has a complete vision of the emergency process, from the service user to resource management.

# In the process of implementation of Emergency Centers, Telefónica helps their customers in the following key tasks:

- Operations analysis based on service needs and the current situation
- Definition and planning of change management activities
- Cooperation with the agencies, in an effort to stipulate protocol and methodology
- Evolution of the Technological Platform
- Management of the complete incident cycle, by means of the appropriate channel, taking into account the various factors: (citizens, management operatives and intervention, and so on)

# Telefónica, offers turn-key projects that include or may include the following phases:

• Process consulting

- Technology consulting
- Supply, installation and commissioning of the technology platform
- Data model customization
- Support and maintenance services

The Telefónica's Emergency Management Integrated System, called **SÉNECA**, is a platform designed to support the emergency management process occurring in the Emergency Operation Centers and PSAPs (112/911, Police, Firefighters and Rescue Services, Health Emergency Services, Public Safety Agencies...). **SÉNECA** offers the ability to attend emergency requests and quickly collect all necessary information to solve it. **SÉNECA** can integrate different technologies related with communication platforms (fixed and mobile phone, radio, SMS, video, etc.), audio recorders, GIS (via ESRI platforms), AVL systems, etc.

# There are 5 operational products available in the SENECA Emergency Suite (SES):

- SÉNECA Multi-Agency (112/911)
- SÉNECA Health (Medical Emergency)
- SÉNECA Public Safety
- SÉNECA Fire & Rescue

# SÉNECA consists of a set of elements (hardware, software, procedures, facilities, telecommunications infrastructure, and resources) that enable emergency management from various aspects:

- Receive emergency requests (demand management).
- Management agencies must respond to the emergency.
- Control and resource mobilization that resolved.
- Resource management and communication with them.
- Management of global emergency plans (definition, testing, etc).
- Generation associated reports, etc.

#### At a functional level:

- Solutions for all phases of operation: demand response and command and control.
- Module Reports and statistics for analysis and decision making.
- Attention and integration of calls from people with hearing disabilities.
- High degree of configurability and parameterization of the solution to the user profile.

#### At the technological level:

- Technological infrastructure based on market standards and industry.
- Email, phone, SMS, radio, IVR, fax, internet.
- Integration with leading telephony communications solutions and CTI.
- Integration with radio communications.

- Integration with call recording.
- Geographic Information System (GIS) fully integrated.
- Full integration with AVL and GPS systems.

#### A business level:

- Product evolving: mobility solutions, new channels (social networks, video call), including emergency simulators, etc.
- Strategic agreements with the best partners in the market.



# Telent

CAD Radio Solutions Recording Solutions Tria

A supplier of integrated mission critical ICT solutions for Public Safety Users, from Control Rooms to front line responders, including ICCS, CAD, Voice Recording, Mobile Data, epcr, Tetra & Paging solutions.

For project activities, we provide design consultancy, procurement, project management, installation & comissioning as well as extensive FAT, SAT & UAT Testing services. For service support, we provide network monitoring, Customer Service

Desk & On-site engineering support on 24/7 365 basis across Ireland & UK.



Our customers include Health Service Executive National Ambulance Service, Irish Fire Service, N. Ireland Fire & Rescue Service, Maritime Coastguard Agency, Royal National Lifeboat Institute (RNLI), as well as various Fire Rescue Services and Police Services across England, Scotland & Wales.



# **Telespazio France**

#### Disaster Management

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Telecommunication

Telespazio France: contribution to the improvement of citizens' safety and security

We are convinced that a simple link between Man and Space is essential to our life on Earth, because Space is a key technological and human enabler to protect the planet and its inhabitants. We have faith in Humankind and diversity, we Axelles Pomies

Head of Navigation Downstream Department

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- ${\mathscr O}$  telespazio.fr/en/home

believe in technology and skills development. We act on the basis of our founding values of Commitment, Innovation and Partnership.

Thanks to our historical legitimacy, our global expertise and our European dimension, we put the strength of two European Leaders and the agility of our human-sized structure at the service of our mission. Our ambition is to democratize the access to the space services of today and tomorrow, through an open logic of "Space On Demand". We bring together the skills and partnerships needed to provide the best solutions, in a market undergoing profound change.

