#connectingthedots

Your guide to public safety solution providers.

THE WHO IS WHO HANDBOOK IN THE PUBLIC SAFETY INDUSTRY

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Your guide to public safety solution providers.
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 more: EENA’s must-have 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 the main 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 EENA members. Learn more about EENA membership here.

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
**Quick Actions**

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Looking for specific information? Are you interested only in one type of service or product? We’ve got your back. All companies have dedicated keywords to indicate their area of expertise (and make your life easier). You can search for specific keywords or simply take a look at the summary below to find the companies best suited to your needs.

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| AVL (Automatic Vehicle Location) | | |
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We are a company that manufactures and propose Anti-drone complete systems designed to protect public and private strategic and other important facilities, various activities that collect a huge number of people, private property and their owners from unauthorized and unwanted intruders of UAVs (Unmanned Aerial Vehicles).

Such UAV invasions can present a different degree of danger to objects of protection, not excluding the possibility of using them for various terrorist acts.

A distinctive feature of our Anti-drone systems is the ability to prevent a potential emergency incident by stopping a moving UAV at a safe distance from a protected object or event, landing it and making it impossible to continue the flight.

Mission

We see our mission in protecting the immunity of various objects of State importance, private business, activities related to a huge gathering of people and each person individually, his property and space.

We guard your industrial, commercial and private property, strategic and important objects, the environment and your life from unwanted UAV invasions.

For that we insure with our Anti-drone complete systems your effective protection and security.

Potential airspace attack targets.

Objects of a prohibited or undesirable UAV invasion can be:
- airports,
- sea and river ports,
- railway stations,
- nuclear, hydro and thermal power plants,
- oil producing enterprises and platforms, oil refineries and oil storages,
- gas producing and processing plants and storage,
- tankers and gas carriers,
- chemical factories,
- prisons,
- drinking water sources,
- government agencies,
- private properties, including large yachts,
- public events such as: rallies, demonstrations, football matches, concerts in large open areas and many others ...

Our Anti-drone complete system ROCON prevent, stop and neutralize such an attacks.

Potential threats and dangers expected from the airspace attack.

Terrorists and plotters can use UAV invasion for:
- drop of explosives,
- drop of hazardous chemical substances,
- illegal surveillance,
- illegal goods air transportation (lightweight weapons, drugs, etc.),
- riots and panic organization,
- using a drone as a firearm,
- dangerous rapprochement with airplanes and helicopters,
- collision with buildings and structures,
- commercial and household espionage,
- eavesdropping,
- invasion of privacy...

Our Anti-drone complete system prevent, stop and neutralize such a dangers.

**Products**

1. **Anti-drone complete system - ROCON: radar-optical complex for detection, tracking of ground, water surface and air targets, identification and neutralization of small class UAV.**

The system can detect moving objects (targets) at a great distance, such as airborne like UAVs, ground like people, cars, others and waterborne: yachts, boats, runabouts and notify the protected object of the perceived danger. In addition, the systems themselves can be mobile, installed on specially equipped vehicles or watercrafts, Our Anti-drone systems provide the possibility of integrating them into the existing global European and other telecommunication networks — warning systems of suspected or occurred emergencies and making decisions about the necessary measures to prevent them or to eliminate their consequences.

The issues of guard, protection, and safety of airspace - are issues of cooperation with public and private companies-customers. This in turn imposes on us a high degree of responsibility and the need to respect the confidentiality that we guarantee to our customers.

We can demonstrate the efficiency of our systems at demo spots and prepare an individual projects to protect your objects, taking into account your specific tasks.

2. **Anti-drone portable radio-electromagnetic complex for neutralization of UAV (unmanned aerial vehicles) - “STUN”**

Intended to be used for neutralization of remotely controlled UAV and drones located on the ground and water surface. The mode of operation of the electromagnetic suppression complex is based on interrupting of the operation, data transmission and navigation channels. The result is the failure of the flight task, the termination of the operator's control and navigation disorientation. As a result, the UAV stops moving along the route (loses control), lands in a safe mode at the place of the impact or returns to the starting point of the route. Drone restores its operability when the suppression stops and (or) when rebooting. No material injury to the owner of the UAV.

