# THE WHO IS WHO HANDBOOK

IN THE PUBLIC SAFETY INDUSTRY

# YOUR GUIDE TO PUBLIC SAFETY SOLUTION PROVIDERS

DISCOVER OVER 90 COMPANIES WORLDWIDE

**NEW** website:

companies.whoiswho.eena.org



# Legal disclaimer

This document was created by the EENA staff in July 2020. 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.



#### 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 Sep 2020.

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# Airbus

Automatic Vehicle Location

Cyber Security

Next Gen Comms

Public Safety

Voice Comms

Airbus group is a large entity with 130,000 employees and truly global presence. Roots of Airbus are strongly in Europe. Airbus is operating in many different business areas with wide portfolio. These business areas include e.g. the following ones: commercial aircraft, helicopters, military aircraft, UAVs, satellites, satellite launchers, security solutions e.g. for border security, satellite communication solutions, cyber security and critical



communication solutions. The customer base is also wide, including e.g. air carriers, defence organisations, security organisations and public safety.

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 has created a large global public safety customer base during the past 30 years. Most of these customers are located in Europe and Middle East. Long experience and understanding of customers' operational processes are forming an excellent basis for addressing future needs of public safety organizations with new technologies and applications.

Airbus has wide portfolio for public safety. This portfolio combines assetts from different operational areas like multimedia communication based on Tetra/Tetrapol/4G technologies, cyber security, image analytics and applications, open source intelligence, drones and UTM, IoT, satellite communication and situational awareness.



# Alcatel Lucent enterprise

Cloud Services

eCall

Emergency Call Management

Network Hardware

**Telecommunications** 

**Alcatel-Lucent Enterprise** has an extensive emergency services experience and expertise, offering advanced

**Digital Public Safety Solutions** to key players such as fire brigades, police brigades, 112 and PSAP service providers across the world.



# Communication and collaboration for emergency centers:

Alcatel-Lucent Enterprise delivers an open and reliable communication and call routing solution (99,9%) for emergency and public safety services that answers their requirements in terms of services and legal requirements.

Rainbow, the cloud-based solution, provides a fully integrated multimedia collaboration solution as part of an end-to-end network solution. Integrated in a PSAP solution, Rainbow CPaaS brings voice, chat, video and desk sharing, and enhances communication and collaboration between staff and first responders, coordinating activities and automating the creation of collaboration rooms for a swift answer.

#### Network and IoT connectivity

The public network is critical for a smart and safe city. The Alcatel-Lucent Enterprise converged, digital age network solution provides a resilient LAN, WLAN for high-density public Wi-Fi based on WiFi4EU compliant Wi-Fi 6 and BLE infrastructure. It enables

IoT devices automatic provisioning in secure network containers and connects the city and its citizens to emergency control centers for better operational efficiency.

#### Notification and awareness

Increase responsiveness to enhance everyday safety, notify the right people at the right time in the right place, provide the right instructions in case of emergency, inform citizens. The ALE Emergency Notification solution, connected to a PSAP and combined with an alerts workflow engine based on the ALE Rainbow workflow and location-based services or asset tracking, help improve reactivity and ensure a swift and safe conclusion.

Learn more about our **Digital Government Solutions** and our public-sector customers: https://www.al-enterprise.com/en/industries/government

## Meet Alcatel Lucent Enterprise

We are ALE. Our mission is to make everything connect to create the customized technology experiences customers need. From enterprises and public safety organizations to the cloud or in combination, we deliver networking and communications that work for your people, processes and customers. An essential provider of enterprise networking, communications and services to over 830,000 customers worldwide. https://www.al-enterprise.com/en/industries/government

#emergency #eCall #Wi-Fi #Cloud #IoT #Collaboration #BYOD #UnifiedCommunications #networks



# **Allianz Partners**

eCall

Emergency Apps

Emergency Call Management

Information Analytics

Third Party Services

**Allianz Partners** is the world's leading B2B2C specialist, delivering integrated solutions that combine insurance, assistance and technology.

Part of the Allianz Group https://www.allianz.com/,
Allianz Partners operates under four global
commercial brands - Allianz Assistance, Allianz
Automotive, Allianz Care, Allianz Travel. Trust is a very

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important part of their heritage. Allianz Automotive provides 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 Assistance and Allianz Travel to provide them with best-in-class travel insurance and assistance services; and for over fifteen years companies of all sizes and industries, as well as private individuals and families, have turned to Allianz Care for reliable, comprehensive health, life or disability protection.

While their fields of focus are different, our four commercial brands and the teams that drive them share a common mission and values, a commitment to continuous innovation, a geographical reach, the ability to meet our partners global demands and a truly customer-centric approach.

#### Allianz Partners Key Figures 2018:

€8.62 Bn Total Revenues,

€566 M Operating Profit, Commercial Activity in 76 Countries,

21, 566 employees worldwide,

65 million cases handled,

Working with over 40 car brands in more than 30 countries.



# **AnthroPi**

Artificial Intelligence

Disaster Management

Emergency Call Management

Information Analytics

Specialised Consultancy

**AnthroPi**, is a society based on an ethical and humanist charter, aims to improve and secure the handling of emergency calls.

By bringing together call takers skills, emergency physicians, cognitive psychologists, sound engineers and IT developers, we worked on emergency call detailed understanding to create the first telephone simulator: SimulPhone ©.



Already used by many call centers, SimulPhone © has proven reliability, validity and high level of practicality. Able to train call takers on similar calls, it provides real time answers to each one questioning. Coupled with a simulation evaluation, SimulPhone © rates the alert quality processing, verifies the objectives achievement and improves debriefing efficiency. During our learning session, we are able to train call takers to the required and expected skills through specific audio or cognitive workshops. We also produce a team effectiveness analysis that reflects the group's global and cognitive behavior.

Our solution allows the alert treatment evaluation, the control of fixed objectives achievement and the communication in crisis situation increasing calls quality and security.

As an evolution SimulPhone ©, SimulCrise © is a tool to train call center teams in crisis management. AnthroPi performed the first simulated crisis in an emergency call center in 2019, and allowed all levels to play their own decision-making role. Our team of experts is able to create scenarios on demand, in various fields, to train actors and test the operational response in order to constantly adapt to emerging risks.

#### We are proud to present you our two last developments:

#### Geminy© allows us to analyze the human factor in real time:

The app scans the phone or preface conversations and our algorithm decomposes the voice parameters and their properties. The professional thus has emotional and cognitive feedback. Setting the different parameters allows real time, relevant and instantaneous information.

Geminy © adapts to different fields, such as intelligence, judicial interrogations, call management (urgent or not), training, recruitment, negotiation.

**AudioscoPi©** also operates in the operational phase and will allow to produce an image of judicial eavesdropping of investigations, or surveillance. In this way, teams have the ability to listen, record, monitor, search, identify individuals, replay, and even import a photo in order to reproduce a visual environment through perceived sounds and noises. AudioscoPi© will also allow you to obtain instant recognition of typical sounds (loading a weapon...), to differentiate sounds that are not in line with the environment (howls in a station hall ...) Through AudioscoPi©, forensic and intelligence services, response units and special forces can have voice parameters and their properties broken down in an analysis of cognitive processes and related emotions.

#### Our solutions

Simulphone©: Phone call simulator

Simulcrise©: Crisis simulator

Anthroscopi©: Conversational and reporting tracker for each step of call processing or crisis management

GeminyO: stress analysis and monitoring in verbal communication

**Audioscopi©:** a tool to record sounds in an image. It will allow in the near future to recognize automatically specific sounds in a mass of data (noises, howls, conversations…).



# **APD Communications**

Caller Location

Control Room Integration

Emergency Call Management

Next Gen Comms

Radio Solutions

#### Meet APD Communications

#### We're here to help your control room do its job.

We're proud to enable emergency response worldwide with our innovative and market-leading contact management and integrated communications and control systems (ICCS), customer relationship management tools (CRM) and location solutions, available on premise or

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in the cloud. Our customers in the public safety sectors trust our solutions to deliver their daily operations in the control room and in the field.

Now as part of the NEC family, and working alongside Northgate Public Services, our expert knowledge goes further than ever before, supporting the wider emergency services sector. We work with every UK police force, and overseas we support control rooms in Europe, the Middle East and further afield. We also connect critical international transport hubs including the London Underground, Gatwick and Dubai Airport.

With technology constantly evolving, so are we. We're experts in LTE and can help your organisation get ready for, and switch to, an LTE-enabled control room.

But for us, it's not just about technology – and we're passionate about helping people. You may already have heard about our global control room initiatives including the annual APD Control Room Awards celebration, which recognises the incredible work of employees in this sector around the world.

And also International Control Room Week, which raises the profile of the control room community, is celebrated by thousands of employees in hundreds of control rooms every year, and takes place in October – so make sure you get involved!

#### **Our solutions**

With our combined expertise, we can build a truly tailored package for your control room operation that includes:

- ICCS
- Voice Recording
- Online Portal
- CRM
- Telephony
- Resource & People Location
- Incident Management
- Relationship Management
- Social Media Integration

#### Cortex ICCS | Integrated Communication Control System - ICCS

Cortex® is a software only Integrated Communication Control System - ICCS, that places all your familiar control room hardware - radio, telephony, CCTV and talk groups onto one screen.

Used in control rooms around the world, Cortex® enables rapid communication for your customers and allows operators to do their jobs more easily and efficiently.

Available in the cloud or on-premise, and completely customisable in layout, design, feeds, language and role-type, Cortex works for your control room, exactly however it's operating.

- Radio
- Marine Radio
- LTE, UHF and VHF
- Telephone, mobile and text
- Access control and CCTV
- Tannoy and alarms
- Websites

#### Cortex OmniChannel | Contact Management Solution

Cortex OmniChannel® is a contact management solution that puts the person at the heart and gives operators the information they need to make decisions. Using telephony integration, it automatically checks caller ID for contact history and retrieves caller information. It also alerts the operator when the caller meets certain criteria, including vulnerability, repeat contact and more.

OmniChannel® also enables multi-channel interaction with the public via telephony, webchat, webforms and social media. Operators can use the software to monitor trends using social media feeds, for example, through hashtags for major incidents and events.

It also feeds information into reporting systems to generate detailed performance reports.

Bring everything together in your control room with Cortex OmniChannel.

#### **Mapping**

Our mapping solution enables optimal emergency response by providing the Control Room with an advanced level of situational awareness. The solution is built on fast, responsive, and familiar mapping interfaces and utilises modern location information tools together with rich layers of data from multiple sources.

When combined with integrations into location tracking technology and Computer Aided Dispatch, operators can understand where incidents are being reported and which resources are best placed to respond.

The result is a powerful tool providing a wealth of geospatial information to support intelligence-based decision making within the control room.

#### aselsan

# **ASELSAN**

CAD

Control Room Integration

Network Hardware

Recording Solutions

Voice Comms

**ASELSAN** Inc. is a high technology, multi-product company that designs, develops and produces state-of-the-art products and systems for military and professional applications since 1975. The ASELSAN headquarters, as well as the main production infrastructures, are located in Ankara, TURKEY.



ASELSAN operates under five divisions:

- Communications and Information Technologies Division
- Defense Systems Technologies Division
- Radar, Electronic Warfare and Intelligence Systems Division
- Microelectronics, Guidance and Electro-Optics Division
- Transportation, Security, Energy and Automation Systems

ASELSAN has expanded its technological capabilities and product spectrum using the know-how and experience accumulated through the major defense programs undertaken. ASELSAN is active in the following fields: military communications, radar, electronic warfare, electro-optic, navigation & avionics, weapon, C4ISR, naval, homeland security, traffic & toll collection, public safety, critical communications and geographical information systems.

ASELSAN has experience in Digital Radio Communication Systems, Command Control Centers and PSAP solutions with the capability to undertake large-scale system integration projects in addition to developing the most sophisticated high-end products.

The Turkish Gendarme uses ASELSAN's APCO25 digital radio system integrated with command control and call centers in more than 70 provinces. ASELSAN DMR System is implemented in 24 provinces for police forces. General Stuff, Coastal Guards and Municipalities are some of the users of ASELSAN Products.

ASELSAN's 112 Emergency System is also one of the main products of the Emergency and Public Safety Communication System solutions. The "112 Computer Supported Dispatch and Management System for 112 Emergency Assistance Substructure Setup Project" was started in 2007. The 112 Emergency Call Center Project, which The Ministry of Interior has become the owner of, is undertaken by ASELSAN Inc. PSAPs have been put in use in twenty-four provinces.



# ATL Tech

Cloud Services Cyber Security Emergency Apps Emergency Call Routing Emergency Call Management

ATL Tech is a company specialised in Information and Communication Technologies with 15 years' experience in software and mobile application development. By having partnership with global companies, ATL Tech offers a broad range of products and services, including IT consulting, systems integration, security, software services and solutions.

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ATL Tech envisions to establish a new tradition within Information and Communication Technologies by providing the market with IT products and services prepared by local specialists. The offerings of ATL Tech are designated to simplify and streamline the daily operations of the companies which provide maximum efficiency while minimising the cost of transactions. Serving both local and global companies, ATL Tech gives its clients opportunity to reach its offerings in a shorter time period with highly qualified service.



# **Atos**

CAD Control Room Integration

Cyber Security

Emergency Call Management

Next Gen Comms

**Atos** is a global leader in digital transformation with annual revenue of over € 12 billion and 110,000 employees serving a global client base in 73 countries

Atos contributed to responding to this year's health crisis. For example, Atos and Erasmus Medical Center developed a model to predict intensive care capacity and disease progression of COVID-19.



As a long-time specialist in digital solutions for Homeland Security, Defense and Communication solutions, Atos is an experienced partner working with public and private sector organizations to evaluate and adopt digital innovation for the most critical missions.

We bring to our customers the most extensive range of solutions to address their public safety challenges. We provide solutions for emergency and crisis management, tactical communications, safe and smart cities, law enforcement, intelligence, anti-terrorism, border control, immigration and more.

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

Atos provides a modular end-to-end offer for Public Safety:

#### **Emergency management**

• **GEMMA** is a next-generation emergency and crisis management product, fitting the needs of public safety organizations in multiple domains. It covers the entire event management lifecycle, from handling emergency communications and dispatching resources, to first-responder intervention and event escalation. GEMMA emergency call taking available on-premises and in the Cloud and the computer-aided dispatch system help PSAP personnel qualify and prioritize communications and efficiently respond to incidents, and ensure a

multi-level and multi-agency cooperation by processing and sharing information in real time, while securely managing large amounts of actionable data. GEMMA has been chosen by public safety organizations around the world, for nationwide operations such as Romania, for regions such as Galicia in Spain, or for major cities such as Paris.

• Multi-Agency Incident Transfer (MAIT) is a robust, secure and virtually instantaneous inter-agency messaging solution for emergency services, currently deployed in several locations in the UK. It can reduce resource deployment time by over 3 minutes per emergency while minimizing the risk of errors and delays between agency interfaces. Crucially, MAIT enables frontline staff to focus on the task at hand, saving cost, time and, ultimately, lives.

#### Next-generation core communication services

- Atos Next Generation 112 (NG112) solutions allow you to receive calls through different channels (voice, video, SMS, eCall, instant messaging, apps, social networks...) into your call routing network, to quickly allocate contacts to the right agent. Atos offers the only carrier-grade VoIP session controller for both call handling and emergency services routing processes, 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 Emergency Services Routing Proxy (ESRP), built from OpenScape Voice that supports EENA and NENA architecture and standards for ESInet.
- OpenScape Emergency Services Routing Proxy is a highly available and scalable system, preserving media during failure conditions and, in concert with the Atos OpenScape Policy Store Server (supporting the ESRPs Policy Routing Function), ensures all calls are processed according to policy routing rules. Combined with Atos' Border Control Function (BCF), and 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 processing NG112 traffic is fully covered by Atos.
- Atos Multi Network Dispatching and Recording provides seamless communication between the field forces
  and the control room (multi-technology), and records communications between command and the control
  center and the intervention forces. It can be connected to operational customer databases. Atos Resource
  Tracking displays and records on a map the location and movements of mobile intervention forces, including
  points of interests, zones and automatic alarms.

## Big Data, Edge computing and Artificial Intelligence

- Atos Codex for Safety is an innovative solution that performs big data analytics on safety and rescue information to deliver an intelligent incident response. By collecting and analyzing data from multiple sources, this solution delivers insights that enable a response to be triggered and managed in real time. Atos Codex for Safety helps reduce crime with intelligence-led policing. It enhances safety and security and improves the operational efficiency of public security. Predictive analytics optimizes resource management, and secure data exchange between systems enhances interagency collaboration.
- Atos Edge Computer Vision analyses in real-time the video flows from multiple cameras. It can run on the highly performing BullSequana Edge server that provides a high computing power using AI capabilities.

#### Secure and tactical communications

• Atos 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.

The offer consists of a complete portfolio including services and maintenance, with key core elements:

- Professional radio network 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
- Ultra-secure **smartphones** with a high-level of data protection
- A **multi-network module** that allows you to automatically switch from one network to another without interruption
- Mission-critical applications such as MCX, dispatcher and recorder.
- **CitySafe** is a mission-critical application that brings essential features on a smartphone: 4G voice and data communication, a zoomable map with real-time geolocation of people, assets and events, live sharing of photos and videos, etc. Compatible with IoT, CitySafe can program surveillance drones, collect their data, and integrate sensors placed on equipment.

## Public warning

• Atos population alerting can cover a city, a region or an entire country. It coordinates different types of alarm systems, including sirens and social media, by providing a unique system that can be run by independent public organizations. Our solutions have been deployed in Switzerland, Spain and Portugal.