Together with EENA and European Institutions, we support the development of innovative solutions for **European citizens' safety and security** in close cooperation with actors from the whole operational chains:

- Deployment of Advanced Mobile Location in Europe with EC HELP112 projects;
- Development of a system for monitoring the health of workers, which includes an **emergency communication functionality** based on **PEMEA standards**, with EC H2020 WorkingAge project;
- Galileo Emergency Warning Service proof of concept, with EC GRALLE project;
- Galileo Emergency Warning Service consolidation and demonstrations, with EC STELLAR project;
- SBAS-based alerting capability demonstration in Sub-Saharan Africa, during the SBAS ASECNA project;
- SAR/Galileo Two Way Communication service prototype and demonstration, with the EC SERENITY project.

We also operate Cospas-Sarsat French Mission Control Centre, SAR/Galileo Service Centre and SAR/ Galileo Service with CNES.

All of these efforts, all of these resources and all of these successes are enabling us to pursue our actions for the benefit of Europe's and the world's citizens, and helping to accomplish the noble mission of saving lives.

### Telespazio France: general description

As a key player in space infrastructure operations for more than 30 years and with a staff today of more than 435 experts, Telespazio France supplies value-added satellite-based services and applications covering all of the key domains of space, from telecommunications and Earth observation to navigation.

Telespazio France is the French subsidiary of the Telespazio group, a joint venture between Leonardo (67%) and Thales (33%). Based in Toulouse, Bordeaux, Paris and French Guiana, Telespazio France delivers its expertise and services to the main European institutional and professional stakeholders.

Telespazio is part of the Space Alliance together with Thales Alenia Space. The complementary capabilities of Thales Alenia Space in satellite systems and Telespazio in the services associated with them provides the Space Alliance all the assets needed to respond positively and effectively to the needs of the market, which today are increasingly focused on applications related to space technologies.

Telespazio is organized around three centres of excellence:

- Satellite Systems and Operations, in charge of operating our own space resources and systems, as well as those of our customers, and developing associated applications and solutions.
- Space Telecommunications, offering a broad portfolio of connectivity solutions and services.
- Geo-Information, delivering a unique range of radar and optical satellite imagery, and land- and oceanmonitoring products and services.

Today, more than ever, Telespazio France is a true innovator, transforming what were once just possibilities into real services available to an increasingly wide audience worldwide.

# **W** Unblur

# Unblur

Artificial Intelligence

Cloud Services Dis

Disaster Management Emergency Apps

**Unblur** has created IRIS Core to help Incident Commanders from Emergency Services make safer and faster data-driven decisions during an incident.

IRIS Core is a software platform that allows commanders to visualize what is happening, and to know where the teams are at every second and what tasks are being done. Commanders can aggregate and share information like decision logs, messages and risk assessments between Alfonso Zamarro
 CEO
 alfonsozamarro@unblur.co
 unblur.co

teams making coordination much easier. Our platform connects all the data sources available displaying them on a simple and intuitive interface, in order to help Commanders execute an efficient response.

IRIS Core captures multiple sources of real-time data, such as live video feeds and geolocation of vehicles and teams, together with static data such as maps, blueprints, pre-planned information and other databases. It integrates all of this data with Incident Command System (ICS) command and control tools, enriching them and allowing Incident Commanders manage the incident from one single place. With the rise of a technological and connected world new tools like wearables, sensors, drones, GIS, have appeared to enrich commanders view of the incident.

However, new technologies are causing saturation of commanders by large amounts of fragmented and unfiltered data, obstructing the decision-making process. In addition, coordination becomes an issue, because different teams have different tools, meaning they have different understanding of what is happening in the incident.

IRIS has been developed with first responders around Europe, ensuring that all features are relevant for field commanders and that it has the best user experience design. The IRIS product team are constantly in contact with IRIS users, ensuring that the platform evolves with users' feedback and needs. IRIS is currently being deployed at Mid & West Wales, Hereford, Worcester and Shropshire FRS in the UK.

We are available to showcase our technology and share our experience from deploying technology in Emergency Services. If you are interested reach us to learn more about how we can help you.

# utimaco

# Utimaco TS GmbH

#### Disaster Management E

Emergency Apps Public Warning

g Telecommunications

UTIMACO is a global platform provider of trusted Cybersecurity and Compliance solutions and services with headquarters in Aachen (Germany) and Campbell, CA (USA). UTIMACO develops on-premises and cloud-based hardware security modules, solutions for key management, data protection and identity management as well as data intelligence solutions for regulated critical infrastructures. With the acquisition of Celltick in April 2022 UTIMACO offers Public Warning

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Systems (PWS) and Mass Notification Systems (MNS), and is the world's largest CBC (Cell Broadcast Center) provider. UTIMACO is one of the world's leading manufacturers in its key market segments.