Generally, without the using of special optic accessories, the maximum range of visibility of drones by the operator is 500 meters, what is enough for the portable unit to neutralize the flying drone. Transportation and application by only one person, ergonomic design, weight 5.5 kg. Operating time in radiation mode – up to 4 hours. Special skills and experience are not required. Portable Anti-drone complex – STUN has been successfully tested and used during 2018-2019 on time of different occasions and events.
Services

• Rental of Universal Anti-drone complete system - ROCON with or without an operator.
• Rental of Portable STUN with or without an operator.
• Operators training.
• Individual projects for the protection of your object in accordance with your own specific conditions.

More information

- 07.06 – 09.06.2017 Participation at EBAN (European Trade Association for Business Angels) Annual Congress 2017 in Malaga, Spain.
  Thema: Life, Innovation and Investment in Our Connected Universe.

- 15.09 – 19.092017 Participation at 6-th User Congress organized by the Company AMST-Systemtechnik GMBH in Grace, Austria.
  Presentation and demonstration of the function of the Portable Anti-drone complex – STUN.

- 30.05 – 02.06.2018 Participation with the own booth at HEMUS International Exhibition in Plovdiv, BG.
  Demonstrations of the function of the Portable Anti-drone complex – STUN.

- January 2018 – present time R&D Project: Design and manufacture of multi task transformable UAV.
  Planned start up of the serial production - beginning of 2020.

  Thema: Digital Discovery and Transformation of our Universe

- 20.09 – 23.09.2018 Participation at Drones & Public Safety EENA (European Emergency Number-112 Association) Summit in Brussels, Belgium

- 23.12.2018 Membership in EENA
- 10.01.2019 Membership in Bulgarian Association Defence Industry Club

- March 2019 – Beginning of the R&D of the new project Drone – Truck transformable for payload of 50 kg
  Planned start up of the serial production – beginning of 2021.

  Presentation of our Anti-drone complete system – ROCON for the integration into the existing European and
  Global telecommunication emergency systems.

Dipl. Eng. Naum Sidorenko
CEO
n.sidorenko@sidorenko.net
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 a wide portfolio for public safety. This portfolio combines assets 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.

Meet Airbus

Ali Helenius
Head of Strategic Marketing & Technology
ali.helenius@airbus.com
Alcatel-Lucent Enterprise has an extensive emergency services experience and expertise, offering advanced Digital Government Solutions (https://www.al-enterprise.com/en/industries/government) to key players such as fire brigades, police brigades, 112 and PSAP service providers across the world.

Alcatel-Lucent Enterprise emergency and public safety solutions are fully integrated with multimedia communications solutions as part of an end-to-end network solution. They include:

- Emergency call localization, routing, management, collaboration and recording
- Multi-vector notifications services to on-site and remote personnel: voice, SMS, voice guides
- Location-based services and notifications to mobile teams or citizens in case of public emergencies
- Multimedia collaboration and conferencing capabilities for on-site security teams, mobile teams and PSAP teams with Rainbow CPaaS (Communication Platform as a Service): voice, chat, video, screen and file sharing
- IoT/connected objects integration and control (city sensors, video cameras, etc) with Rainbow CPaaS (Communication Platform as a Service)
- WiFi6 connectivity: access points, network management, network security
- Enterprise-grade voice platforms and services
- Secured and highly-available networks
- Services redundancy and availability complying to public safety requirements

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. www.al-enterprise.com

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

Fatima Elleouet
Government Business Development
fatima.elleouet@al-enterprise.com
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/](https://www.allianz.com/), Allianz Partners operates under four global commercial brands - Allianz Assistance, Allianz Automotive, Allianz Care, Allianz Travel. Trust is a very 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.


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Marjorie Simon
Head of Connected Car Assistance Services
marjorie.simona@allianz.com
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.