## Cybersecurity

You can benefit from Atos' extensive knowledge base of IoT skills shared through 14 SOCs worldwide, with 5000+ highly experienced and certified security professionals. Our end-to-end solutions rely on our own technology and strategic partnerships:

- Evidian: with our Identity and Access Management solution, only the right people can access the right resources at the right time.
- Horus and IDnomic: trusted identities for people and devices. We enable you to build trust infrastructures for digital entities and IoT businesses.
- **Trustway:** data protection at rest and in motion. Trustway ultra-secure VPN and hardware security modules (HSM) protect organizations from cyberattacks with strong data encryption.



# Avaya

Emergency Call Routing

Avaya is a global leader in communications systems for enterprises and organisations of any size.

Avaya and our partners are crafting comprehensive solutions to meet the increasingly complex multichannel communications and that are critical for successful implementations of Next Generation

#### Amarkus Bornheim

Practice Lead Avaya International - Public Safety & **Emergency Services** 

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Emergency Services. Avaya's core contributions to Next Generation Emergency Services supporting distributed, consolidated and integrated Emergency Services and Public Safety environments are centred around our competencies in:

- Contact routing and treatment (Voice, Video, SMS, Text & IM, IoT, Social Media)
- Intelligent contact filtering and prioritization to avoid resource overload and enable adequate and efficient incident treatment
- Application integration into Command and Control room applications, rich interaction between media streams and application logic
- Drone video streaming integrations, supporting manual flight (Visual Line of Sight VLOS) as well as automated flight (Beyond Visual Line of Sight BVLOS).
- Single site on-premise implementations as well as multi-data centre private, public and hybrid cloud deployments, covering small regions up to national rollouts

As Governments and Public Safety Institutions build the network required for Next Generation Emergency Services, Avaya is ready to provide solutions today, across all required communication channels. Government institutions of all sizes can continue to depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, and services to citizens.

Avaya understand that Next Generation Emergency Services is a desired end state that helps to solve many current challenges. We also see from recent customer interactions that many organisations see the challenge in getting to that end state without neglecting current landscapes. Avaya's platforms do support customers to migrate from where they stand today into the new world of public safety communications and interactions, including current hot topics like

- ISDN-to-SIP migration
- Internet of Things, sensor and apps integration
- Infrastructure and services security
- Cloud-based services in public safety

Avaya's team of seasoned experts in public safety and emergency services is ready to get in touch with you to explore a new dimension in public safety communication, collaboration and interaction!



# Bandwidth

Cloud Services

Emergency Call Routing

Emergency Call Management

Telecommunications

Voice Comms

Bandwidth is a Communications Provider as a Service (CPaaS) company offering a full suite of voice, messaging, and 911 services and APIs, all built atop the company's own secure, carrier-grade VoIP network. Businesses use Bandwidth's APIs to easily add calling, texting and 911 connectivity to software, applications, and internet-connected devices.



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- S bandwidth.com/9-1-1

Bandwidth is proud to be the communications provider behind a diverse group of customers—from telecomfocused brands like Earthlink, RingCentral, and 8x8 to internet giants like Google and Microsoft's Skype for Business.

Bandwidth's 911 solutions provide fast, reliable call routing and highly-reliable location management capabilities. Behind it all, Bandwidth's emergency services experts provide the hands-on support and subject-matter expertise that working with 911 technology demands.

#### E911 for VoIP and Unified Communications

Whether you're a carrier, VoIP Service Provider, or enterprise, Bandwidth offers simplified address provisioning and seamless call routing, ensuring public safety knows where your users are when you call 911 while helping you meet regulatory obligations. We are compatible with leading enterprise communications platforms from Asterisk, Sonus, Cisco, Avaya, Microsoft, Broadsoft, Mitel, Metaswitch, ShoreTel and much more.

#### E911 Dynamic Location Routing

Now you can protect your mobile and nomadic users as they move within your enterprise. E911 Dynamic Location Routing uses location gathered at the time of a 911 call to both route and arm public safety with real-time location information to support faster emergency response.

# **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.



# Beta 80 Group

CAD Caller Location

Emergency Apps

Emergency Call Routing

Next Gen Comms

**Beta 80 Group** started its journey in Milan, Italy's business capital and one of Europe's most dynamic cities. It has now become a leading company in Public Safety Solutions worldwide.

Beta 80 serves **74 PSAPs and Control Rooms** covering EMS, Fire, Healthcare Continuity, Coast Guard and 112 Call taking PSAPs. Every day, our solutions protect **40 million citizens in 7 countries worldwide, with a 100% customer retention rate.** 



Beta 80 is leading the transition of emergency PSAPs and Emergency Control Rooms into the next generation by empowering operators and agencies with the world's most advanced tools and solutions for their daily operations in a simple, innovative way.

#### Our products and services include:

#### Life 1st CAD

The first *all in one*, high performance and scalable Computer Aided Dispatch solution for **next generation PSAPs**, a system which is revolutionizing the entire Control Room industry, integrating Social Media and other new IP based communication mechanisms. A platform designed with a Service-Oriented Architecture (SOA) with an **innovative model of data collection** and distribution, with Multi-tenancy capabilities and cloud-oriented.

# Next Generation 112 / 911

Beta 80 started working as one of the first companies in Europe, on all topics related to the upcoming new methods of emergency communication. We have developed a full range of components for the NG112/911 **ESInet platform**, based on the **ETSI TS 103 479** standard and **NENA i3** specifications, to deliver VoIP and multimedia communications to PSAPs.

#### Smart Mobile Applications

Beta 80 has a vast range of tablet and smartphone application to support on-field operators in their daily tasks. Our solutions include **Mobile CAD**, **ePCR**, **AVL**, **and apps for first responders**. Beta 80 also develops apps for geolocating citizens in emergency, compatible with **PEMEA** standards.

#### System Integration

Beta 80 has a **proven track record as a system integrator and consultant** in several European projects such as **eCall** and **TPS eCall** implementation, **PEMEA** app network deployment, Multimedia Call Handling, **AML**, and social media enhancement for PSAPs (including the interoperability with the crowdsource **Waze** app).

Our products come from 30 years of experience in the Public Safety market and our close relationship with partners and customers, combined with the newest technologies in data management, geolocation and mobility. We believe the greatest asset for a company is the ability to create a network of positive connections from which to learn and grow. Therefore, in over three decades, we never stopped investing in our products to respond to all our customer's requirements.



# **BICS**

Big Data Cloud Services Next Gen Comms Telecommunications Voice Comms

BICS makes international communications possible. We are at the heart of international connectivity, enabling the global mobility of people, applications and things

We are connecting the world by creating reliable and secure mobile experiences anytime, anywhere.

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BICS is a leading international communications enabler, one of the key global voice carriers and the leading provider of mobile data services worldwide.

Our solutions are essential for supporting the modern lifestyle of today's device-hungry consumer – from global mobile connectivity, seamless roaming experiences, fraud prevention and authentication, to global messaging and the Internet of Things.

Our headquarters is in Brussels and we have regional offices in Bern, Madrid, Dubai, New York, San Francisco and Singapore, a satellite office in Beijing and local representation in Accra, Miami, Montevideo, Nairobi and Toronto

We have achieved a series of World's Firsts successes with the launch of the first LTE Roaming relation or the first VoLTE International call between Europe and Asia, to name a few.

With a diverse and multicultural team of about 600 employees, we continuously strive to provide customers with the highest level of quality, reliability and interoperability, enabling them to maximize their end-user value.



# **BISS**

Big Data Information Analytics Public Warning Telecommunications

**BISS** is privately owned Croatian company, situated in Zagreb, where we bring programming and telco expertise to business perfection. We do it by delivering projects and solutions mainly for telecom companies, system integrator companies and logistics companies. We have more than ten years of experience in telco industry.



Solutions we developed deal with mobile subscriber alerting, GDPR and consent management.

We offer software development and implementation services based on open source technologies. We are experienced in the development of backend systems and web applications in Java technologies. Besides, we also develop frontend systems and mobile applications.

You can utilize our expertise through implementation of following solutions:

#### **SMS ALERT**

Geo-fenced sending of SMS notification and messages for mobile subscribers that are positioned in an arbitrarily selected polygon on a map. Exact number of mobile subscribers in selected polygon on a map is presented. In order to achieve that we use handset location utilizing existing mobile operator infrastructure. System is fully GDPR compliant, all personally identifiable information (PII) is aggregated and anonymized.

#### Identity guard

Identity guards enables us to process data from various sources (streams, files, databases, ...), those data sets are reduced with powerful, yet simple filtering system (rules, consent, blacklist). Data can be enriched from other sources (e.g. CRM), files can be transformed (CSV, XML, JSON, ...). Personal identifiable information (PII) is protected with powerful anonymization techniques. Data is aggregated and common identities are grouped in order to strengthen privacy. Data owner's consent is enforced, and compliance is managed by recording all actions while providing audit trail. Anonymization of PII data can be reversed securely. Streams and data processing flows can be configured via intuitive administration GUI. Progress monitoring is in real time.

#### Consent management

Manage personally identifiable information (PII) data your organization processes, manage legal basis for processing, manage processing purposes and owner's data processing systems, manage PII data exchange with external parties. Record of all processing activities is ensured by audit log. Manage business users, processing owners, their rights, permissions via an intuitive and user-friendly GUI. Easily monitor and create reports.

Enable data subject to exercise their rights in a transparent and user-friendly way:

- · Right of access
- Right of rectification
- Right to erasure
- · Right to restriction of processing
- · Right to object to processing
- Right to export

Provide overview of all processing purposes, including legal basis for processing. Consents can be viewed and managed.

Processing Owner can manage processing purpose and manage data subject's consent (by defining consent types, by defining consent request in a clear and precise way and by collecting and recording data subject's responses).

You can import/export data from/to other IT systems. Real time integration with other IT systems, such as CRM. Enable GDPR related business processes across the organization.

#### **VEENO**

Video notifications system delivers personalized notifications to clients via RCS, SMS, email or through mobile application. It uses standard technologies like HTML5 and JavaScript. Video notifications system can be used in telco, banking or insurance industries, wherever report or bill needs in-depth but simple clarifications, and can be spiced with top-up offers. Also, this is great channel to deliver surveys or you can start custom development project that will be delivered on time with us.

Check our offering in more detail at www.biss.hr



# **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 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". The Bosch eCall Service is now available in 18 languages and 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. 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.



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.



# Carbyne

Caller Location

Cloud Services

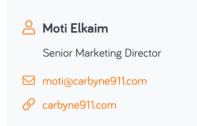
Emergency Call Management

Interoperability Solutions

Next Gen Comms

**Carbyne** is the global innovation leader in public safety technology. Our company unifies the flow of life-saving information to emergency call centers (ECCs) onto one simple platform.

By using Carbyne's innovative cloud-native tools like live video, instant chat, dynamic location, and more, ECCs can fully connect to an incident and share the information with emergency units, which increases its response efficiency and ultimately saves lives every day.



Carbyne's solution is solving one of the most challenging aspects in public safety today: the aggregation of data and audio input into a single platform. Rather than following the siloed nature of operations in an ECC in which every solution requires an added screen (therefore also adding a layer of work onto the shoulders of the call taker), Carbyne's solution simplifies the work flow into one UI.

Apex has the ability to perform full call handling functions, receiving AML, video, chat, speech to text, notes, and much more all in a single screen solution.

Carbyne's platform has a strategic importance in the local and state level as well. Aside from providing the ability to reduce response time and improve response efficiency, it also enables more optimized and strategic operations.

Our cloud native platform creates an environment in which information, statistics, and insight can drive better operations. Carbyne's analytics tools provide live, critical information like PSAP performance, call density by category, caller's health related symptoms, or natural disaster hit points which then enables every emergency operation from local to state levels to shift resources to where they are needed most. This means that the same man hours, number of ambulances, amount of police units, etc can be strategically placed to maximize operations at every level.

Additionally, Carbyne's rich CRM enables access to unlimited videos, photos, and notes which provides better situational awareness to the decision makers.

Ultimately, Carbyne's solution enables decision makers to enjoy unprecedented visibility, transparency, and accessibility to information in a unified way which creates an emergency network synergy that drives local data to the state level and therefore enables state officials to make informed decisions when managing a crisis or resources.

Carbyne's cloud native solution enables each state to deploy up to 1000 c-Live Universe licenses a day on top of any call handling or dispatch platform (system agnostic).



# Carmenta Public Safety

Artificial Intelligence

CAD

Control Room Integration

GIS

Multimedia Comms

Being in the right place with the right resources as fast as possible saves lives, reduces suffering, and prevents unnecessary property damage. But 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.



Carmenta 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.

For more information please visit www.carmenta.com

Our 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.

#### Powering 112 Systems Across Europe

In emergency response situations, every second counts. Being at the right place, with the right resources, as fast as possible saves lives, reduces suffering and minimises property damage – but this requires the optimum utilisation of public safety resources.

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 product portfolio includes:

#### Carmenta CoordComTM

A fully fledged C4IS system that integrates incident and resource management with communication systems, all in a single product.

#### Carmenta ResQMap

A geographical information system used in our mission critical solutions.

#### Carmenta ResOMobile

A mobile device intended for use in rescue vehicles providing full case information from CoordCom and navigation instructions to the first responders leading the rescue operation.

Carmenta is a Swedish company headquartered in Gothenburg and having branch offices in Stockholm, Berlin, Paris and Valencia. We have been active providing emergency response and geospatial solutions to our customers for over 30 years providing solutions which span from nationwide to local operations. To give potential clients confidence in our capabilities, we can warmly recommend a visit to one of our 15 established customers and we would be pleased to arrange this upon request.

Depending on the client's location and requirements, Carmenta engages directly with the client or via a trusted system integration partner established close to the client.



# CEIEC

Artificial Intelligence

CAD

Emergency Apps

GIS

Information Analytics

For over four decades, CEIEC has been giving close watch to world's security situation and social development since its foundation in 1980, and continuously improving our solutions and services to help our customers respond to the challenges from sovereignty threat, natural disaster, social crisis, and economic development. We hold a large group of experts from government organizations, military forces, security agencies and industry manufactures to understand customer's current



situation and future demand by their expertise and experience. We manage a full line of products to be integrated into tailor-made solutions meeting various application scenario. We are very proud that we are now close partner of many foreign government, military and security department, to help them fulfill their mission of securing citizen's confidence to health, safety, economic growth and public governance.

According to the actual needs of city safety and the development trend of modern technology, CEIEC combined with its more than 40 years of experience in the field of public safety to form a professional city safety center solution, which has been successfully implemented in many countries and cities around the world. Helped the local government improve the handling efficiency of incidents, and maintained local safety and happiness.

The CEIEC city safety center solution mainly includes the following aspects:

## Quick access and processing of police information

Quickly accept and deal with the police incidents, calm it as soon as possible, and minimize the impact caused.

## Video Supports the handling of incidents

Support for incidents handling through cameras, help the police keep track of the incidents situation, collect evidence afterwards, or prevent incidents from happening.

## Deeply dig the value of incidents data

Exploit the value of accumulated data on city safety affairs, explore the rules and predict risks in the city, guide managers in police deployment and decision-making.

## Service for Public and Engage Public Participation

Provide the convenient services for citizens, and enable citizens to participate in city safety affairs conveniently, improve their sense of security

CEIEC public safety solutions overview is as follows:

#### Varieties of alarm methods can be accessed

A variety of alarm methods can be accessed to the CEIEC City Safety Center, including fixed telephone, mobile phone, SMS, panic alarm button, social network, instant messaging software, Email, etc., and can accept various types of incidents, such as fire, Medical care, transportation, and various complex types of police incidents.

## Police processing quickly, efficiently and professionally

The CEIEC City Safety Center provides a professional police accidents processing platform. It uses artificial intelligence technology and standard operating procedures to help improve the efficiency and handling quality of incidents, and provides a variety of collaboration and communication tools to help improve the efficiency of cooperation.

# Multiple methods for command and dispatch methods, efficient visualization

CEIEC City Safety Center supports multiple communication methods, including: PSTN, 3G/4G/5G, TETRA/eLTE, panic button, cameras, video conferences, etc., which integrate voice and video communication, it can cover the communication requirements of various scenarios, so that the command center can see the live view of the scene and make decision more efficiently and accurately.

CEIEC City Safety Center provides a variety of command methods, including mobile terminal command, which can easily and quickly understand the development of the incidents anytime and anywhere; command with GIS can help the command center understand the macro situation at a glance; command with video can help understand of the development trend of the scene.

### Intelligent and comprehensive monitoring system

CEIEC provides a full range of video surveillance systems to support the city security. It provides a wealth of surveillance equipment including PTZ cameras, fixed cameras, vehicle chick point, face cameras, body camera, etc., which can meet the needs of various city security monitoring scenarios. Through comprehensive coverage of key areas such as intersections, roads, etc., the manager of city safety can fully understand the situation. And the City Safety Center use AI algorithms to face recognition, vehicle analysis, and Intelligent recognition of incidents, improving the efficiency of city security monitoring.

## Deeply mine the value of urban safety data

The city safety center will collect a large amount of incidents information, and it contains huge valuable information but takes time and effort to organize it. The hidden information can reflect the focus of city safety prevention and the development trend. The manager can adjust police deployment and take measures to deal with possible risks according to the intelligent analysis of incidents data. CEIEC provides professional city safety data analysis tools, which can quickly generate charts from massive data, discover laws and predict risks from the data, quickly generate reports, quickly retrieve targets. Providing data support for the city safety operations.

CEIEC productions overview is as follows:

## **CAD System**

The CAD system provides related functions of incidents processing such as Call-taking, dispatching and incidents commanding. It can support multiple alarm methods and make rapid handling. In addition, it also provides GIS, duty management, resource management and other related functions.

## Video management system

The video management system provides powerful video access capabilities and intelligent monitoring methods. It can access cameras of various brands, and provide video browsing, recording, video wall management and other functions. It can also support video intelligence analysis such as abnormal behavior, face recognition and vehicle analysis.

## Mobile police App

The mobile police App is a convenient system for phones or pads. It can help the police handles incidents anytime and anywhere. It is integrated with incidents taking, video watching, instant messaging, data analysis, GIS and other systems.