## u.warn Public Warning solutions

Our world-leading products provide powerful and instant emergency/commercial notifications in over 20 countries with more than 1 billion users. We are a global leader of Public Warning Systems (PWS), Mass Notification Systems and the world largest CBC (Cell Broadcast Center) provider.

u.warn is a public warning suite of products that caters for governments, enterprises and other organizations, which seek an emergency mass communication system. u.warn adapts to the various needs of each entity via a variety of delivery channels, including cell broadcast, location-based SMS, customized apps, desktop alerts, email and more. Whilst the system is modular, alerts via all u.warn delivery channels are managed by a single control and management system – the Command Post. The Command Post includes a pre-programmed alerts library and supports various sending modes, either per location or for a group of individuals.

#### u.warn main components are:

- **u.warn Command Post** A comprehensive alert control and management tool for all communication delivery channels.
- **u.warn CBC** Real-time and location-based alerts without the need for cell service or internet network during natural disasters or national emergencies.
- **u.warn SIM Alert** The ultimate solution in increasing alert coverage, with zero integration effort.
- **u.warn Location Based SMS** Ensures that alerts reach the intended audience rapidly and efficiently with nearly 100% coverage.
- **u.warn Mass Notification System** Always be in touch with your citizens, students or employees, in emergency and everyday times.

• **u.warn APP** - Fully customized and branded emergency alerting app.

UTIMACOs customers include the Danish Armed Forces, Qatar's Ministry of Interior, IDF (Israel Defence Forces), government of India (AP), 3 in Denmark and Sweden, Vodafone-Idea, Airtel, BSNL, Telia, Bite, Tele2, America Movil, Globe Telecom, Taiwan Mobile, Taiwan Star, APT, MobiFone, Dialog, Mobitel, VNM and many others.

#### Our unique advantages:

- Trusted cybersecurity and compliance solution provider
- A global leader for complete Public Warning Systems
- The world's largest cell broadcast provider
- We develop all in-house elements that are required for the overall system
- All products are equipped with a state-of-the-art and easy-to-use GUI
- A large footprint in all regions, with local experts
- Very fast time to market

500+ employees around the globe create innovative solutions and services to protect data, identities and communication networks with responsibility for global customers and citizens. Customers and partners in many different industries value the reliability and long-term investment security of UTIMACO's high-security products and solutions. Find out more on www.utimaco.com



# Vitkovice IT Solutions

CAD Control Room Integration

Emergency Call Management G

**VITKOVICE IT SOLUTIONS** has more than 25 years of experience and knowledge in building complex systems with several integrated solutions for crisis management. Our software solution is deployed at all 112 PSAPs in the Czech Republic. We also provide solutions for effective cooperation and coordination of emergency services. Due to our experience in many stressful situations during natural disasters and the COVID-19 pandemic, our system is designed to handle extreme

eCall

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stress. A sophisticated stress testing methodology is used to support this solution. The systems architecture is set up so that the potential failure of a key node does not severely limit the availability of emergency services. We continue to work on improving system availability during high load or technology failure. We are participating in Europe-wide projects for research and development, our company is a leader in implementation of eCall.

We currently provide:

- Computer Aided Dispatch System
- GIS with Caller location solution
- eCall solution
- Advanced Mobile Localization (AML)
- SMS communication
- Mobile applications
- Full telephony and other communication systems integration
- Integration of all IRS to one working environment
- Video calling using WebRTC protocol

The best you can find in the world of IRS is what we have created – the Integrated Rescue Center – all dispatch systems working together are tightly integrated and working together, all resources are connected and working together to the highest standards available. Fully efficient in terms of results and costs.

The PSAP system now provides support to other components of the integrated rescue system in locating citizens in emergency situations. We provide an interface for the transfer of AML positions to the individual operational controls of the integrated rescue system components.

We are supporting all major PBX systems which are certified for PSAP systems.

Our goal is to help PSAP operators with their mission to help citizens in emergency situations. We hear what our customers say and build solutions that are optimal for them.