Meet AnthroPi

Florent Da Rocha
Business Developer
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We create critical software and infrastructure for public safety control rooms.

Specifically, we deliver innovative and market-leading contact management and integrated communications and control systems (ICCS), computer-aided dispatch (CAD), customer relationship management tools (CRM) and location solutions, on premise and 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. Over 69% of UK police forces use our technology, 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.

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
- Computer Aided Dispatch

**Cortex | 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.

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

**Aspire | Contact Management Solution**

Aspire® is a contact management solution that gives operators the information they need to make decisions. Using telephony integration, Aspire® 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.

Aspire® 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.

Location Tracking
Our location tracking service is a powerful tool for tracking vehicles and assets in the field – including service vehicles, emergency vehicles, public transport vehicles such as buses, trains and more, as well as radios and mobile equipment – directly from the control room. This intelligence enables graded service provision through managing drivers and crewing staff effectively. For example, using the precise location of all available resources, enables the operator to allocate the vehicle that will arrive at the destination fastest.

Revolutionise your control room with our integrated software solutions.

Telephony | Connecting your control room
We understand the vital role telephony plays within the control room in helping you communicate with the public and, ultimately, save lives. That's why we offer a variety of different telephone systems, including Avaya, Cisco, Nortel and Ericsson, as part of your control room solution.

When you work with us, you'll have a complete end-to-end solution from CRM through to ICCS, fully supported by the very latest in telephony systems.

Not just your traditional telephone
Boost your control room's effectiveness by adding multiple channels onto your workstation's capability. As well as telephony, your agents will be able to handle interactions via social media, SMS and web chat with skill-based routing helping match demand appropriately.

Sue Lal
International Business Development Manager
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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 52 provinces. ASELSAN DMR System is implemented in 16 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 prov 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.

Mehmet Sevket Ergin
Business Development Manager
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ATL Tech is a company specialized 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.

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 minimizing 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.

Anar Aliyev
Director
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Atos is a global leader in digital transformation with annual revenue of over €11 billion and 110,000 employees serving a global client base in 73 countries. As a long-time specialist in digital solutions for Homeland Security and Defence, 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, counter-intelligence, anti-terrorism, border-control and 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. Anywhere organizations such as police, fire brigades and emergency medical services 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 system, fitting the needs of public safety organizations in multiple domains. It can cover the entire emergency management lifecycle, from call handling and dispatching to first-responder intervention and event escalation. The GEMMA emergency call handling and computer aided dispatch software helps PSAP personnel qualify and prioritize calls and efficiently respond to events, and ensures a multi-level and multi-agency cooperation by processing and sharing information in real time, securely managing large amounts of actionable data, and adding secure mobile technologies. The GEMMA emergency management system has been chosen by public safety customers around the world, for nationwide systems such as Romania, for regions such as Galicia in Spain, or for major cities such as Paris.

### Network and unified communications solution

- **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 Router, a module extension to OpenScape Voice that supports NENA and EENA architecture and standards for Emergency Services Routing Proxy (ESRP) capabilities. OpenScape Emergency Router is a highly available and scalable system, preserving media during failure conditions and, in concert with the Atos Policy Routing Function (PRF), ensures all calls are processed according to rules and policies. Combined with Atos’ 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 field
forces and control room (multi-technology), and records communications between command and 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 movement of mobile intervention forces, including various Point 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 analysing 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 Computing 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.

- **Atos Multi Agency Interoperability Platform** services allows emergency responders to exchange diverse types of messages concerning the incidents they are involved in. Deliverable as ‘Software as a Service’ (SaaS) or on-premises, it provides a secure messaging hub for exchanging incidents between agency control rooms.

**Secure and tactical communications**

**Atos LTE** is an end-to-end offering for tactical, secure and resilient communications. Atos LTE is based on interoperable LTE modules.

- **Air-Lynx** is a range of 4G LTE / 5G private network devices that are compact and easily deployable in multiple configurations. This provides communication functions as push-to-talk (MCPTT) and advanced geolocation mapping features.