## Intelligent data system

The intelligent data system can be used to analyse huge incident information, deeply dig the internal value of the data. It can help generate charts and reports quickly from the massive data, can help retrieve targets quickly and intelligently, and can discover laws and predict risks, which is a powerful assistant for decision-making of city safety operations.



# Celltick Technologies

Disaster Management

Emergency Apps

Next Gen Comms

Public Warning

**Telecommunications** 

Founded in 2000, Celltick is the world's largest cell broadcast-based products provider and a global leader of mass mobile communication systems for both emergency and commercial purposes. Our products have been adopted by over 70 mobile operators across 5 continents and deliver alerts globally to hundreds of millions of users daily.



Celltick's dynamic and unique flagship MAGEN® (Mass Alert Geo Emergency Notifications) suite of products encompasses a wide range of mass communication solutions that are especially designed for government agencies, mobile operators and enterprises.

Celltick's MAGEN® enables entities to deliver messages within seconds to unlimited subscribers, based on time and location in real-time, tens of languages across networks, with thousands of RAN controllers and over multiple time zones. MAGEN® adapts to the specific needs of each entity via a variety of delivery channels, including cell broadcast, location-based SMS, customized native apps, unique SIM based applet, desktop alerts, IVR, email and others.

Celltick's customers include Vodafone-Idea, Airtel, BSNL, Beeline, Telia, Bite, Tele2, America Movil, Globe Telecom, Taiwan Mobile, Taiwan Star, APT, Mobifone, Dialog, Mobitel, VNM and others. Celltick also works closely with the IDF (Israel Defense Force), enabling new performance dimensions that are needed to meet the ever demanding daily national security threats Israel faces.

## **Our Products**

MAGEN® suite's main components are:

#### MAGEN® CBC - Cell Broadcast Center

With MAGEN® CBC's "Write once, publish to all" technology, real-time location-based alerts are broadcast and delivered, without the need for a data plan or internet connection during natural disasters or national emergencies. During crucial times, networks are usually heavily congested. Instead, MAGEN® CBC is not at all affected as it connects directly to the RAN (Radio Access Networks) part of the network.

Celltick also provides a unique patented interactive cell broadcast solution (ICB) that allows citizens to respond to the emergency alerts with a single click, enabling emergency units to receive infographic views of the situation, and thereby identifying the largest group of people who need help.

MAGEN® CBC supports all RAN vendors including: Ericsson, Nokia, Huawei, ZTE and other established vendors. It is congruent with all types of networks – 4G, 3G, 2G and very soon 5G and additionally, the system can be used on top of other existing CBC to support newer types of networks.

MAGEN® CBC also supports all kinds of redundancy levels including LHA (Local High Availability) and geo redundancy. It can be deployed over bare metal or on a cloud/VM. MAGEN® CBC can be implemented either in centralized or distributed topologies, and it complies with all industry standards including EU-alert, CMAS and CAP.

#### MAGEN® Location-Based SMS

MAGEN® LB-SMS is primarily designed for the emergency and public safety sectors, by operating as a standalone service or working alongside with cell broadcast with its effectiveness in ensuring that alerts reach the intended audience rapidly and efficiently with nearly 100% coverage.

MAGEN® LB-SMS provides an integrative solution to network operators' systems, by extracting location data effectively from the available network elements. Celltick's LB-SMS interfaces with various systems used by network operators and is able to extract location data without slowing or congesting the systems during emergencies, whilst following up in real-time where the alerts were transmitted and if received.

By applying location data extrapolated from the network, location-based messages can be sent as a point-to-point SMS communication in real-time to all users in a known area, without identifying the individual users, thereby guarding privacy concerns. Once the alert has been transmitted, MAGEN® LB-SMS provides immediate delivery acknowledgement and is equipped with all imperative dashboards and reports required for the control and management of the system, additionally providing different levels of performance as per the requirements of the entity.

#### **MAGEN®** Command Post

Whilst the MAGEN® system is modular, alerts via all MAGEN® delivery channels are managed by Celltick's unique single control and management system – the Command Post.

The MAGEN® Command Post is a central alerts creation, control and management tool for all MAGEN® delivery channels. It is a fully fledged CBE (Cell Broadcast Entity) that in addition to the CBC, also correlates with all other MAGEN® products, starting from location-based SMS all the way through the variety of MAGEN® apps, including desktop alerts, email and IVR.

Primarily used by government entities, public and educational institutions, the Command Post's state-of-the-art graphical user interface includes all features required for rapid and easy operation. The Command Post supports pre-defined alerts libraries, pre-defined areas list, various map technologies, layers, roles and permissions, allowing customization for protocols and permissions of the customer and their specific roles and responsibilities. Also, the required dashboards and reports are provided for close monitoring of the alert via the delivery channels.

Whilst alerts may be activated manually, the Command Post can also connect to external monitoring devices e.g. earthquake, tsunami or flood sensors. The Command Post allows for advance preparation and readiness for all fundamentals required in an emergency and so when the situation arises, alerts and protocols are easily and rapidly activated.

#### Additional MAGEN® products

- Native Apps for Android, iOS, and Windows
- SIM Alerts a unique SIM-based alerting app for mass notification
- Desktop a dedicated client with pop-up alerts
- Email pre-configured email alerts
- IVR pre-recorded voice alarm

# Celltick's Unique Advantages

- 20 years of proven experience
- A complete solution for all mass communication needs
- A single alert creation and management system
- World's largest CBC vendor in terms of deployments



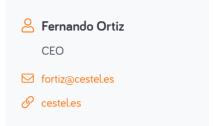
# Cestel

Emergency Apps Multimedia Comms

Recording Solutions

### CENTRO ESPAÑOL DE SERVICIOS TELEMATICOS S.A (CESTEL) is a

full service manufacturer of ICCS - Integrated Communication Control System (radio & telephony), Recording Systems, Mobility Applications and Interactive Voice Response (IVR) systems for 112 Centers. These systems are empowered by our own advanced technology in voice biometry, AWM and NLASR and transcription features.



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.



# Citizen Responders Foundation

Emergency Apps

Mapping

Specialised Consultancy

The Citizen Responders Foundation is a non-profit organization, created on the initiative of AEDMAP Lifesaving Solutions.

The main goals of the Citizen Responders Foundation are (i) citizen involvement in emergency situations, (ii) awareness and (iii) education through the following main axes:

- Provision of the Citizen Responder App to PSAP worldwide;
- Medical research support;
- Support education and training activities in the field of lifesaving.

# AED Registry management solution

The Citizen Responders Foundation provides a comprehensive AED mapping solution to health authorities, including:

- Cloud based database integrating AED specific needs (location, mapping, materiovigilance, recall management...)
- Artificial Intelligence proofing solutions
- Public Smart App to share AED locations with the public
- · Country specific content

Several smart apps have already been deployed. Staying Alive, the flagship app available in 10 languages on iOS and Android lists over 160,000 AEDs. White labelled apps include:

- Save A Life: Canadian version developed in partnership with St John Ambulance
- Responders: Swiss version developed in partnership with Lausanne 144 ambulance service
- Reanim: Belgian version developed in partnership with the Belgian Heart League

Dr Paul Dardel

Volunteer CEO





Smart apps share the same AED database, thus building a worldwide network of AED mapping apps.

Besides AED locations, Staying Alive family apps provide extra content including CPR training material, training centers locations, emergency number auto-select and Citizen Responders management.

# Citizen Responders

The Citizen Responders service is using state of the art technology to provide 24/7 volunteers locations services to PSAPs.

The system, run by PSAP operators, uses our smart apps to recruit, locate, alert and dispatch volunteers in case medical emergency nearby.

The service is fully customizable to fit customers specific requirements. Options include:

- Volunteer auto-trigger and if so number of dispatched volunteers
- Alert radius (default / manual)
- Alert reasons are fully customizable (cardiac arrest, unconsciousness, bleeding...)
- Volunteers selection auto-filter (age, qualification, gender...)
- Video call capability
- Responders smart dispatch based on volunteer's location / qualification. The system can send trained volunteers directly to the victim and untrained ones to get closest AEDs.
- Route display
- Data analysis tools

Moreover, the Citizen Responders service can be tightly integrated in PSAP dispatch software through open APIs.

In France the service is live in over 40 states (35 million citizen) since 2017, counts 80,000 volunteers and has been used over 3,500 times saving hundreds of lives.

Working in the field of AED mapping and Sudden Cardiac Arrest since 2011 the Citizen Responders Foundation is committed to provide best in class and fully customizable digital services to PSAP and Health authorities worldwide.



# CityGIS

Automatic Vehicle Location

CAD

Disaster Management

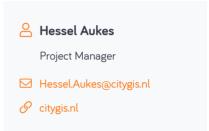


**Public Safety** 

#### 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



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.

# Corti

Andreas Cleve

CFO

# Corti

Artificial Intelligence Big Data Mapping Telemedicine Triage

**Corti** is designed to empower medical professionals, both in EMS and more general medicine, to combat loss of life and suffering by improving their speed and accuracy in triaging and diagnosis, in numbers previously unthinkable.

previously unthinkable.

Corti leverages its artificial intelligence, and specifically real-time natural language processing, to listen in on emergency calls and patient

enabling them to make faster and more qualified decisions and reduce errors.

language processing, to listen in on emergency calls and patient interviews to assist the calltaker or any healthcare professionals to identify the often subtle signs of critical illnesses, such as cardiac arrest. By identifying similar patterns between live call data and information from thousands of previous medical interviews, our AI looks for verbal and non-verbal patterns in the communication, such as a caller's tone, or information on whether the subject

Publications from Copenhagen Emergency Department has showed that Corti is able to identify cardiac arrest more quickly — 44 seconds to be precise — and more accurately than humans. In the most extensive study to date, on 108,607 danish emergency calls, **Corti reduced the amount of undetected cardiac arrests** by 43%, and it was significantly quicker too, recognizing the most relevant signs 25% faster than the human call-taker could alone.

is breathing or not. The healthcare professionals ends up with clear advice from Corti during the interview,

Now, Corti has begun expanding to more telemedicine services, trying to reach more healthcare professionals to augment by assisting with more tasks than triaging, such as mapping and analyzing the regions environment and providing the region's patients with appropriate applications to self-assess before contacting a public-safety answering point.

By using our machine learning model, we can use big data to reduce the prevalence of misdiagnosis in our society and improve processes, providing patients with better, faster medical outcomes. We can support new breakthroughs in medical research by allowing researchers to have access to rich and varied data sources.

Overall, we strive to contribute to creating a world in which people feel safer and healthier than ever before. Corti's vision is that every person on earth is able to have access to the best and most informed medical assessments and, that every medical professional will have AI-based expert agent augmenting them as they diagnose patients.

We at Corti are proudly partnered with EENA to pilot our AI across Europe. If you are a public-safety answering point, interested in piloting cutting edge decision-support technology, please reach out to us on our website, www.corti.ai.



# Creativity Software

Caller Location

Cyber Security

Emergency Call Management

Information Analytics

Public Warning

Emergency services require location information to support all aspects of their work: 112 caller location - using AML and also with mobile network data as a safety net; track and trace – for COVID19 and whatever follows; emergency alerts/reverse 112; lawful investigations.

**Creativity Software (CS)** is a European company that specializes in providing precise, accurate and reliable caller location technology – for nearly 20 years. Advisory board member of EENA since 2010.



With systems installed across 5 continents, covering more than half a billion subscribers, our software platforms provide high-accuracy mobile location to help Emergency Services, Law Enforcement and Mobile Network Operators alike.

## Caller Location

There are two methods - and we support both.

The Google Android and Apple iOS operating systems can send Advanced Mobile Location (AML) data during an emergency call. This means that GNSS and WiFi data from the phone can be used to support the emergency services. CS has – since 2016 - been sponsored by the EC to examine, test and support the deployment of AML across 7 member states. This project (HELP112 Phase 1 and Phase 2) highlights the technical expertise of CS.

AML is great but is not foolproof, and a network based solution is necessary – for non-smart phones and also where AML is unable to generate a location. IN some of the countries we have tested, this proportion is as high as 50%. Our network based solutions provide the safety net – e.g. in Colombia CS has been delivering against the strictest accuracy requirements in the world since 2015. This 50 metre requirement is more than sufficient to direct emergency vehicles to a critical incident. This illustrates how your needs for location data can be met, regardless of technology constraints within your country.

### Track & Trace

Observation of the change in population movements, analysis of trend data across populations relative to their mobility is a critical element in managing national responses to pandemics. This data is available from the mobile networks, and our technology already manages, anonymizes and processes it in the UK. The quality of the picture is illustrated by the fact that we process 20 billion records a day – all of which combine to enable actionable insights for health and emergency services.

# **Public Warning**

By June 2022 all the EU Member States must introduce effective & modern Public Warning systems.

CS has the technology and technical experience to assist you in this implementation. In the UK in 2013, a Government project was launched to complete a series of trials in partnership with three of the UK's Mobile Network Operators (MNOs) and emergency responders to assess different methods of achieving this. National and local communications campaigns were held to ensure people in the participating areas were aware of the nature and purpose of the trials. Our technology reflects the findings of these trials – using Location-Based SMS alerts - meaning that you benefit from the work done over the past 6 years.

Our system maintains awareness of the location of all subscribers, at all times, across all networks – so that those within an area at risk can be identified in real-time.



# Dataminr

Artificial Intelligence

Big Data

Disaster Management

**Emergency Apps** 

Public Safety

**Dataminr** is recognized as one of the world's leading AI businesses. Our clients are the first to know about high-impact events and emerging risks, so they can mitigate and manage crises and opportunities effectively. Dataminr's First Alert product for the public sector alerts first responders to breaking events, enabling the fastest real-time response.



Around the clock and around the world, hundreds of enterprises and public sector organizations rely on our pioneering AI platform to help solve real-world problems. Dataminr is one of New York City's top private technology companies, with nearly 650 employees across seven global offices.



# **DATUS**

Caller Location

eCall

Interoperability Solutions

Next Gen Comms

Voice Comms

**DATUS** was founded in 1970 and has been a manufacturer-independent specialist for ICT solutions ever since. With the extensive solution expertise in the field of voice and data convergence in networks and applications, DATUS provides innovative standard and customized solutions for medium and large enterprises and public authorities. The focus is on communication solutions and the integration of various services (voice, data and multimedia) as well as customer-specific



solutions for special requirements, such as communication solutions for PSAPs. E.g. 100 of the 240 German 112 PSAPs are equipped with DATUS eCall decoders and more. One of our strengths is our own research, development, engineering and consulting expertise and competence. Our solution-portfolio is completed by 24/7/365 service and support.

Areas of specialisation: customised solutions, services, development and products in the fields of ICT (Voice, Data, Security, Safety) for Business Customers, Public Authorities and Organizations with safety/security tasks (BOS) and Military Sectors. In addition, products and solutions to migrate legacy voice and data applications to IP-based infrastructures (transport and transformation), e.g. ISDN to All-IP-Networks.

Areas of application: Large-scale and cost-effective applications in the area of IP-Telephony, Voice-over-IP (VoIP), Unified Communication (UC), Computer-Telephony-Integration (CTI) and Fixed-Mobile-Convergence (FMC) with IP-Communication Systems and Voice-/Media-Gateways. Hardened applications for military ICT solutions in mobile environments.

Solutions for Public Safety Answering Points (PSAP - emergency call center 112), e.g.:

- emergency call polling equipment redundant high-availability IP-PBX
- emergency call decoder 112 eCall MSD decoding, AML co-ordinates, TPSeCall TSD decoding (in cooperation with BOSCH TPS Call Center)
- emergency call gateway to connect legacy PSAP infrastructure (e.g. ISDN, analog) to IP-based emergency networks (All-IP, IMS, NG112)
- emergency call conferences, control and geo-information systems
- IVR routing to prevent overload situations (e.g. storm, heavy rain, flooding, etc.)

PSAP interconnections as well as call and data distribution.

#### Products (HW appliances and virtualised SW solutions), e.g.:

- IP-PBX and IP-Communication Systems (DATUS indali)
- Emergency Call Decoder and Gateways (DATUS NDC)
- VoIP/Media-Gateways (DATUS NTG, iAGS, MP/OP)
- Enterprise Session Border Controller (eSBC)
- Ruggedized VoIP-router and communication systems for special environments and requirements

**Services offered:** Beneath service and support for our own products and solutions we offer a wide range of Professional Services in the fields of Consulting, Engineering, Development (HW and SW), Project and Rollout Management.

#### Technical expertise:

- Concepts and system-architectures for innovative and cost-effective communication solutions
- Comprehensive know-how in modern, legacy and customer-specific communication protocols like e.g.
   VoIP, SIP, H.323, TDM/ISDN (DSS1, Q.SIG), MGCP, IP, ATM, Frame-Relay, X.25 and its implementation
- Software development: PHP, C++, C, Java, LINUX, modern WEB technologies using WebSockets and WebRTC, Open Source Software advancements and customizations, database technologies, device drivers. . . ..
- Hardware development: embedded systems, standardized and customer-specific telecom interfaces and bus-systems, environment and EMC hardening,...

**Aims, cooperation fields and forms:** To improve our aims as a specialist for innovative, customized and future-oriented communication solutions we are looking for partnerships with companies in need for customized and/or tailored telecommunication solutions. Further on we are interested in sales partners for the European telecommunication market and in the field of safety and security solutions.

**Research and Development:** Wide spread knowhow in software and hardware development (see above: technical expertise). Research e.g. in the fields of secure and trusted IP-communication solutions, next generation emergency calls, ...

**Certification:** Quality Management Certification EN ISO 9001, Information Security Management Systems (ISMS) ISO/IEC 27001 (in preparation), TeleTrusT Quality Seal "IT Security made in Germany"



# Deveryware

Accessibility

Caller Location

Emergency Apps

Multimedia Comms

Next Gen Comms

Founded in 2003, **Deveryware** is a French company that specialises in the design and development of innovative real-time geolocation solutions that rely on an industrial Platform, The GeoHub.