We regularly discuss new ideas and future directions with our solution operators. At the moment, the main long-term topic of these conversations is the NG112 issue.



# Zachranka

#### Accessibility A

Caller Loca

Emergency Apps Public Warning

We are a Czech based company focused on solutions for emergency calling, public warning, AED mapping, and public awareness in the emergency field based on mobile apps and WebRTC. Our main expertise is based on our unique knowledge of emergency service operational management systems, our strong technical background, and our highly individual approach. Our main product is the NG-SOS platform which is now used by more than 3 mil users in 4 EU countries.



## Zachranka - NG-SOS

NG-SOS is a modular solution for effective two-way communication between the caller and the operations centre. The system's modules are designed to work as a whole or in conjunction with already-established technologies within a particular organization. Whether you are dealing with real-time image transmission, a mobile app for emergency calls, a public warning system, or notifications for first responders — NG-SOS is the technological leader in the field of emergency communications.

# Mobile App

The app was tested and developed in cooperation with EMS professionals and provides the most accurate information about the caller by sending their location updates, complete medical profile, and basic preclassification data (including next-of-kin contacts, mobile network, battery status, and more). The app also provides an interface for online chat and video streaming. By combining all of this information provided, EMS crews can reach the patient in a far shorter period of time, thereby increasing the patient's overall chances of survival. The app supports communication for callers with speech and hearing disabilities and was also developed to fully support Voice Over technology for blind users.

An important part of the app is the geofence-based reverse notification communication feature with static and dynamic content. And all with remote control over CMS or CAD.

# Web-based App

Not all emergency calls are made through a mobile app. Effective caller location, classification, and identification is thus limited to the classic telephone call scenario and the individual operator's own ability to make good use of this method in repeatedly stressful and demanding situations, with callers who are often in

shock, disorientated, and possibly seriously injured. And sometimes trying to communicate all of the above in a foreign language. NG-SOS technology significantly streamlines and enhances standard emergency calls. This specially-developed technology enables an SMS to be sent containing a so-called Smart Link to establish a connection via a WebRTC-based web app.

## **Public Warning System**

The NG-SOS system uses a mobile app to warn of sudden crisis situations such as water supply contamination, epidemics, chemical leaks, unexploded ordnance, and other dangers. It is thus an important component in the various means of alerting the population, such as sirens, emergency SMS alerts, or Cell Broadcast. The source of the alert notification can be CAD (via Common Alerting Protocol). Alternatively, the alert can be entered directly through the CMS system, or the app can be integrated within other emergency call systems already in use.

The main advantages of adding a mobile app to a national public warning system are the speed of sending notifications (millions of notifications received within minutes) and the low operating costs (as the above are not charged as individual SMSes). Notifications can be supplemented by a link to a website with further instructions, or a direct link to the procedure or instructions in the mobile app. The system can work either with a database of registered users according to defined regions or with users' current locations based on the principle of Geofencing technology.

## **Dispatcher Portal**

The NG-SOS system's online dispatcher portal was designed based on the needs of emergency call lines. It enables access to information either from the caller's mobile app or obtained via Smart SMS. It includes:

- An overview of calls from the mobile app within that region.
- A display of all caller information transmitted during the emergency call, including visualised map data.
- The possibility for customisation and integration with other technologies.

## CMS

Remote content management of a national mobile app for emergency calls or sending direct notifications to users has never been easier. With a sophisticated CMS, you can easily update Points of Interest in the app without the need for millions of users to update the app themselves.

An important function is the unique reverse emergency notification system, which enables emergency alerts to be sent to all users within a selected area, with the added option to supplement the alert's arrival with an alarm message tone and display a link to the national authorities designated websites.

## **API for CAD**

The NG-SOS system is built on a robust backend solution that enables direct implementation within local operations management systems. All available functions can then be managed directly within the CAD system currently in use. The simple API has already enabled direct implementation within CAD systems in Austria, the Czech Republic, Slovakia and Hungary. The entire technology can be operated on the principle of a cloud solution or in the form of an on-premises solution.

The NG-SOS system is already in use in specific situations in various countries for the automated activation of first responders from the mountain and water rescue services.

This publication provides an overview of companies that are part of the EENA community.

For further information, please visit our official website at <u>www.eena.org</u>.

Do you have questions or comments? Contact Jérôme Pâris at j<u>p@eena.org</u>.