- **CitySafe** brings on a smartphone the essential features: 4G voice and data communication, a zoomable map with real-time geolocation of people, materials 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 population alerting solutions have been deployed by first responders, government and city services in Switzerland, Spain and Portugal.

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**Isabelle Delfosse**
Marketing and Portfolio Manager
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Avaya is a global leader in enterprise communications systems.

Avaya and our partners are crafting comprehensive solutions to meet the increasingly complex multi-channel communications and network requirements that are critical for successful Next Generation Emergency Services implementations. Avaya's core contributions to Next Generation Emergency Services are centered around our core competencies in:

- Contact routing and treatment (Voice, SMS, Realtime Text & IM, Video, Social Media)
- Intelligent contact filtering and prioritization to avoid resource overload and enable adequate and efficient incident treatment
- Multichannel Outbound communication and mass notification to enable case sensitive and location oriented communications to selected target groups and citizens
- Application integration into Command and Control room applications, rich interaction between media streams and application logic
- Virtual Network and Cloud infrastructures, prepared for high volume realtime traffic (CCTV, voice, video), supporting distributed, consolidated and integrated Emergency Services and Public Safety environments

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 our 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!

Markus Bornheim  
Practice Lead Avaya International - Public Safety & Emergency Services  
bornheim@avaya.com
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.

Bandwidth is proud to be the communications provider behind a diverse group of customers—from telecom-focused 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.

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**Meet Bandwidth**

![Bandwidth Logo](image)

**Tricia McConnell**
911 Product Marketing Manager
[tmcconnell@bandwidth.com](mailto:tmcconnell@bandwidth.com)
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. As of today Beta 80 serves 70 PSAPs and Control Rooms covering Law, EMS, Fire, Healthcare Continuity and Civil Defence. Every day, our solutions protect 40 million citizens 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 EENA Long Term Definition Document 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. Some of our solutions include Mobile CAD, ePCR, AVL, and apps for first responders. Beta 80 develops also 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.

Luca Roberto Bergonzi
Sales Executive
Luca.Bergonzi@beta80group.it
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](http://www.biss.hr)

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**Ivan Branica**

CEO

[ivan.branica@biss.hr](mailto:ivan.branica@biss.hr)
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 15 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.

Marcel Reissmann
Product Manager eCall
Marcel.Reissmann@de.bosch.com
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.

Meet Buehler

Hermann Bühler
Managing Director
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Capita Secure Solutions & Services is the UK's leading supplier of Public Contact and Control Room solutions with a 30+ year pedigree supplying mission-critical command, control & communication platforms to Emergency Services and other response agencies in the UK and overseas. Working closely with resellers and in-country system integrators Capita’s solutions are proven to deliver operational benefits and enhanced public services.

Core products:

**ControlWorks - The operational hub of a smart and safe city**

In the new world of smart and safe cities, “converged solutions” become the natural processing and workflow engine for new types of “contact”, beyond the traditional telephone call from a member of the public, that require specific management and resource deployment.

Using the configurable and granular workflows that join our solutions together, ControlWorks® can be deployed as the operational hub of a smart, safe and secure infrastructure integrating a vast array of external sensors and data sources with an organisation’s internal systems to provide a truly integrated and flexible platform.

Inputs from external sources provide triggers into ControlWorks®, generating incidents and providing key intelligence and operational information to assist an informed decision during the management phase.

The interconnectivity of intelligence systems, either owned by the organisation or through partner agencies, using ControlWorks® as the operational hub, provides an automated and/or manual ability to surface additional context to an event, enabling an informed response, even in instances when minimal information is provided by the initial triggering system.

Capita’s ControlWorks® is a next-generation control room and contact centre solution which puts transformation within grasp. It provides seamless interoperability with back office and other external systems to provide a major step-change in control room efficiency.