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.



Over the last 8 years, Deveryware has gained considerable know-how and expertise in public safety, contributing to multiple European projects involving emergency services. Since 2015, with the NEXES project, Deveryware has created a new platform, GHALE, that powers the services of the PEMEA standard (ETSLTS 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 in commercial deployments with the Emergency Services sector in several European countries. GHALE, as part of the EENA-PEMEA Programme, is helping EU PSAPs and Application Providers to deploy PEMEA using GHALE services (8 countries involved).

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. 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.

Don't hesitate to contact us for a Proof of Concept and find out more about the next integration of your Mobile Emergency App and/or your Emergency Centre with PEMEA.

Deveryware, committed to better security!

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# DJI

Disaster Management

Drones

Public Safety

In 2016, DJI, the world's leading maker of unmanned aerial vehicles, in partnership with the European Emergency Number Association (EENA) have released a white paper sharing insights and best practices from a year-long project with the European emergency-response community promoting the safe integration of drones in emergency situations.



The results of Phase II were published in 2018 in the Drone Efficacy Study!

DJI is a global leader in developing and manufacturing innovative aerial robotics and camera technology for humanitarian, commercial and recreational use. DJI's products and solutions have been chosen by customers for applications in inspection, firefighting, SAR, construction, film, farming, and many other industries. Professionals around the world trust DJI to bring new perspectives to their work and help them accomplish feats safer, faster and with greater efficiency than ever before.

With the release of the Matrice 200 Series aerial platform, DJI has provided a more capable drone for public safety missions. Equipped with both an aerial zoom and thermal camera, first responders can now quickly locate missing people in remote areas and plan the safest approach path. Learn more about the Matrice 200 Series drone.

- Report May 2019: DJI Elevating Safety White Paper & Recommendations
- EENA/DJI Partnership Overview 2018: Working Together On Public Safety
- Report November 2018:

Best Practices in Effectively Deploying Drones for State and Local Governments

- Report November 2018: Study on the Advantages of Drones for Search & Rescue
- Report April 2018: DJI Lives Saved Report
- Report April 2018: More Lives Saved: A Year Of Drone Rescues Around The World
- Report March 2017: Lives Saved by Drone
- Saved By Drone 2018: https://youtu.be/yoB2wd2NLrE



# ELi-Technology



"Where is your emergency?"

Worldwide and annually, tens of thousands of lives are lost when Responders are unable to locate a mobile caller accurately or promptly. Current emergency location methodologies cannot provide a verifiable, dispatchable, civic location for a mobile caller, and this impedes the response efficiency and effectiveness. ELi Technology located in Halifax, Canada, is dedicated to resolving inaccurate location information.



The patented "Emergency Mobile Location" (EML) methodology, is the world's first and only location methodology. Using existing Wi-Fi infrastructure, it provides 2 pieces of localization information; GPS coordinates and a dispatchable address, also including indoor location data. It is technologically neutral, was engineered with "privacy be design" in mind and as such is GDPR friendly.

#### EML provides:

- Accurate, real-time, indoor, rural, and urban location information
- A verified, dispatchable civic address, including floor and apartment number
- GPS, latitude, and longitude
- Depending upon handset capability, a vertical reference is available.

To assist in EML's ongoing development and testing, we are building a partnership with Kista Science City/ Urban ICT Arena in Stockholm Sweden. Called the Kista112 Development Centre, it is the world's first open end-to-end IP development centre and testbed. With Kista112, we have a platform which allows us to conduct rigorous, transparent, and replicable testing of our methodology, including its benefits and outcomes. Kista 112 welcomes innovators and emergency services industry participants to join our initiative. The purpose is to collaborate, build and test new services to improve ESN systems globally. If you would like to know more about EML or our testbed in Kista please contact us.



# **EMERES**

CAD

Control Room Integration

Emergency Call Management

Multimedia Comms

Public Safety

**EMERES** is a Canadian based company that offers a world class, emergency call handling and dispatch solution designed to meet the needs of 9-1-1 multi-agency services as well as single Law Enforcement, Fire and EMS agencies worldwide. The product offering is in constant evolution to incorporate innovative customer driven demands, industry best practices and Public Safety standards.



Albert Israel

President & CEO



@ emeres.com

EMERES solution key attributes and differentiators:

- Unique Fault Tolerant Architecture
- Field Proven Multi-Agency / Multi-Jurisdiction / Multi-Site Scalability
- Extensive Configurability and Adaptability
- NG911 Softphone, CAD and GIS developed and maintained by EMERES
- Feature Rich Industry Standards Compliant
- Extensive Interface Capability / Adaptability
- System Health Monitoring and Diagnostics

To find out more about our innovative solutions, please call us at +1 514.545.3067, or email us at sales@emeres.com.



# **Enghouse Networks**

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.



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 okalerting.

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

Learn More: www.enghousenetworks.com/AlertBroadcastCentre

# 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



# FR24

Control Room Integration Disaster Management Emergency Call Routing

**Emergency Call Management** 

### Er24 is the premier private emergency medical care provider in South Africa.

We operate from 59 bases throughout South Africa and provide quality emergency response and pre-hospital care services, supporting both public and private hospitals.



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

Esri, the global leader in GIS (Geographic Information Systems), is leading the way in emergency communications with unprecedented investments in research and development on next generation 112 capabilities PSAPs. Our platform enables intelligent collaboration, operational awareness and cutting-edge capabilities. GIS webmaps consume and manage

➢ Mike King

 Director, Emergency Communications & Fraud Solutions

 ✓ mking@esri.com
 ✓ esri.com/en-us/industries/public-safety

sensor data, IP intelligence and the IoT (Internet of Things). PSAPs use Esri to improve CAD and RMS solutions, manage address data and transform digital capatilities. We support your efforts with geospatial tools to create service districts, maintain data, analyze information and visualize your mission-critical work in real time. Collect and observe information in the field or collaborate from the command center. We understand 3D and have been solving z-axis challenges for years, including developing tools that assist in creating 3D building exteriors, 3D indoor floorplans with egress/access routing capabilities and 3D landscapes. Esri is a proven organization with offices throughout the world that has been doing GIS for more than 50 years. A proven technology that brings clarity to location data. The ArcGIS platform offers a stable environment for designing and managing solutions with configurable, "out of the box" capabilities and a growing library of free templates and tools.

Esri • THE SCIENCE OF WHERE™



# eurofunk

CAD Control Room Integration

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.



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-of-the-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

Control Room Integration

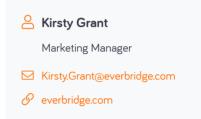
Disaster Management

Emergency Apps Next Gen Comms

Public Warning

Everbridge was founded in 2002 in the aftermath of the tragic events of 9/11 with the mission of helping to keep people safe during critical situations and is a trusted provider of Critical Event Management solutions for both enterprise and government organisations.

Everbridge has significantly broadened its capabilities for public warning in recent years. In April 2018, Everbridge acquired the leading locationbased SMS technology from Unified Messaging Systems (UMS) based



in Oslo, Norway and in March 2020, Everbridge added best in class cell broadcast technology by acquiring One2many, the leading global vendor of nationwide public warning solutions for governments and the telecommunications industry.

Everbridge now delivers an unrivalled integrated platform for multi-channel, multi-agency public alerting which ensures that the message gets through to the right people at the right time, to mitigate the threat to the life or safety of citizens during a major incident.

## About Everbridge Public Warning

The Everbridge public warning platform is the most comprehensive, feature rich, multi-channel multi-agency solution available.

Designed to be both flexible and scalable to meet the needs of sending authorities both large and small from city, municipal or state level up to large scale countrywide alerting systems. The solution combines location intelligence to help authorities make informed decisions before sending an alert, with a choice of communications channels including cell broadcast, location-based SMS, standard SMS, voice, email, native apps, CAP (sirens, Radio, TV, digital signage etc) and social media.

Customers can be 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.

## COVID-19 & Beyond

The Everbridge public warning platform provides immediate help for countries to protect against coronavirus; share updates on viral hotspots and pandemic best practices; coordinate first responders and healthcare resources; establish lockdown zones, two-way communications with at-risk populations; and manage disruptions to transportation, education and other critical services. In addition, the platform also provides critical event management capabilities across a broad range of threats including manmade and natural disasters, terrorism, cyber, and other security events.

### Customers

Everbridge already leverages its Critical Event Management solutions to deliver the world's most widely used population alerting solution, reaching over 550 million people, with over 3,700 active deployments at the municipal, city, state, and province level in thirteen countries including the U.S., Canada, and India. As the global leader in countrywide deployments, Everbridge supports five European countries: Greece, Iceland, the Netherlands, Norway and Sweden. In addition to Europe, Everbridge supports countries in the Middle East, Asia Pacific and Latin America including New Zealand and India with recent wins announced in Australia, Peru and Singapore.

Everbridge also offers its services to industries including public security, telecommunication, hospitals, oil and gas, aviation, educational institutions, public service and national security.

# Unique Advantages of Everbridge

- Over 20 years' experience in the field of emergency and mass notification.
- More than 4,800 customers, reaching over 500 million globally.
- Unrivalled number of successful national alerting systems worldwide.
- · Sophisticated geo targeting capabilities
- Communicate across all phases of the incident's lifecycle:
   Plan, Alert, Respond, Recover.
- Communicate with all stakeholders:
   People who are impacted, people who can help and people that need to know.
- Define incident zones and automatically alert people entering or leaving.
- Meets and exceeds the requirements of EECC Article 110.

- Best in class technology for Cell Broadcast including:
  - Speed of message delivery when time is of the essence
  - · Congestion free notification by-passing SMS network
  - Unique recognizable alert tone
  - Messages in native language
- Best in class technology for Location-Based SMS including:
  - · Location intelligence to target alerts to specific groups
  - Multi-lingual messaging based on SIM card
  - Two-way engagement and communication
  - Target people with special requirements or needs.
  - Traveller alerts to citizens that are overseas
  - Target alerts based on static, dynamic and expected location
  - · Target alerts based on historic 'footprint'
- The only vendor to have successfully deployed a hybrid solution combining CB & LB-SMS for nationwide population alerting.
- On premise, hosted or cloud-based model as well as customised platform deployments.
- Flexible solutions that can be optimised to the needs of the sending authority, helping to meet functionality expectations and resource constraints.

## About Everbridge

Everbridge Inc. is a global software company that provides enterprise software applications to automate and accelerate organizations' operational response to critical events to keep people safe and businesses running. The company's platform sent over 3.5 billion messages in 2019 and offers the ability to reach over 550 million people in more than 200 countries and territories. The company's critical communications and enterprise safety applications include Mass Notification, Incident Management, Safety Connection™, IT Alerting, Visual Command Center®, **Public Warning**, Crisis Management, Community Engagement™ and Secure Messaging. Everbridge serves 8 of the 10 largest U.S. cities, 9 of the 10 largest U.S.-based investment banks, 47 of the 50 busiest North American airports, 9 of the 10 largest global consulting firms, 8 of the 10 largest global auto makers, all 4 of the largest global accounting firms, 9 of the 10 largest U.S.-based health care providers, and 7 of the 10 largest technology companies in the world. Everbridge is based in Boston and Los Angeles with additional offices in Lansing, San Francisco, Abu Dhabi, Beijing, Bangalore, Kolkata, London, Munich, New York, Oslo, Singapore, Stockholm and Tilburg. For more information, visit www.everbridge.com, read the company blog, and follow on LinkedIn, Twitter, and Facebook.

## Everdrone AB

AED

Control Room Integration

Drones

Third Party Services

Everdrone AB is a global leader in autonomous drone technology. To date, we have performed more than 13,000 autonomous flights in laboratory and outdoor settings, as well as more than 1.8 million simulated flights. Our test and development facilities are located at Säve Airport near Gothenburg, Sweden.



At Everdrone we see drones as a tool to save human lives. That's why we are working exclusively with civil applications related to public safety and emergency response. We have a special focus on emergency medical delivery applications that ensures unprecedented response times when it comes to deliver medication or light-weight equipment to an incident site.

In a life or death situation, every second counts. That's why we've developed technology that enables drones to operate with a high degree of autonomy, allowing first responders and other emergency personnel to maintain focus on the task at hand. Our drones can be deployed anywhere in the world and are remotely monitored and controlled from our own Mission Control Centre.

Our services are available through a subscription model with no additional CapEx costs. Dispatchers working with Everdrone's solutions are coordinating local drone-assisted emergency response missions very much in the same way as they are already doing for the ambulance and helicopters services.

Safety is at the core of everything we do, and we are proud to be one of few companies in the world to be granted permission for beyond visual line of sight (BVLOS) operations in urban environments by a National Aviation Authority (NAA).

#### System integration

Everdrone's team of senior software developers are experts in system integration, ready to make drones a natural part of your organisation. Our aim is to minimise the impact on your established way of working and to ensure that any technical integration is as light-weight as possible – usually only requiring a handful of API calls between our drone backend and your dispatch system.

#### Training and onboarding

Getting started is easy. We'll work alongside your team throughout the integration process, offering guidance and training support. By integrating Everdrone's technology in your organisation's established way of working, dispatchers are typically ready to start using drones as a tool to save lives after just a short introductory training.

#### Regulations

At Everdrone, we specialise in managing the regulatory process surrounding advanced drone operations, especially when it comes to operating in populated areas. We obtained our first permit for operations beyond visual line of sight in 2018 and are routinely conducting emergency response missions in urban environments. This expertise allows us to handle all regulatory matters related to flight operation so you can focus on the value that drones can bring to your daily work.

#### Cybersecurity

All communication between our drones and the Mission Control Centre is sent over the mobile network utilising Advanced Encryption Standard 256 – equivalent to military grade level. In the unlikely case of physical tampering with any of our drones, all onboard data is kept safe on encrypted discs. Furthermore, remote wiping is considered a core functionality of our software suite in the case of intrusion or theft

#### The flight system

By combining world-class proprietary software and vision technology with proven off-the-shelf hardware, Everdrone offers complete drone solutions characterised by autonomy and safety.

If you want to dig deeper in the technical aspects, we recommend scheduling a meeting with us. We're always happy to grab a physical or virtual coffee and discuss our robust airframe, intelligent route planning, state-of-the-art sense and avoid system, certified Parachute Recovery System, onboard ADS-B technology, precision landing capability, or visual navigation functionality.



## **Ford**



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 information regarding Ford, its products and Ford Motor Credit Company and Fo

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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\* 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 Furo 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\*\* 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

Control Room Integration

Emergency Call Management

Multimedia Comms

Vext Gen Comms

**Public Safety** 

Experience and Innovation: Integrated Dispatching 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 emergency services and critical



infrastructure organisations with highly reliable, easy-to-use control centre solutions. As communication technology evolves toward more open and multimedia-oriented standards and platforms like NG112 and MCx, the company 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 YouTube.

With an installed base of users in Europe, the Middle East, Asia and the United States, the company is serving some of the largest and most demanding public safety institutions in the world. During the 2012 London Olympics, the Metropolitan Police Service relied on the company to support the largest command and control centre in Europe, consisting of more than 600 working positions and 60,000 CCTV cameras in use for video surveillance. Three years later, the company's voice communication solution integrating analogue and digital radio was used to support the G7 Summit at Schloss Elmau - the largest operation in the history of the Bavarian Police with up to 18.000 emergency service personnel protecting heads of governments while controlling demonstrations.

#### Highlights of the Frequentis portfolio include:

- The 3020 LifeX™ multimedia integration platform, the company's latest ICCS, utilises a serviceoriented architecture (SOA), combined with multi-tenancy capabilities, in order to support 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 despatch (Simultaneous connection to

TETRA and MCx based radio systems) and seamless integration with common CAD/GIS and recording solution providers using standard based interfaces. 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.

- ICCS 3020 (Integrated Communication and Control System) stands for secure and reliable voice communication in control centres. The ICCS 3020 efficiently connects telephony and radio functions with all associated data services, such as location data. The ergonomic and efficient operation makes it easy for users to concentrate on their tasks.
- 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.



## Gedicom

Disaster Management

Interoperability Solutions

Public Safety

Public Warning

**Felecommunications** 

Since 2003, **Gedicom** is a provider of crisis management and emergency alert system in France and abroad. Our innovating solutions enable our 500 clients' risk, security and safety managers to communicate effectively and thus to ensure their organizational resilience. Moreover, our location-based-solution are focus on Public Warning System.



Gedicom was the first French company in Information Technology services and data processing to carry out a close coupling between mass notification system, databases management system and applying Geographic Information Systems (GIS). The platform relies on a multichannel system that can broadcast messages in all following medias: vocal messages, texts (localized or not), social networks, notifications on apps, e-mails, sirens, etc.

Since 2015, the solution has enabled more than 8,5 million calls and dealt with more than 13 million people. This innovative technology serves as a tool for mass communication to public warning and tackles strategic challenges such as the responsibility in case of major risks. It can also help mobilize the crisis unit and the field teams, as well as give the opportunity to monitor the situation in real-time, using a state-of-the-art platform.

All the solutions have been developed and monitored in-house by our team of engineers. Applications are hosted and managed in Gedicom's secure infrastructure and meet the highest and strictest standards of security and data confidentiality.

Since 2016, Gedicom is in charge of the Public Warning System in Belgium. This project called Be-Alert makes it possible for the Belgian authorities to deliver instant messages to their citizens in case of an emergency situation. This information is transmitted through many complementary channels. In December 2018, Be-Alert was awarded as remarkable innovation during the 11th event IRISES.

Today, GEDICOM is recognized as one of the leaders in crisis management and alerting systems and strives to achieve a worldwide development by providing the most up-to-date and innovative solutions, especially for Public Warning System.



## Genasys

Disaster Management

Emergency Apps

GIS

Public Safety

**Public Warning** 

**Genasys, The Critical Communication 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, is based in all our expertise gained in deployment of critical solutions all over the world, having already been successfully proven, having sent more than 100 million of emergency messages



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

Genasys NEWS is a mission-critical, efficient, modular, and scalable solution, which allows to use multiple channels to maximize the covered population, getting the attention of the people, sending information in different languages to maximize the understanding of the messages.

Our multi-channel approach is key to reach all these objectives:

- Location based SMS and Cell Broadcasting Messages: no need of any subscription procedures, all
  mobile phones will be receiving SMS. The Cell Broadcasting will be the quickest way to reach those
  compatible devices
- Mobile Application: to receive advanced warning content and to improve the accessibility
- Integration with our Genasys Long Range Acoustic Devices: a great complement to the mobile based channels, to ensure that the population is warned even when the mobile devices are switched off
- Integration of other communication channels compliant with the Common Alerting Protocol, CAP
- Social Media, Massive Mail, Voice Calls, Whastapp

#### End to End Solution

Genasys NEWS covers the whole value chain of a Public Warning System, fulfilling all news of 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, and to have different kind of users for the same level

Moreover, its internal structure allows to deploy any requirements regarding the escalation of emergencies

#### Easily Integrated in Current SW Deployments of Emergency Agencies

Genasys NEWS offer multiple ways to be integrated to the existing emergency software stack, in order to get the more efficient deployment, minimizing the time and effort need to define and execute emergency warning campaigns.

For more information please visit us our website <a href="https://eu.genasys.com">https://eu.genasys.com</a> and follow us in @GenasysEU and <a href="https://www.linkedin.com/company/genasys/">https://eu.genasys.com</a> and follow us in @GenasysEU and <a href="https://www.linkedin.com/company/genasys/">https://eu.genasys.com</a> and follow us in @GenasysEU and <a href="https://eu.genasys.com">https://eu.genasys.com</a> and follow us in @Genasys.

#### **Advanced Situational Awareness**

Genasys NEWS makes the most of the different feedback obtained from the communication channels to, together to its broad experience in GIS and data analysis algorithms, offer key information to first responders, helping them in controlling any kind of situations.

### Fulfilling the new EECC Directive, Article 110

Genasys NEWS covers and exceeds all requirement in the Article 110 about Reverse 112, allowing a quick and efficient deployment to fulfill the EU requirements



### GeoComm

Cloud Services

Emergency Call Routing

GIS

Next Gen Comms

Project Management

Reliable, dedicated, and innovative are just a few words our customers use to describe **Geo-Comm, Inc. (GeoComm)**. In 2020 GeoComm is excited to reach an important company milestone by celebrating their twenty-five year anniversary of empowering their customers to create public safety grade GIS data to be used in their 9-1-1 and NG9-1-1 systems.



Understanding GIS for a 9-1-1 and NG9-1-1 environment can sometimes be difficult or seem overwhelming. Our goal is to help you understand the role GIS plays in 9-1-1 and NG9-1-1 and to provide public safety location intelligence solutions that meet both industry standards and their unique jurisdiction-specific needs.

When founded in 1995, GeoComm provided turnkey emergency services to local county governments and throughout the years has grown to not only serve local county governments but also, regional and statewide government agencies as well as some military agencies spanning forty-nine different states, protecting more than 100 million people. Through these customer partnerships GeoComm has been able to execute their company mission of helping protect lives and property by providing essential, innovative, location-based solutions to public safety professional during emergency situations.

As the customer base has grown over the years, so has the number of GeoComm employees. Starting with just a few employees in 1995, GeoComm has grown to have a national headquarters in St. Cloud, Minnesota, a West Coast Office in Albany, Oregon, as well additional sales and project team members scattered across the United States.

As an Esri Platinum Partner, our clients receive software based on leading edge GIS technology. Our mission-critical proven dispatch mapping software is powered by Esri technology and supported by GIS professionals. This software empowers you with the tools necessary to attain peak PSAP performance in a 9-1-1 emergency. Our software products can quickly access and view map data while integrating with any CPE or CAD.

GeoComm's GIS Services Bureau has mapped over 3 million addresses and developed more than 225,000 road miles for public safety agencies nationwide. If an agency has a public safety GIS need such as data development, attribute enhancements, or on-going data maintenance, GeoComm's GIS Services Bureau – the largest professional public safety GIS staff in the nation – is equipped to provide those GIS needs.

We are prepared to help you in planning and preparing your GIS data for a NG9-1-1 environment. We can help you navigate through all the NG9-1-1 GIS requirements and recommend approaching a NG9-1-1 transition in three steps: Asses, Improve, and Maintain. Our NG9-1-1 GIS software provisions quality NG9-1-1 GIS data into the ECRF and LVF.

Visit www.geo-comm.com to learn more about GeoComm and how public safety grade GIS data empowers public safety personnel during an emergency situation.



## Geos

Public Safety

The GEOS International Emergency Response Coordination Center (IERCC) was officially founded by GEOS in 2007. Based just outside of Houston in Montgomery, Texas, the IERCC is at the heart of the 24/7/365 GEOS services, coordinating over 10,000 incident responses in over 165 countries. The IERCC is the world's first and only Satellite Emergency Notification Device (SEND) monitoring company and has been since 2007. GEOS holds exclusive



monitoring agreements with dozens of satellite equipment providers and satellite network operators, such as Iridium, Globalstar, Inmarsat, and Thuraya. Today, the GEOS IERCC is also the 911/112 endpoint for all Globalstar and Inmarsat Satellite phones and is an optional service for users of Iridium phones. In 2014, GEOS Safety Solutions along with the GEOS IERCC introduced a number of cellular based emergency alerting applications for campus-wide safety, remote worker, and employee travel safety and security. AT&T, Sprint, Bell Canada, and T-Mobile corporate solutions sales departments sell many of these solutions.

#### How it Works

The IERCC operates 24/7/365 and has the ability to interact in over 200 languages and dialects. Each IERCC Search and Rescue Mission Coordinator (SMC) must complete a rigorous training program that includes hours of hands-on call experience and requires full FEMA certification. The IERCC SMCs work together closely on each call to ensure that every emergency situation is handled as quickly and effectively as possible.

Regardless of the type of incident occurring, immediate notification and establishing communications with those involved is critical. Receiving accurate location information through this notification is crucial in mitigating the incident at hand. When an SOS alert is received, the IERCC team immediately begins working to assist the individual in distress and does not stop until the mission is complete.

#### GEOS Membership Benefits

In addition to monitoring services, GEOS offers a variety of memberships and bundled packages to benefit all customer's needs, such as: Search & Rescue (SAR), MEDEVAC, GEOS360°, Group SAR, and SAR High-Risk.

Search & Rescue (SAR) – GEOS SAR benefits help cover the cost of resources used for an emergency response incident initiated by a GEOS Supported Device. If a customer requests emergency assistance from the IERCC by pressing the emergency button on their device, they could use their GEOS SAR benefit to help cover the cost of the resources that emergency services used for the rescue.

MEDEVAC – This benefit provides access to repatriation services and coordination from nearly any country worldwide. Any membership holder that is admitted into a hospital can utilize this benefit to be transported to a hospital closer to home or hospital of their choosing. All of which is coordinated by the GEOS International Emergency Response Coordination Center (IERCC).

GEOS $360^{\circ}$  – This membership is designed for people that are traveling or working internationally. GEOS $360^{\circ}$  is a full crisis management resource that offers the ultimate protection in potentially high-risk areas.



## Google

Caller Location

Public Safety

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 70% of calls to emergency services come from mobile phones, but locating these mobile callers can be a major issue. In most countries, emergency location, if it exists, relies on cell tower location (which can have a radius



of up to several kilometers) or assisted GPS (which can fail indoors, and suffers from urban canyon, multipath, and weather reception problems).

To help address this issue, **Google** has created **Android Emergency Location Services**. ELS is a supplemental service that saves lives by sending enhanced location directly from Android handsets to emergency services when an emergency call is placed.

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 4.0 /Ice Cream Sandwich and up). It uses the same location technologies available to apps on your phone, including cell, GPS and WiFi signals, as well as other smartphone sensors, to quickly estimate an accurate emergency location, both indoors and outdoors.

#### 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, and upon activation, a user's precise location is never seen or handled by Google.
- Location is computed on the handset and sent to Emergency Services.
- Location data is sent via Data SMS (per AML specifications\*) or HTTPS, which are both open, OSagnostic protocols.
- ELS location is often more accurate and reliable than cell tower IDs.

Google will activate ELS once a mobile network operator or emergency infrastructure provider has built the necessary endpoint to receive emergency location. ELS is a free service; 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-emergency-location@google.com.

\* Note: AML is a protocol that was developed by EENA, British Telecom and Google that specifies how emergency location data is sent and received using the Data SMS format. ELS is Google's implementation for AML for Android phones.



## 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.



**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



Emergency Apps

Public Warning

**Heartrunner** Sweden was established in its current form in 2016. The company was founded by researchers, resuscitation experts and techies with a strong belief in the power of volunteers.

When a cardiac arrest occur, time is crucial. For every minute without cardiopulmonary resuscitation – CPR, the chance of survival decreases by 10%. Every year an estimated 350 000 are killed by cardiac arrest in Europe, and many of them could be avoided with early CPR and use of AED.



6 heartrunner.com

Ambulance might be far away but is closer than you think.

We are proud to provide the Heartrunner system, a reliable supply-and-demand system that recruit volunteer lifesavers nearby a cardiac arrest. Our system is tried and tested in operation since 2014 with over 25 000 alerts on suspected cardiac arrest issued.

We have proven that volunteers can be a valuable complement to ambulance and other resources in the first critical minutes of a cardiac arrest. Citizen responders download our app and can be alerted if they are nearby the victim to perform CPR and use an AED to increase the chance of survival.

In analysis we see that volunteer citizen responders arrive before ambulance in up to 46% of the cases.

By 1st of May 2020 Denmark became the first European country to be entirely covered by a single system for alerting citizen responders in the TrygFonden Hjerteløber project which use the Heartrunner platform.

The Heartrunner system is currently active in Sweden and Denmark with over 160 000 users ready to save lives and we are now ready to move engage more countries in our mission to increase survival in cardiac arrest.

The Heartrunner system can be incorporated with any CAD software and alerts are sent through an API to our MissionServer. This is a hassle-free solution and have not seen any bottlenecks in number of alerts handled or number of volunteers in the system. Our MissionServer is redundant and built on Microsoft Azure servers and our apps are currently available for iOS and Android platforms.

It is easy to configure the Heartrunner system if your region wants to let anyone who have CPR skills to be able to download the app from Appstore/Google play and join, as in Sweden and Denmark. Or if you only want to distribute the app to a select number of specified individuals within your organization depending on needs and regulations.

We can easily incorporate data from a national or regional AED network in the alerts to citizen responders to further increase the effect on survival by showing nearby available AEDs. We can also assist your region in establishing a national or regional AED registry if this is not in place already.

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 and the University of Copenhagen. True to our heritage we can help you with research and evaluation of the effect of citizen responders and volunteer lifesavers in your region.

We can also provide a real-time feedback to the region regarding number of volunteers and their actions in an alert and you can quickly see the benefit in terms of increasing rate of bystander CPR and AED use.

The benefit of citizen responders is clear and international research has proven an increase in survival. This is reflected in the 2020 ILCOR CoSTR that strongly recommend installing a system like Heartrunner. https://costr.ilcor.org/document/first-responder-engaged-by-technology-systematic-review

In a randomized controlled trial from Stockholm, Sweden the bystander CPR rate was increased by 32 % with volunteer heartrunners first on scene. https://www.nejm.org/doi/full/10.1056/NEJMoa1406038

In Copenhagen, a threefold increase of bystander defibrillation over 12 months was shown in OHCA cases where volunteer heartrunners arrived before the ambulance. Read the story here.

Our app can be available as a "white label" solution, to be branded in compliance with regional or national concepts. So, a local government or NGO can put their logos and themes on to our platform and be the information carrier like TrygFonden in Denmark that has launched our platform under their own name.

To make sure that your region makes the most use of the power of volunteers let us help CPR trained citizen responders and public available AEDs come to use and save lives.



## Helmut Wittmann Consulting

Disaster Management

eCall

Next Gen Comms

Public Safety

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.



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 division

CAD

Cloud Services

Control Room Integration

Disaster Management

Information Analytics

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. Public safety agencies need the right information at the right time to plan and deliver vital services. However, legacy technologies, shrinking budgets and staffing



Director EMEA Public Safety & Security



hexagonsafetyinfrastructure.com

pressures, a lack of technical resources, and resistance to change create challenges for organizations.

The global leader in public safety and security solutions, Hexagon's Safety & Infrastructure 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 mission-critical IT investments and the staff that use them.

**Global Leader** – Hexagon has an extensive global reach, providing advantages to customers in terms of our domain knowledge, lessons learned, and best practices. We are the market leader in public safety and security and the only truly global supplier of these solutions.

**Trusted Partner** – Our solutions are trusted to meet the needs of mission-critical public safety operations for more than 2,500 agencies in over 30 countries. With 350+ installations around the world, Hexagon's Safety & Infrastructure division helps protect 1 in 10 people worldwide.

**Proven Innovator** – We have pioneered public safety and security innovation for 30 years. We are responsive to the changing needs of safety and security operations.

Reliable, scalable, and interoperable, our solutions enhance capabilities, improve agility, mitigate risk, and reduce the total cost of ownership for enterprise systems. In the operations center or in the field, on-premises or in the cloud, at a workstation or through a mobile app, our solutions deliver greater situational awareness and better results.

#### Hexagon's New 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 or 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.

- **HxGN OnCall Dispatch** Agile next-gen call-taking and computer-aided dispatch (CAD) capabilities that link callers, dispatchers, managers, and field officers for faster, more effective response.
- HxGN OnCall Analytics A single source of organizational data featuring interactive reports and dashboards that all can use for evidence-based analysis and communications.
- HxGN OnCall Field Mobility Task-focused apps that connect first responders with dispatch and records,capabilities to ensure safe, efficient operations.
- HxGN OnCall Planning & Response Web-based application for managing major incidents and events that integrates and coordinates resources, procedures, and communications for safe, effective action.

The HxGN OnCall portfolio is the perfect foundation for building safer, smarter cities. Learn more at hexagonsi.com/hxgn-oncall-portfolio

#### 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 Reporting & Analytics

Proactive law enforcement agencies apply data analytics to problem-solving for intelligence-led policing. Our police analytics software 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.

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.

With tools for real-time and historic reporting and analysis, we 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.

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.



## Huawei

Emergency Call Management Cloud Services

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



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

- **1. Visualization**: visual on-site conditions and resources (police and emergency resources); unified command on the same GIS map
- **2. 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

- 1. Awareness: Huawei's all-scenario access network implements data backhaul from various sensors
- **2. Analysis**: the collaboration among open smart cameras, IoT gateways, and video analysis platform featuring device-pipe-cloud incorporates industry-leading intelligent analysis algorithms
- 3. 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

**1. 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

- **1. 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
- **2. Real-time video dispatching**: a single base station supports the upload and distribution of 27 video channels
- **3. Unified network**: one eLTE network replaces two networks (TETRA narrowband trunking and broadband access)
- 4. 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

- **1. 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
- **2. Rich partner resources**: 100+ ICT partners, 550+ certified service partners, and 120+ authorized service partners

#### **Success Stories**

#### 1. 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.

#### 2. Thailand RTP emergency communications

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



## **IES Solutions**

Cloud Services

Interoperability Solutions

Resource Management

*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



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 according 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.



## **IMA**

eCall in France in close partnership with emergency services and Public authorities.

Emergency Call Routing Emergency Call Management Interoperability Solutions Third Party Services

The IMA group has a 20-year relationship with

PSAP in western Europe as a TPS eCall Provider.

Since 2017 the SNSA and IMA have been

designated PSAP eCall for the handling of 112

Interoperability Solutions Third Party Services

The IMA Group develops, brings together and provides assistance solutions tailored to the needs of its shareholders and clients. From emergency assistance to long-term support, IMA offers a comprehensive range of solutions including motor, transport, home, medical, individual, international mobility, advisory and customer relations services.

The Group represents a revenue of 773 million EUR, including a net result of 10.4 million EUR. It serves 45 million clients and has more than 4,000 employees (2018 data).



## 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.



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.



### Innovative

Automatic Vehicle Location

CAD

Caller Location

Control Room Integration

eCall

Innovative Business Software A/S is a Danish company, which for more than 35 years, has built state-of-the-art incident management software solutions that have helped manage and streamline the most critical security operations at alarm receiving centres and control rooms, all over the world.



Our versatile **Innovative Security Manager**™ platform handles critical security tasks, incidents and resources, providing a complete operational picture of the current security situation in real-time. In addition, ISM interfaces to multiple disparate systems, such as video management systems (vendorindependent), automatic fire alarms and access control systems and presents all alarms, incidents and tasks in the same user interface.

#### Innovative Security Manager<sup>™</sup> key features:

- Alarm handling and incident management
- Task and resource management, including personnel app for task management
- Video integration and interactive floorplans
- Real-time overview of the security situation and indoors positioning
- Interactive map to locate alarms, vehicles and personnel
- Emergency management and coordination in real-time
- Documentation, reporting and big data for enhanced planning

Our customers include police forces, fire departments, 112, airports, private security companies, university campuses, hospitals, military and industrial facilities.



## Intrado

Caller Location

Emergency Apps

Emergency Call Routing

Emergency Call Management

Interoperability Solutions

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



Sr. Vice President / General Manager, Intrado Life & Safety, Carrier Services

intrado.com

world-class network engineering focused on the needs of public safety, Intrado manages the entire emergency 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 networks

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 network-based 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 —each with its own production specifications and operational protocols—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.

We connect. We deliver. We are Intrado.