- Clear and intuitive user interface - instant visibility of resources and their location; integrates with existing technologies to drive one view of the truth regardless of which databases or knowledge repositories hold the information. It puts frontline officers immediately in the picture and can be up and running with virtually no disruption to current systems and procedures.
- Maximise collaboration - ControlWorks® can be deployed and used in an environment which promotes and maximises collaboration between other emergency responders and partner agencies. A ControlWorks® client could also be deployed at a partner agency if required to increase interoperability.
- Product suite flexibility - ControlWorks® combines the functionality of ICCS, CAD, Mapping and Contact Management, and can be deployed in Contact Centres, Control Rooms, Front Desks or Mobile Operations. Any ControlWorks® client can perform any role.
- A modular, scalable solution - ControlWorks® can be deployed as a modular system that meets the evolving operational needs of Public Safety agencies with each major module deployable independently and able to be built on as the requirements change.
ResponsEye – delivering enhanced situational awareness to Control Rooms
Delivered as 999eye, 911eye or 112eye depending on the single emergency number, or as ResponsEye where there is either more than one number or when in use by non-emergency clients, this unique service provides ‘on scene eyes’ to Control Room operators by streaming live video direct from a caller’s smartphone.

This enhanced situational awareness provides immediate INSIGHT which helps assess the scenario and, with caller’s location visible on integrated maps, better select the appropriate RESPONSE to the incident - either as a ‘real-time’, immediate response or for a ‘slow-time’, non-emergency follow up – while at all times considering the SAFETY of first responders and the public.

• Secure, one-time-use link sent to caller by SMS or email
• Video streamed direct to Control Room or, under low bandwidth environments, as still images
• Dynamic mapping and location-based services allow for accurate location of caller
• Ability to share the video or images with other control room operators or responding resources across multiple agencies if required
• Works on any smart device and operating system - no need to download any apps
• Media immediate accessible for review and storage for evidential and investigative purposes

Corinne Cassidy
Head of Alliances
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**Carbyne** is a global leader in public safety technology, enabling real-time emergency communication for citizens and Public Safety Answering Points (dispatch centers). Their Next-Generation 911, cloud-native incident response system sits on a global infrastructure, supported by a powerful ecosystem. Carbyne is the only Cisco Solution Partner approved for 911 worldwide, Delivering advanced IP-enabled communication features, AI-enriched response functionalities, IoT-enabled capabilities and state-of-the-art caller solutions, Carbyne is delivering the future of public safety and first response, today.

**Carbyne’s vision**

Carbyne views Next Generation 911/112 as being far more than just pictures and text to 911/112, and improved routing. We view NG911/112 as being an opportunity to use proven technologies to re-envision emergency response.

To understand what Carbyne is building towards, you need to imagine a world where a baby monitor detects an irregular, and possibly dangerous, change to a baby’s breathing pattern.

Before anyone can react, the monitor reaches out to the 911 platform and using AI, the platform assesses whether the baby is at risk. If the baby is at risk, the platform pulls in health records if available, and makes an initial assessment of the threat. Then, the 911 platform:

- initiates a call between a 911 telecommunicator and the child’s parents
- sets off alarms in the house in case the parents aren’t home,
- pushes triage instructions to the parents through a text, and
- sends relevant information to EMS to prep them for dispatch.

And all this happens in seconds, **before anyone in the house has woken up. This is Carbyne.**

**Carbyne’s products: Technology solutions that are focused and flexible.**

Carbyne’s NG911 cloud-native call handling platform sits on a global infrastructure, supported by a powerful ecosystem that delivers advanced IP-enabled communication features, IoT gateways, and AI-enriched automation.