# **Ipkom**

CAD

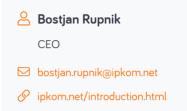
Control Room Integration

Interoperability Solutions

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.



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**

Disaster Management

Emergency Apps GIS



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.



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



## Iskratel

Control Room Integration

eCall

Information Analytics

Next Gen Comms

**Public Warning** 

With more than 70 years of experience, Iskratel is the leading European provider of infocommunications solutions for the digital transformation of the telecommunications, transport, public safety and energy industries. The company is based in Kranj, Slovenia (EU), with its own R&D and manufacturing facilities, over 900 employees and local presence in more than 30 countries, Iskratel combines experience and expertise with creativity and innovation.



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** complements existing emergency communications infrastructure with next-generation operational centres to increase public safety. Iskratel's PSAP (Public-Safety Answering Point) solutions fill in the gaps in today's public safety network and clear a simpler, more-efficient and cost-effective path for handling future emergency situations.

**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.

**Safe City solution** offers cutting edge, end-to-end security with ubiquitous network access, a convergent operations center 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 responses and inform tactical manoeuvres invarious situations.



## Issured

Artificial Intelligence

Cyber Security

Drones

Information Analytics

Specialised Consultancy

**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.



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.



# Japan MayDay Service

eCall

Third Party Services

Although JMS is a private company, it was established with capital contributions from various companies throughout Japan, due to the high public nature of emergency call services.

Main shareholders are as follows:

- 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 for 20 years all over Japan. As of July 2020, JMS supports over two and half million vehicles, and receives sixty 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 726 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".

General Manager, Business Planning and Sales Operations Dept.

- helpnet.co.jp



# King ICT

CAD Caller Location Drones E

Emergency Call Management

GIS

**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 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 NG112 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)



**LIS** is a software company with over 30 years of experience in the field of security. Our software **LIS SP - Service Plus** - offers a broad, modular and integrated range of products for all agencies, organizations and institutions with security tasks such as fire brigades, ambulance services and private security companies. We support CAD - computer aided dispatching - with interfaces for alerting, reporting, the management of tools & devices, staff and extensions for a billing systems.



All tasks & processes of an organisation can be handled in one system. The modular system design allows for increasing or changing requirements. Data used already in one module can be used immediately in other modules. With appropriately configurable interfaces, the modules of the administration can be coupled with CAD systems of 3rd parties.

A short list of our software modules:

- CAD with interfaces to 3rd party systems
- Disaster Management
- Interfaces to / from other control systems
- · Interfaces to third-party alerting systems
- · Reporting & billing
- Staff management & roster
- Management of tools & devices, maintenance of devices
- Documentation of daily events during a shift, tasks & events
- Statistics

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

#### Your solution - from a single source

Since there are many standard solutions, one of our main goals is to customize our solutions for your special & individual requirements. For detailed information or requests visit our homepage or contact us directly.



Trond Nerdal

∫ locus.no

Director Sales

## Locus Solutions

CAD

Emergency Call Management

GIS

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.

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

The Who-is-Who Directory In The Public Safety Industry | - Sep 2020 - | www.eena.org

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.

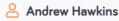


## Microsoft

Big Data Cloud Services

#### 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.



Managing Director, EMEA Public Safety and National Security

9 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 incident-based 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 Dr. Andrew William Hawkins or Kirk Arthur or go online and visit our worldwide government website.



## Motorola

CAD Conti

Control Room Integration

**Emergency Call Management** 

Multimedia Comms

Next Gen Comms

Motorola Solutions is a global leader in mission-critical solutions. Our technology platforms in communications, control room software, video security solutions and managed and support services make cities safer and help communities and businesses thrive. At Motorola Solutions, we are ushering in a new era in public safety and security. Public safety and commercial customers

Amarcel Verdonk

Vice President Software & Video Solutions, International Sales

 ${\mathscr O}$  motorolasolutions.com/en\_us.html

globally depend on our solutions to keep them connected, from everyday to extreme moments. We serve more than 100,000 customers in more than 100 countries and have a rich heritage of innovation spanning more than 90 years.

#### COMMANDCENTRAL

CommandCentral is an integrated control room software suite that has been designed for public safety and emergency service organisations. The software suite is powered by a technology ecosystem that unifies voice, video, data and analytics. With CommandCentral, personnel can enter information once, at any point in their operations, and share it with everyone — from call to case closure. Our solutions are fully integrated and deployable on cloud, as a service, or on premise.

#### Community Engagement

CommandCentral Community combines a full suite of capabilities into one, extensive community engagement solution. Begin to foster a more transparent and accessible relationship with the public you serve through collaborative applications that inspire partnership and empower community members to help shape public safety and improve quality of life. The best part is the community can easily connect through a single online touchpoint, unique to your agency, to build engagement and connect the public with public safety.

### Emergency Call Handling and Computer-Aided Dispatch

CommandCentral Emergency Call Handling integrates the most important information into a unified view, eliminating repetitive data entry steps and improving operator focus and productivity. 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.

### Real-time Intelligence

The CommandCentral Aware software module provides a complete operating picture, integrating real-time intelligence in the control room to remotely assist officers in the field. The software lets tactical decision-makers simplify their operational view by consolidating their resources into one single pane of glass. With CommandCentral Aware, organisations can support officer safety by monitoring real-time alerts and accessing nearby video feeds when incidents occur.

## Post-Incident Investigation Analytics

CommandCentral integrates an investigative platform that provides actionable intelligence for public safety organisation 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

With CommandCentral Vault, investigating officers can maximise the value of their digital evidence. CommandCentral Vault is 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.



## Nokia

Control Room Integration

Emergency Call Routing

Multimedia Comms

Public Warning

Radio Solutions

At **Nokia** we create the technology to connect the world. Only Nokia offers a comprehensive portfolio of network equipment, software and services across the globe. With our commitment to innovation, driven by the award-winning Nokia Bell Labs, we are a leader in the development and deployment of 5G networks.



Our communications service provider customers support more than 6.4 billion subscriptions with our radio networks, and our enterprise & government customers have deployed over 1,300 industrial and mission-critical networks worldwide. Adhering to the highest ethical standards, we transform how people live, work and communicate.

Nokia helps government agencies and cities use broadband communications to alert populations and enhance the capabilities of first responders. Our solutions provide public safety organizations with high-performance communication solutions that allow police, fire, medical and emergency management to make faster and more informed decisions, and respond more safely and effectively to critical events.

Our public safety solutions comprise hi-performance mission-critical broadband networks (wireless and ESINet), integrated operations center solutions, video group communications, Industrial grade drones, public warning system and IoT and cognitive analytics platforms that turn data into meaningful insights.

Nokia solutions provide emergency services with 360-degree situational awareness, they automate field intelligence and help to enhance multi-agency cooperation.

## About Nokia Public Warning System Solution

The Nokia Wireless Emergency Alert solution utilizes Cell-Broadcast (CB) that can be complemented with Location-Based SMS (LB SMS) to provide a complete solution for both governments and mobile service providers. It is standards-compliant, leverages our unique and deep expertise of wireless networks and is field-proven as it powers public warning systems in the USA, Canada, several European nations and other countries across the globe.

#### About Nokia ESInet network solution

Nokia ESInet solution allows emergency authorities to modernize their emergency call routing infrastructure to support true multimedia information and very accurate device location information. Based on standards widely adopted by communication service providers (CSP) and relying on mission-critical IP routing, we provide a smooth and resilient solution to interconnect call originating networks to Public Safety Answering points and enable a total multimedia conversation from citizens and sensors to emergency management officers.

### About Nokia Integrated operations center for public safety

Nokia's Integrated Operations Center (IOC) lies at the heart of public safety operations offering a unified real-time view into all public safety assets and services, bringing efficiency and enhanced collaboration with analytics integration, while facilitating rapid response based on automated workflows across multiple applications.



# NPI NotrufPlus Innovation GmbH

Accessibility

Caller Location

Emergency Apps

Emergency Call Management

Interoperability Solutions

The NPI NotrufPlus Innovation GmbH developed a system that fully meets the requirements of a modern and future emergency call. This is the "barrier-free and direct emergency call - NotrufPlus" to the PSAPs 110 (police) and 112 (rescue service and fire brigade) and if necessary, also to others: www.notruf.plus



notruf.plus

After years of research and development, the application has been successfully tested by people with and without disabilities in a pilot operation with the PSAP Brandenburg since 31.08.2017.

**NotrufPlus** is a turnkey solution where there is no more need to spend a lot of effort on development. And it is precisely the routing and the simple integration and operation in the PSAP that distinguishes **NotrufPlus**. This is the problem that has hitherto caused all other barrier-free emergency call developments to fail.

The new feature of **NotrufPlus** is, that the mobile network is only used as a transport medium for data transmission and communication in conjunction with a geographic routing method. To this end, novel solutions have been developed and several patents are pending.

The **NotrufPlus** system consists of the NotrufPlus apps, the NotrufPlus servers and the WebClient within the NotrufPlus Incident Management System.

Already today, **NotrufPlus** can do what is desired in Europe for the future of the emergency call. No matter where they are in Europe, people can be provided with a custom-made application.

#### Key points of NotrufPlus are:

- the NotrufPlus system with a novel geographic routing method (not number-based)
- the provision of a free app (Android, iOS) for barrier-free use (currently for test users, soon to be freely accessible)

- Selection and routing of the emergency call via a category selection (call number does not need to be known)
- Communication with and without voice or video
- Transmission of the location data determined with the app as well as the presaved personal and medical data
- the location-based geographical assignment of a caller to the responsible PSAP, also abroad (roaming)
- A WebClient for PSAPs to handle emergency calls and to be included in the existing PSAP-software
- the automatic retrieval of messages from the NotrufPlus Incident Management System by the WebClient
- an API to implement the WebClient functionalities in the existing PSAP-Software
- Interoperability between PSAPs and other connected Instances
- a chat feature
- Emergency call message from generated SMS, if no data transmission is possible
- optional Emergency call fax in addition to the emergency call message
- Transfer of pictures and videos
- the transmission of weblinks to the caller (for example, for the instructions for resuscitation)
- Consideration of the wishes of the users and the PSAP dispatchers
- ensuring data protection

NotrufPlus was developed in cooperation with the BürgerServiceNetz e.V. and the Disability Advisory Council of the City of Brandenburg/Havel with the support of the University of Applied Sciences in Brandenburg (THB).

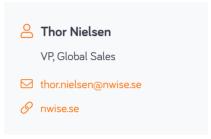
Other Inventions are pending and will be soon presented to the public.



## nWise

Accessibility Caller Location Emergency Apps Next Gen Comms Telemedicine

**nWise** develops, sells, deploys and supports the MMX® Communication Platform, including MMX® RTT gateway. With the MMX®, Emergency Services can make and receive calls using Real-time Text (RTT), video and voice, and connect to third-party providers such as interpreter services or Video Relay Services. The MMX® enables services to receive calls from deaf, hard-of-hearing and deafblind individuals using Total Conversation. Our Communication Platform complies with EU



requirements in the following legislation: EU Electronic Communication Code, Directive 2018/1972, recitals 14 on voice communication services, 35 on total conversation, and 258 on emergency communication.

The Coronacrisis, terrorist attacks in Europe, and recent natural catastrophes such as storms and floods in various regions brought to the forefront just how necessary a robust communications system for diverse, underserved communities, including the deaf, and those with speech impairment, are during a catastrophic event. Providing comprehensive, reliable and easy to use technology solutions that ensure that the deaf, deafblind and speech impaired communities have access to critical services at critical times is our purpose.

We have worked with RTT and Total Conversation (TC) since 2005, and the MMX° is used by 19 national services in 13 countries. Our team works with development, integration and implementation of RTT and TC calls to external communication platforms.

Our solution can be used as a gateway to connect RTT and TC calls to call takers in a PSAP. We integrate our solution to next generation 112 services, enabling deaf, deafblind and hard-of-hearing people to make emergency calls. Key information necessary in emergency services, such as geolocation, call recording, call logging, RTT conference, are all available in the MMX®. RTT calls to 112 can be made from Native RTT or Over-the-top apps that can be provided by us or a third-party supplier. If necessary, call takers at 112 can connect external resources to the call, such has video interpreter services.

Following is the high-level representation of the architecture, showing how our technology enables existing infrastructures to receive and make RTT and TC calls.

Regardless of the method used to access nWise MMX®, the communications streams are quite similar.

- 1. An individual makes a DIRECT call to 112 (SIP)
- 2. The call is connected to the next available telecommunicator in a pre-defined operator group that receives RTT calls.
- 3. The nWise agent application automatically opens on screen.
- 4. MMX® sends a SDP (session description protocol) with call information (SIP).
- 5. SDP negotiation is initiated with IP- address and port information between the RTT-enabled user equipment and the agent application.
- 6. Session is established between the two parties above using RTT and voice (activated on the connecting device once the session is initiated) to communicate between the end user application and the telecommunicator position.
- 7. If necessary, the telecommunicator incorporate a third party into the communication, for instance Video Remote Interpreter (3-party call). In this case, video is added to the call.

Our technology can be deployed as cloud-based or installed locally. Our team can work with local integration and installation on-site and/or remotely. Our apps are customizable and already available in more than 10 languages, including Arabic and Thai.



# one2many

Disaster Management

Multimedia Comms

Next Gen Comms

**Public Warning** 

Telecommunications

One2many, a leading global vendor of nationwide public warning solutions for governments and the telecommunications industry, was acquired by Everbridge in March 2020. The one2many Cell Broadcast System is the most advanced and high-performance Cell Broadcast System in the market and with more than 85 deployments worldwide it's



the leading system in the world. 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**, 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.

### One2many's credentials:

- is capable of deliver a full end-2-end nationwide public warning system by providing the necessary infrastructure for towards Governments and Telecommunication Providers, enabling their own state-of-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.
- is 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.
- 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.
- is very actively involved in standardization committees like ETSI, 3GPP and ATIS (CMAS/WEA/ eWEA).
- is one of the main contributors to and editor of ETSI's EU-Alert standards.
- is 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.



## **OnStar**

eCall

Third Party Services

**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, Europe and South America.

The telematics system is imbedded in the vehicle and combines cellular communications, global positioning system (GPS) satellite location and live human interaction with OnStar

Catherine Bishop
 Senior Global Emergency Services Manager

 Catherine.bishop@onstar.com
 public-safety.onstar.com

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. There is also a toll-free number customers use to request remote door unlocks and Stolen Vehicle Assistance.

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 24 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 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 hourlong 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/

**Europe:** https://www.onstareurope.com/

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



# Opencode Systems

Cloud Services

Public Safety

Public Warning

Telecommunications

Voice Comms

With 20 years of experience building telecommunications solutions, **Opencode Systems** is one of the leading providers of cell broadcast and SMS-based public warning systems. Our

solutions, based on a market-leading, patented telecommunication technology, have been deployed in Europe, South America 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 broadcast simultaneously to millions of mobile users nation-wide or geo-fenced to areas of interest.

Opencode alerting solutions conveniently deploy 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.

By design Opencode mass notification solutions are 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, public info panels, 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 behavior.

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 180 engineers worldwide with main offices being in Bulgaria, France, Malaysia and Tunisia



## Oracle Communications

Next Gen Comms

Voice Comms

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 and clear - this is why having SD-WAN and session border controllers built for mission-critical environments is so crucial. Only Oracle provides the specialized communications solutions that ensure the high reliability and high quality of experience (QoE) that satisfy these demands.

Gianluca Vegetti Sales Consulting Senior Manager ☑ gianluca.vegetti@oracle.com

P oracle.com/index.html

Some success stories include Essex County Fire and Rescue, Maricopa Region 911 and

Read more: Oracle Enterprise Communications solutions

#### Oracle SD-WAN

Morgan County Next Generation 911

Our SD-WAN solution is used by next generation public safety organizations throughout the world. Thanks to patented technology that does continuous unidirectional measurement of all paths and offers sub-second response time to not just link failures but also congestion-based brownouts, Oracle SD-WAN delivers the uptime, call quality and end-to-end visibility that could mean the difference between life and death.

- Increases speed & reliability between all locations headquarters, data centers, public safety answering points (PSAPs), incident command units (ICUs), etc.
- Aggregates multiple diverse network links together
- Continuously monitors the quality & availability of each link
- Application aware SD-WAN enables control to prioritize mission-critical traffic

- Detects & avoids outages instantly
- Enables cost-effective networking choices
- Ensures agreed upon SLAs with carriers

Read more: Oracle SD-WAN

#### 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, realtime 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

Read more: Oracle Enterprise Session Border Controller

#### **Success Stories**

Essex County Fire and Rescue

Maricopa Region 911

Morgan County Next Generation 911



# Orbita Consultancy

Project Management

Resource Management

Specialised Consultancy

Third Party Services

**Orbita** specialises in service delivery and the optimum, seamless use of the different channels for customer/citizen interaction and management. We characterise our services in many ways; and in particular we do not just provide documented advice – rather we also help our clients to implement change with hands-on involvement, then through transition to steady-state in the new business as usual.



As well as specialising in PSAP operations, we have the necessary programme and project management skills, experience and track record to implement change and improvement projects.

We are expert in Workforce Planning and Resource Management which is key to determining resourcing requirements; through forecasting demand, capacity planning, and scheduling staff to match contact volumes and arrival patterns.

We are completely independent of any suppliers or other companies and organisations and in all our dealings with our clients, we are non-biased – except through our total commitment to our clients and we operate with the highest integrity.

Over the years, Orbita and our consultants have delivered many operational excellence reviews, business process re-engineering projects, contact centre strategies for clients in both the emergency services and other industries.

We have been involved with the EENA certification programme since its inception and have been integral to its deployment and growth.

In late 2017 Orbita merged with Insight Now, combining the outstanding Customer Experience knowledge, capabilities and unique solutions provided by Insight Now with the consultancy skills and experience of Orbita Consultancy. We use this unique blend to monitor customer interaction and to advise on, and provide, the most appropriate Customer Experience (CX) solutions for our clients and their customers / citizens.

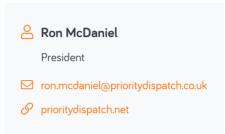


# **Priority Dispatch**





**Priority Dispatch** is the global leader in emergency dispatch protocol products, including software, training and services. Priority Dispatch has developed a comprehensive, systematic approach for triage systems for emergency call taking centers. The Priority Dispatch System® (PDS®) includes robust solutions for police, fire, medical and nurse triage call taking and is used in 46 countries and available in 22 languages. The PDS software solution, called ProQA®, is the most



complete emergency call taking solution in the industry. ProQA software greatly simplifies the dispatching process and improves the quality management of the center. It has a customizable format that seamlessly integrates with CAD (computer-aided dispatch) and phone systems. The ProQA software leads the call taker through a structured interrogation sequence, displaying each question individually with specific answer choices, then prompts the call taker for a response and, based on input, assigns a patient condition code and recommends a response assignment. Prioritizing emergency responses helps avoid inappropriate response allocation and inappropriate use of lights-and-siren. In this way, the PDS not only saves money – it saves lives.

Priority Dispatch is the exclusive world-wide proprietor of the MPDS (Medical Priority Dispatch System), PPDS (Police Priority Dispatch System), FPDS (Fire Priority Dispatch System), and ECNS (Emergency Communication Nurse System). These emergency dispatch protocol systems are licensed to emergency dispatch centers throughout the world. The content of the MPDS, PPDS, FPDS, and ECNS is developed, approved, and provided by the International Academy of Emergency Dispatch (IAED).

IAED is the internationally-recognized, non-profit, standard-setting organization which promotes safe and effective emergency dispatch services worldwide. IAED has over 20 boards, councils, and special committees, including the Council of Standards, Board of Accreditation, Board of Curriculum, Council of Research, and Board of Certification. These boards and committees are chaired by and include the world's foremost experts in medical, police, fire, and nurse dispatch. The MPDS, PPDS, FPDS, and ECNS are continuously examined, studied and updated to keep current, and changes are made based on continuing medical, police, and fire research, along with practical field experience and from feedback from thousands of emergency dispatch users the world over.

### About Priority Dispatch:

- 46 Countries
- 22 Languages/Dialects
- Over 80,000,000 emergency calls taken in 2016 through our systems
- Over 71,000,000 population base covered by our emergency call systems
- Over 35 years of the emergency protocols being used
- Over 62,000 IAED Members
- Over 3,000 agencies
- Over 96,000 active medical, police, fire, and nurse dispatching IAED certifications
- Over 1,000 IAED certified instructors
- Over 60,000 subscribers to the IAED's Journal of Emergency Dispatch, published in 9 languages
- First and only peer-reviewed journal of dispatch science Annals of Emergency Dispatch & Response
- Over 15 years of the EMD Advancement Series the longest-running and most trusted CDE series in the world
- Over 40 IAED protocol-based research studies published in peer-reviewed journals



## **PTOLEMUS**

Project Management

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.

The consulting group regularly assists these companies with strategy definition, investment assistance, procurement strategy, innovation management, business development or product strategy deployment.



#### PTOLEMUS is also the author of many widely praised reports:

- The Connected Fleet Global Study 2018, the unique strategic decision-making tool assessing the potentials and partnership models in the commercial transport market.
- The Autonomous Vehicles Global Study, the most thorough analysis of the AV market and its impact on the risk sector
- The Usage-Based Insurance Global Study, the 1200-page reference document whose 3rd edition was published in January 2016.
- The Connected Insurance Analytics report, the add-on report to the UBI study explains how to transform telematics data into predictive analytics.
- The Connected Mobility Forecast 2016, which quantifies 14 mobility markets including car sharing, pooling and leasing.
- The Road Charging Global Study 2015, the reference document for the electronic toll collection market globally. For more information on research, please contact Thomas Hallauer on thomas@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**

CAD Control Room Integration

Disaster Management

Emergency Apps

Public Safety

**Pulsiam** is a proven and innovative leader in public safety software, with more than 30 years of experience in the industry. Specializing in public safety and disaster management, we have used our industry expertise to create a comprehensive browser-based command and control solution that is fully scalable and ideal for both the largest and the smallest agencies.



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.



# RapidDeploy



At **RapidDeploy**, we believe that regardless of size, geography or budget, everyone in public safety should have access to the data they need when it matters most to save more lives. That's why, since 2016, our mission has been to reduce emergency response times and improve public safety.



RapidDeploy is the industry's only truly open and integrated emergency response platform, transforming 9-1-1 communications centers of any size into data-centric organizations. RapidDeploy achieves new levels of situational awareness and reduces 9-1-1 response time by seamlessly integrating third-party data ensuring it is available when, where and how Telecommunicators and First Responders need it.

# Our web-based cloud platform includes analytics, mapping, dispatch and first responder applications

- Eclipse Analytics provides flexible reporting and analytics to facilitate data-driven, operational performance improvements by leveraging real-time call data.
- Radius Mapping provides best-in-class mapping that optimizes the contextual and informational view of a location, within seconds, by integrating the most trusted and diversified data in the industry.
- Nimbus Cloud-Aided Dispatch provides a comprehensive, highly configurable, web-based dispatch
  platform integrated with sophisticated location mapping and real-time data to ensure a rapid and
  informed response.



# RapidSOS

Big Data

Caller Location

Disaster Management

Emergency Call Management

Next Gen Comms

In partnership with public safety, RapidSOS has created the world's first emergency response data platform (also known as the RapidSOS platform) that securely links life-saving data from 350M+ connected devices directly to 112/999/911 and first responders in an emergency. The RapidSOS platform serves as a direct data pipeline from connected devices, platforms, and systems to public safety. It is an NG911 standards-compliant Location Information Server and



Additional Data Repository that is accessible to authorized Public Safety Answering Points (PSAPs) through integrations into all major call-taking equipment, mapping software & CAD products.

PSAPs with access to the RapidSOS platform can securely access fast and accurate device location from millions of iPhones and Android devices, without the need for the caller to use an app. The RapidSOS platform also offers additional emergency data from user profiles (e.g., 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 portal for PSAPs to access the RapidSOS platform within just weeks of claiming their account. With RapidSOS Portal, any PSAP can receive the benefits of all new data sources available on the RapidSOS platform, access training and admin tools, and view real-time data for their agency's jurisdiction on one 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 appears as supplemental data in existing dashboards and PSAP workflows. RapidSOS partners with all major PSAP technology vendors to provide the integration through a simple software update. Contact RapidSOS and your software provider to get started.



# Regola

Accessibility

CAD

Cloud Services

Disaster Management

Public Warning

**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.

Backed by an experience in the sector of **20+ years**, 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).

### Unique CAD Suite

A **nextGen 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 (EML) 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**, EML 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.

#### Crisis & Disaster

A multi-modular emergency preparedness and management solution helping in Crisis situations or Major Incidents and addressing greater collaboration among organizations.

Designed to support a flexible and widely adopted command structure called GOLD-SILVER-BRONZE command chain, it provides collaborative response, pre-determined response plans, map-centric operations, resource monitoring, chat & alerting, bi-directional data sharing and more.

### What are we looking for?

Regola is a highly skilled technology supplier willing to provide its professional solutions and services to **International Partners** looking for top-quality, comprehensive, versatile and competitive solutions.

It is in the nature of Regola working in synergy with other technology suppliers and complement each other solutions, exploring new trends and anticipating functional demands.



# Saab AB

CAD Control Room Integration

Emergency Call Management

GIS

Public Safety

**Saab** serves the global market with world-leading products, services and solutions within military defence, civil security and emergency services. Through innovative, collaborative and pragmatic thinking, Saab develops, adopts and improves new technology to meet customers' changing needs.



The SAFE public safety unified control room solution is created in partnership with the blue light market enabling streamlined workflow and business process management. SAFE is already in operation in over 35 mission-critical control rooms across Europe and U.S.

### SAFE > Control, Connect, Communication

## The unified platform

SAFE is a truly unified platform for mission critical incident and operations management. The solution replaces legacy disparate solutions, such as C&C, ICCS, GIS, CRM and Mobile data with a single modern platform, providing a complete control room feature set within a single user interface.

SAFE empowers users to make more informed decisions, faster. The solution increases resolution at first contact, improves customer satisfaction and enables resources to operate more efficiently.

At the heart of SAFE is a powerful workflow based rules engine and user interface tool, enabling tailored configuration to meet business process and workflow requirements of individual customers. Organisations can evolve workflows and designs as their demands grows.

### Dynamic Decision Support

SAFE supports models such as THRIVE (Threat, Harm, Risk, Investigation, Vulnerability and Engagement) to help users to assess the needs of victims and determine the most appropriate level of response.

SAFE assimilates information from multiple data sources and automatically flags relevant information to the user, such as repeat victim, antisocial behaviour hotspot and mental health sufferer.

SAFE can provide questions and prompts to advice users dynamically, based on knowledge the system learns from real-time background searches, data entry, location details and contact history.

A sophisticated recommendation capability considers multiple parameters to help users quickly determine the most appropriate response and resource.

#### Features:

- Multi-channel public contact
- Intelligent contact history
- Adaptive search and decision support
- Configurable Workflows
- Customisable user interface
- Fixed / Web / Mobile working
- Share information and self-serve
- · Advanced GIS and event triggering
- Real-time business intelligence
- High Availability open architecture

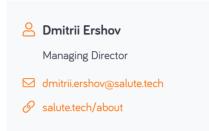


# Salute Solutions Oy

eCall Emergency Apps Multimedia Comms Public Warning Voice Comms

We are developing a messenger, one of the functions of which is the organization of first aid by volunteers located near the scene of the accident.

Our main focus is on motorists. The importance of attracting trained road accident bystanders is marked by WHO in its regular road safety reports.



In collaboration with eCall and dispatch centers (PSAPs) that received a call about the incident, Salute allows sending this information as a Salute message to volunteers who are located near the scene of the incident. The Salute message also contains additional information for communication with professional medics for exchanging relevant data about the accident.

Such collaboration allows providing quality first aid before the arrival of a professional rescue team and getting actual pieces of information from the scene.

Our volunteers can be anyone who has been trained in first aid. Messenger Salute allows you to send messages to users based on their location. Thus, it is ensured that only those who are nearby (~ 10 km) and have the necessary skills for helping will receive Salute emergency messages.



# Sfera, JSC

CAD

Emergency Call Management

GIS

Information Analytics

Public Safety

**Sfera, JSC** is a Russian system integrator, software and information systems developer. It specializes in the automation of business processes of public authorities and industrial companies since 1992. Main business areas are development and implementation of software; creation of IT infrastructure, multi-service networks, automated engineering systems; project consulting, including documentation development and maintenance. Sfera, JSC has all the necessary



Daniil Bodrov

Deputy CEO





licenses to accomplish various tasks regarding automation and information security systems in Russia. We make our priority to give our customers IT-solutions that satisfy the actual need in high quality performance while executing their business functions. In doing so we are open to new solutions and does not confine only to the areas of expertise.

### Expertise in Emergency

Sfera, JSC completed more than 10 turnkey projects building the 112 system in various regions of Russia. The created systems serve more than 20 million people and receive more than 100 thousand calls a day. The largest of them — the system 112 of the Moscow region — serves more than 10 million people and receives up to 50 thousand calls a day. We offer services for building various emergency response systems in Russia and the former USSR countries. Apart from the 112 call systems we've got solutions for a safe city, utilities, large industrial companies and infrastructure facilities and other businesses that have their own dispatchers and response resources.

### Detailed overview of the solution

The basis for the solutions we offer is a specialized platform for building emergency response systems.

#### The main characteristics of the platform are:

• communications, workflow support and resource management are combined in one suite and interconnected

- voice call handling, data transfer and radio communication in a single system for receiving calls, taking decisions and resource management
- multi-protocol and multi-channel processing of signals from various alarms
- decision support in emergency situations

#### The stated features allow all the systems based on the platform to:

- search operators by certain criteria (e.g. language)
- decrease time of response due to call allocation and prioritizing
- speed up emergency identification through interview and classification
- make data immediately available to all participants due to single information space
- ensure immediate dispatch of the most appropriate resources with the necessary equipment and skills
- check the real-time information on resource status and location
- have a log of all actions and negotiations
- control the actions of the operator and dispatcher
- process signals of change in the situation and emergency by screening from cameras close to the incident or mobile cameras of the crew

#### The benefits of the platform that we offer to our customers are:

- tested product, used by emergency services in many countries
- use of serial equipment
- long-term development prospects
- regular updates with new functions
- technical support



# **ShadowFocus**

eCall Emergency Apps Emergency Call Management Specialised Consultancy Third Party Services

**ShadowFocus Consultancy** was formed in 2014 due to demand for its founder's unique skills and knowledge in the implementation of Intelligent Transport Systems and Services (ITS) within an Emergency Services operating environment.

We support the development of effective partnerships between

Emergency Services customers and suppliers of ITTS, so that technical

solutions are developed that will be effective within the operational

realities of the Emergency Services. This includes the development of eCall services, both public and private, along with supporting the deployment of effective technical solutions for the emergency services.



## SiriusXM

Automatic Vehicle Location

Cloud Services

eCall

Emergency Call Management

Third Party Services

**SiriusXM** Connected Vehicle Services pioneered the Connected Vehicle Services market in 1996 with the first OEM-embedded, consumer-facing telematics service in the United States.

A member of EENA since the beginning, Sirius XM has also been members of both APCO and NENA for the last 20 years.



Today, SiriusXM provides connected vehicle services to several million vehicles across 450 model lines sold for a variety of automakers across North America.

With safety and security services as its core offering, SiriusXM's connected vehicle platform also has developed over 50 services that includes innovative infotainment, navigation, and remotely activated vehicle functions designed to enhance consumer mobility and convenience as well as enhanced customer service and operational efficiencies for vehicle manufacturers.

For over 20 years SiriusXM Connected Vehicle Services has deployed a proven emergency call center architecture and operation specifically designed to assist emergency responders relative to vehicle emergencies and stolen vehicle location, including screening non-emergency calls.

### Core Competencies

SiriusXM's core competencies reflect a commitment to leveraging technology to enhance service to motorists. These competencies currently include the following:

- Providing Emergency Call (eCall) and Automatic Crash Notification (ACN) response services.
- Dual agent handling of emergency calls enabling simultaneous interfaces with both the motorist in need and the PSAP.
- Extensive experience in interfacing with key service delivery partners to fulfil OEM and end user automotive customer needs
- Comprehensive IT and program management capabilities that meet vehicle production dates, integrating vehicle architecture with off-board content and communications.



# Systel

CAD Disaster Management Emergency Call Management GIS Next Gen Comms

SYSTEL specialises in the delivery of command & control and integrated communications systems specifically to Fire and Rescue Services and Ambulance Services. Of our current 62 current clients, 51 are in mainland Europe and a number of French Overseas Territories, whilst five solutions are currently live in England, others are being deployed in Scotland, Northern Ireland, Republic of Ireland and Belgium. Collectively, our Solutions handle over 2,500,000 calls per year with the largest individually handling 400,000 per annum.



The Solution developed entirely by our team of engineers as a holistic, integrated systems to meet the end-to-end needs of our Clients. Originally developed in 1987, it has undergone a number of iterations since its inception to take account of new requirements of our clients.

# SYSTEL's solution incorporates the following key integrated components:

- Command and Control (CAD)
- Integrated Communication Control System and Telephony (ICCS)
- Geographic information system (GIS) /Gazetteer
- Resource Management
- Predictive Dynamic Cover Tool
- Mobile Data Terminals and Vehicle Mobilization
- Information management and Reporting System
- Interfaces to key third party systems

### Key benefits:

 Multi-Agency and Interoperability -> Fire and Ambulance services work together on the same systems, sharing the same back-office

- High Availability -> Resilience at site and system level
- Call Scripting -> Includes Fire and Medical scripts
- Integrated Communications -> Radio/telephony integrated in CAD
- Attribute Based Mobilising -> Flexibility in manning resources
- Flexible Resourcing Models -> Linked to attribute based mobilising
- Advanced Gazetteer -> Progressive searching and corporate gazetteer integration

Systel employs approximatively 140 staff at its headquarters in La Rochelle, France (comprising Software Engineers/Developers, Support technicians, Project Management Staff and Trainers) as well as 8 staff in Leeds, UK.



# **Techwan**

CAD

Control Room Integration

Resource Management

**TECHWAN** is a Swiss software company, specialized in public safety solutions. The company was created in May 2000. The products line is called SAGA; there are Solutions for police, civil defence, airports, ambulances departments and private sector. Each module was developed in collaboration with our customers.



- SAGA's workstations are: WPF for Smart clients and HTML5 for Web clients and mobile They can be mixed. WEB clients can be multiscreen. Mobile workstations are individually notified.
- SAGA can be on top of Windows Server or LINUX, and SQL Server or PostgreSQL.

SAGA was chosen by the French National Gendarmerie to create the world's greatest centralized CAD, with more than 6,000 workstations, spread all over Metropolitan France and Overseas, it is completely functional and, amongst other things, was the safety centre of G20 in Cannes and the 70th anniversary of DDAY.

### SAGA product line is:

- An Incident Management Solution: SAGA COMMAND & CONTROL
- A Crisis Management Solution: SAGA CRISIS
- A large event planning tool: SAGA PLANNING
- A Mobilization Solution: SAGA MOBILIZATION
- A Victim's management solution: SAGA VICTIM

### Principal Characteristics

SAGA is a completely services oriented (SOA) multi-layer solution.

- SAGA is multiservice and can manage Police, Civil Defence and Ambulances, in multiservice on the same system. This can be made on workstation level or at incident type.
- SAGA user interfaces are flexible and modular. They are defined outside the application, in a profile register. Profiles number is not limited and user interfaces can be adapted by systems engineer.
- SAGA supports all types of fixed and mobile workstations: Multi-screens PC, laptops, PC tablets and smartphones.
- SAGA is multilingual and supports all alphabets: Latin, Greek, Cyrillic, Arabic and Chinese.
- SAGA has a broad pallet of communication interfaces: PABX and IPBX, radio TETRA, TETRAPOL, LTE, recording voice and video, Paging, SMS, GPS, E-mail, Fax, API, CCTV, networks of alarm...



# Telefónica

Emergency Apps

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 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**



Radio Solutions Recording Solutions

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

Caller Location

Emergency Apps

Project Management

**Public Warning** 

Third Party Services

# 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 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:

- Deployment of AML 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-based Emergency Warning Service proof of concept, with EC GRALLE 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.



# Unblur

Artificial Intelligence

Cloud Services

Disaster Management

Emergency Apps

GIS

**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



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.



# Vitkovice IT Solutions



**VÍTKOVICE IT SOLUTIONS** has over 25 years of experience and knowledge in building complex systems with several integrated solutions for managing crisis situations. Ousoftware solution is deployed into all 112 PSAPs in the Czech Republic. We also provide solutions for effective cooperation and coordination of emergency services. It uses modern technologies and it can also smoothly manage peak traffic during disasters.



We are participating in Europe-wide projects for research and development, our company is a leader in implementation of eCall.

### Currently we provide:

- Computer Aided Dispatch System
- GIS with Caller location solutions
- eCall solution
- Advanced Mobile Location (AML)
- Mobile apps
- full telephony and other communication systems integration
- · integration of all IRS to one working environment

The best you can find in IRS world was done by us - **Integrated Rescue Center** - all Dispatching systems working together tightly integrated and cooperating, all resources joined together and cooperating on the highest standards available. Fully effective in results and costs.

We are supporting all mayor 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 they are optimal for them.



# Vodafone Automotive

Artificial Intelligence

Cyber Security

eCall

Emergency Call Management

Third Party Services

**Vodafone Automotive** is part of Vodafone Internet of Things, a global provider of IoT products and solutions with over 27 million connected vehicles. It is exclusively focused in the offer of services and products for vehicle manufacturers, insurance companies, fleet managers and in the development of innovative applications for the mobility of the future.



Senior Operations Lead - Partner Markets



@ automotive.vodafone.com

Vodafone Automotive has over 40 years of experience in the

automotive industry and manages the entire value chain including the design and production of on-board telematics, the telematics platform, advanced data analytics functions. Vodafone Automotive work with over 35 vehicle manufacturers and provide 24/7 security and safety services in 45 countries in Europe and 54 globally including Australia, Canada, India, Japan, Malaysia, Singapore, South Africa, South Korea and USA.

In automotive, the Porsche Car Connect OEM program include the assistance to Porsche customers in case of emergency, thanks to the airbag deployment alert, which is transmitted to the Secure Operating Centre across different continents. Vodafone Automotive telematics services enables insurance companies to offer policyholders, involved in a crash, immediate support through our specialised Secure Operating Centres.

Thanks to the interconnected network of Secure Operating Centres, Vodafone Automotive is able to manage automatic emergency call (Private eCall) alerts. Vital information, such as precise location of the crash incident, vehicle direction and speed before and after the crash are sent. The security experts evaluate the severity of the impact, which is made available to emergency services who are able to intervene quickly and provide the right emergency response. Through these services, it has strengthened its reputation as a leading provider of critical mobility services including possibility to directly contact the PSAP whenever the circumstance should require it.

Vodafone Automotive has also launched the Safety Pack - a solution enabling motorcycle manufacturers to offer a new security service to their customers. The major feature, dedicated to scooters and motorcycles, is the automatic emergency call generated in the case of an accident. In the case of a fall, the operator calls the rider to check whether help is needed, and if the rider does not answer the call, the operator evaluates the severity of the incident based on the digital reconstruction (received within a few seconds) and, if needed, contacts the PSAP immediately. This service is a new step towards safer mobility on the roads.



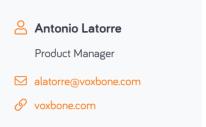
## Voxbone

**Cloud Services** 

Emergency Call Routing

**Telecommunications** 

**Voxbone** makes it unbelievably easy to set up and manage global business communications. Our on-demand virtual numbers, and voice and SMS services, allow businesses to extend their reach to 9,000 area codes in 60+ countries. All at the touch of a button thanks to our APIs. That's strangely simple.



Voxbone's happy customers include: Skype, Zoom, 8x8, Dialpad CaféX,
Orange Business Services, foodpanda, Deutsche Telekom, Telefónica,

InContact and Serenova. Check out our website at www.voxbone.com or follow us on Twitter and Facebook.

### An IP-based emergency calling solution

We provide instant access to local emergency services for our enterprise and wholesale customers in more than 30 countries. With Voxbone's Emergency Calling, businesses can finally consolidate their communications infrastructure in the cloud without the need to maintain a local PSTN line for emergency calls.

We have some pretty impressive hardware dedicated to making the world a smaller place for business comms. Our private network is a behemoth that will take you places others can't. We're a fully-licensed telecommunications service provider, interconnected with local providers and incumbents across all of our coverage areas.

At the core of Voxbone's Emergency Calling are the routing tables that we maintain, mapping local addresses to their corresponding local emergency answering points. If a customer or end user needs, to make an emergency call, we determine their location using our address database, look up the E.164 telephone number of appropriate Public Safety Answering Point and connect the call.



# Wey Technology

Control Room Integration

Disaster Management

Ergonomics

Interoperability Solutions

**Recording Solutions** 

**WEY Technology (WEYTEC)** is a Swiss-based global information technology company.

### Core Competencies

WEYTEC specializes in the transmission, control, distribution and display of real-time data for command and control rooms around the world.



WEY makes it possible to switch and distribute all information sources in any combination to an unlimited number of desks, video walls and screens, in real time, with their own smart KVM and Videowall controllers.

WEYTEC is a one-stop supplier that develops and manufactures all of its products and solutions in- house. First-class components, state-of-the-art manufacturing techniques and Swiss workmanship guarantee the flawless quality of WEYTEC products and solutions.

### Solution Portfolio

WEYTEC Solutions are tailored to client needs and are based upon a unique product portfolio. Control room solutions contain products from seven WEYTEC product houses: multifunctional keyboards, remote solutions, Smart KVM matrix, mini PCs, video walls, workplace recording and event and alarm management.

WEYTEC's value proposition also includes a full suite of customer-oriented professional services: Project Management & Consulting, Product Development, Production, Maintenance & Field Support and Training.



# What3words

Caller Location

Control Room Integration

Emergency Apps

GIS

Public Safety

what3words is a new addressing system that provides a very simple way to communicate precise locations. Every 3m square in the world has been assigned a unique 3-word identifier: a what3words address. For example ///kite.chats.dine is a point in a field in York, in the UK.



The system what3words works by converting GPS coordinates into three words - providing a widely accessible and easily

communicable method of describing a location that has the accuracy of coordinates but the simplicity of three words. The system is available through a free mobile app and web map at what3words.com where 3 word addresses can be discovered, searched and navigated to and is used by thousands of businesses and organisations and millions of users worldwide.

Since 2018, what3words has been working closely with emergency services to help them make use of its technology to reduce response times, improve efficiency and save lives. It is now used by over 100 emergency services worldwide including most services across the UK and a growing number in South Africa, Australia, Germany, Austria, Canada, US and India.

## How does what3words help emergency services?

Knowing exactly where an incident is taking place is vital for emergency services to be able to respond efficiently and effectively. However, when emergencies can happen anywhere, often in places not covered by an accurate street address - this can be a challenge. Where Advanced Mobile Location (AML) is not available and verbal descriptions are relied upon - members of the public often struggle to describe their locations precisely. If AML is enabled, the onward communication of an incident location can be difficult and often means compromising accuracy.

#### what3words can be used to solve these issues:

#### Gaining a caller's location:

what3words can be used to locate a caller by asking them to provide the 3 words for the 3m square where they are calling from. If the caller has the free what3words app, they can discover them here otherwise services are able to make use of the **what3words FindMe link:** a simple web-link that can be sent via SMS and presents the caller with the 3 words for their exact location. This link is incredibly data light using only 7kb so loads very quickly in low-data coverage areas, it has also been zero-rated in South Africa by Vodacom telecommunications.

The three words given by the caller can be entered into the **what3words online map** (what3words.com) or typed directly into the location field of **what3words enabled Computer Aided Dispatch** systems\* to pinpoint the exact location of the caller.

#### \*what3words enabled CAD systems

- Sopra Steria: Storm
- Capita Vision
- MIS
- Rapid Deploy

#### Using what3words for response

what3words addresses can be passed incredibly easily via voice, text or through existing digital systems, minimising the room for error and ensuring teams can retain the accuracy of the original incident location. Services can equip teams with the **what3words app** on their personal devices and any individual or agency has free access to the **what3words.com map** allowing anyone to search and navigate to a what3words address easily.

### Success stories and testimonials

Stories about how what3words has been used effectively to save time, resources and lives are evident across all services using the system. Early data from a number of enabled services in the UK, shows that nearly 1 in 10 incidents where what3words was used related to concerns for a persons welfare, including suicide attempts and missing persons. More than 1 in 3 incidents related to a road traffic collision. An ambulance service reported that more than half (61%) of all calls, where what3words was used, were in the highest response time categories (CAT 1+2). In many examples, what3words has significantly helped to reduce the need for expensive resources like helicopters and search units to be deployed.

Sam Sheppard, from Avon and Somerset Police, said: "Having this type of technology integrated within our command and control system has changed the way we are able to deal with incidents where the location isn't known. We are moving away from the old style questioning - 'Where have you come from?', 'Where are you going?', 'What can you see?' et cetera." These questions take time and aren't always that accurate. Asking for a three word address or sending an SMS [text message] so they can easily provide their three-word address has meant we have saved valuable time locating incidents."

What3words has also proved an effective tool in responding to the coronavirus crisis in 2020, Tony Blinkhorn, National Inter-agency liaison officer (NILO) for Yorkshire Ambulance Service NHS Trust says: 'An important part of our response to Covid-19 is ensuring that our ambulance crews can find new hospital sites and medical facilities quickly and accurately – and this is where what3words has made life much easier for the management and planning of the transfer process.'



# **Xolaris Civil Security**

Big Data

Caller Location

Disaster Management

Public Warning

**Xolaris**' mission is to enable our customers to gain insights from mobile networks to save lives, every day. We have made sure that public safety authorities and law enforcements responsible for civil security can lead the way and make the right decisions fast when it is time to act. Our solutions deliver strategic insights by structuring and analysing massive dataflows, movements and positions based on real-time



analytics of mobile networks. Proven under extreme pressure, our products prevent, predict and help neutralize criminal activity as well as guiding people to safety during disasters.

Our Swedish heritage has given us our strong belief that people always come first, and teamwork, honesty and trust is what has ensured us long-lasting relationships with global customers and partners.

Our story began as Mobilaris National Security, a part of the Mobilaris Group. And as time went by, Xolaris became independent with the purpose to develop even better products and continue our work for a safer world.

### Our product portfolio consists of three systems for authorities:

### Xolaris Eunomia Monitoring Center

Eunomia is a tracking and behavioral pattern analysis tool engineered to detect and combat criminal and terrorist activity through mass location, cellular traffic data interception, machine learning, call data records and historical data analysis. Eunomia provides invaluable actionable intelligence supporting law enforcement and national security agencies.

### Xolaris CIWS

Xolaris Community Information & Warning System (CIWS) provides the right information at the right time and location to citizens during emergencies. Receive information in your own language, based on SIM-card nationality and unique location. CIWS has a proven record worldwide, successfully applied under the most challenging crowd conditions on earth. CIWS is a highly scalable solution and can manage up to 10.000 SMS per second.

#### Key functionalities:

- Intuitive and interactive web graphical user interface
- Calculates the predicted cell coverage in and around the alert area to optimize geo-accuracy
- Multi-language support based in SIM card nationality
- Alert messages over SMS and Cell Broadcast
- Multiple parallel emergency campaigns (50+) independent of geography
- SMS throttling algorithms to optimize network performance
- 10.000 SMS per second
- Statistics; how many phones received message, when and where
- High availability active-active solution for high capacity and redundancy including geo-redundancy

#### Xolaris REACT

Xolaris Realtime Emergency Analytics Communication Tool (REACT) is a decision support platform engineered to assist governments and health authorities to detect, monitor, trace and ultimately help combat spread of infectious diseases. Xolaris REACT combines real-time collecting of anonymous cellular data from operator networks, machine learning and historical movement data to provide guidance and situational awareness enabling governments and authorities to plan and follow-up preventive measures.

#### **XOLARIS REACT is:**

- Handset independent meaning any phone turned on is contributing to data collection and situational awareness
- Completely based on mobile network data in real-time (anonymized if required by law)
- Requires no interaction by citizens, no need to download or install anything on handsets
- All phones in operator's networks contribute to analytics result thus providing an unprecedented quality in the analytical quality.

#### The XOLARIS REACT platform:

- Accurately measures the number of people in a given location at a given time now or in the past.
- Generates heatmaps and density measurements to see how the population is distributed now and in the past to understand travel routes, movement over time (day/night) and places of congregation in advance of a potential crisis in order to e.g. determine evacuation plans.
- Delivers coordinated, prompt, reliable, and actionable information over SMS or Cell Broadcast to the whole community or groups in different geographical areas to avoid or manage potential risk areas.
- Identifies phones that has been travelling and visited infected areas and can inform by SMS if necessary.
- Automatically detects phones traveling into areas with curfews or into zones with high risk of infection.
- Detect movements of individuals and groups anonymously, in order to monitor whether they are selfisolating or following authorities' directives to not travel.
- Automatically informs people who moves more than e.g. 10 km if curfews are in operation.
- Identifies "hot spots" congregations of people



# Zachranka

AED Caller Location

Emergency Apps

Next Gen Comms

Public Warning

We are Czech based start-up company focused on solutions for emergency call systems. Our main expertise is based on our unique knowledge of emergency service operational management systems, our strong technical background, and a highly-individual approach to meeting our clients' requirements through focusing on long-term partnerships and innovative creativity.



Aplikace Zachranka is the NG-SOS system, which significantly facilitates and streamlines both patient communication with the operations center and managing the entire rescue operation. The system uses all modern communication means to ensure the exact location, type of emergency and patient identification all take place seamlessly, and includes WebRTC technology for image transmission directly from the incident site. The system consists of five components that can function as a whole, or as separate modules.

- Mobile app for callers
- Web-based app for callers
- Online dispatcher web portal
- Advanced online tool for app management
- Unique automation of processes with API for CAD integration

The system was tested and developed in cooperation with EMS professionals and provides the most accurate information about the caller by providing their location updates, complete medical profile, and basic pre-classification data, including next-of-kin contacts, mobile network, battery status and more. System 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. System also supports communication for callers with speech disabilities and was also developed to fully support Voice Over technology for blind users.

Our app is the official nationwide Czech, Austrian and Hungarian app, and we provide our technology for mountain rescue operations in Slovakia. The concept behind this is for a universal platform with localized apps specific to each country and linked through a single interface, so that the app not only works in the user's home country but also when they travel abroad for business or on holiday.

It also features an interactive First Aid guide with CPR, which functions as an intuitive user manual. Plus, users can register new AED locations through the app. One of the most important features is that it's an extremely easy way for local authorities to effectively warn the public in the event of large-scale emergencies – via push notifications, automated calls or text messages to all users. This unique combination of emergency call function, first aid procedures, AED database and reverse emergency notification system has received excellent ratings from both experts and the wider public. 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.



# Zefonar Advisory

Public Warning

Specialised Consultancy

# Delivering unequalled public safety transformation

**Zefonar Advisory (Zefonar)** brings nearly 40 years of unrivalled handson leadership experience in successfully transforming emergency management, public safety and national security.



**Zefonar** is the only global advisory service that offers a proven outcomes-driven and requirements-led approach to future-proof the design to delivery of an effective **Public Warning System**. Our objective is helping clients with "**Getting it right first time**". We focus on guiding national project teams along a clear programme trajectory to success. Our tried and tested step-change formula helps accelerate both the crafting of a persuasive business case and full implementation of **Article 110, European Electronic Communications Code** by June 2022.

We are unrivalled specialists in this field, having led the project team for Australia to deliver one of the world's most frequently used Public Warning Systems. Partnered now with Public Safety Communications Europe (PSC-Europe), **Zefonar** provides multi-agency user-workshops to get you started and project assurance to keep you on track. We are also ready to help with post-implementation evaluation to aid continuous improvement.

Throughout 2020, we will be running again our highly acclaimed series of facilitated workshops that guide Member States and Industry through the three critical steps for success:

- 1. Overriding Design Principles and the Operational and Functional Requirements for an effective all hazards, all agencies Public Warning System platform that maximises the return on investment;
- 2. The Governance, Policy, Regulation and Standards Framework and Funding Options, and
- 3. **Operational Readiness** (business transformation of the Public Warning System user-authorities in readiness for the launch) and **Community Education and Preparation** (to prepare the population).

#### Contact us now to discuss how our services can transform your public safety projects:

Email: enquiries@zefonar.com Web: zefonar.com Mobile: +44 7973 253 999

#### Zefonar Advisory Limited

UK Registered Company 11323903

UK Crown Commercial Services, Framework Agreement Supplier of Digital Outcomes and Specialists 4 Services

# Also online on our NEW Website www.companies.whoiswho.eena.org

This publication provides an overview of companies that are part of the EENA community.

For further information, please visit our official website at <a href="https://www.eena.org">www.eena.org</a>.

Do you have questions or comments? Contact Jérôme Pâris at jp@eena.org.