**C-Lite, Carbyne’s NG911/112 Plugin. Unleash the Power of Rich Data in Legacy PSAPs**

Roughly 80% of calls to emergency call-centers (PSAPs) originate from smartphones. c-Lite enables rich data - from the caller's device and beyond - to be shared with call-takers, dispatchers and first responders, without the need to install applications on callers’ devices. The enhanced situational awareness resulting from this data helps call-takers react faster and smarter. Rich data includes:

- Dynamic, device-based location from more calls than any other solution in the industry,
- Telecommunicator-controlled video streaming from the caller device, smart-city cameras, drones and more,
- Silent messaging with c-Lite’s browser-based chat
- Caller profile information,
- And more
Key features

- Device-based location provided for more calls than any other platform in the industry. Whether a caller calls 911 or the non-emergency lines, device-based location is possible.
- Deployed as a Plugin, so it sits on top of the existing systems. There is no wasted investment, no integration needed, implementation in a few hours.
- Integrated with Cisco Smart Cities. Carbyne is the only Cisco Solutions Partner certified for 911/112 worldwide.
- Proactive servicing - Cloud-native approach ensures Issues are fixed before the client is even aware.
- Cloud-driven redundancy and resiliency, providing unrivaled uptime.
- Live streaming video from people's phones or nearby smart city cameras, controlled by the call-taker.
- Cost effective. c-Lite is priced affordably, providing Emergency Call Centers key NG911 capabilities at a strong ROI.
- Instant messaging, meaning that callers who can’t talk, or who end their call unexpectedly can be contacted without triggering a text notification after a session has begun.
- 24x7x365 phone support if any problems do arise.
- Subscription pricing, new features being added regularly with no incremental fees.
- Future-ready. Designed and built with a flexible architecture to handle different types of data and data sources, c-Lite is constantly evolving.
- Focus on the customer: Training and customer management done by an individual with significant PSAP experience.

**c-Live, Carbyne’s NG911 Call Handling Product and Incident Response Hub**

c-Live provides telecommunicators with an intuitive, easy to use NG911 call handling solution that serves as a hub for a wide array of rich data sources. Built on Cisco’s powerful and feature-rich Unified Collaboration platform, With AI-driven capabilities and the ability to take in data from an array of diverse sources, c-Live is prepared for the future while delivering advanced capabilities – and results – Today.

**c-Live Features**

**INFORMATION. ENHANCED**

Roughly 80% of calls to emergency call-centers (PSAPs) originate from smartphones. c-Live enables rich data, from the caller's device and other sources, to be shared with call-takers, dispatchers and first responders. Rich data includes pinpoint location, video feeds from various sources, smart city sensor info, IoT device data, caller profile information and more.

**CLOUD-NATIVE. SECURED**

c-Live sits on a robust infrastructure which resides on AWS’ highly secured GovCloud. This minimizes on-premise setup time and equipment footprint, reduces hardware capital expenses and maintenance costs, while providing unmatched high-availability and elasticity to easily scale-up and adapt to any workload changes.

**INNOVATIVE. INTUITIVE**

c-Live leverages advanced technology to provide a feature-rich user experience that is intuitive and easy to navigate. Built for NG911, c-Live has a consistent look and feel across all sections, enabling fast and efficient handling of call-taking tasks.

**TELECOMMUNICATOR CONTROLLED VIDEO**

In situations where callers are struggling to explain their issue – whether they are panicked, or a young child, or have language difficulties, etc – video can be a literal lifesaver. c-Live can present telecommunicators with video from a caller’s phone, CCTV cameras, Smart
Cities sensors or other standards-based devices... and the call-taker doesn't have to view the video for it to be captured. They have full control.

EFFICIENT. ROBUST
c-Live provides PSAPs with all essential functionality required for effective call handling in the PSAP, while eliminating any elements or features which are never/ seldom used and distract from task. This includes dynamic conference creation with external and internal participants, one-click call transfer, call parking, an advanced and easily navigated contacts database, Intra-PSAP communication and more.

INSTANT MESSAGING
When a caller cannot speak for any reason, or if the voice call drops unexpectedly, c-Live's chat capability provides telecommunicators with a method of communicating to that caller without any notification sounds or vibrations for their device – even after the voice call has ended.

SIMPLE INTEGRATION
c-Live provides a simple and well-defined API for any 3rd party application that wishes to take advantage of the rich information it provides. This can include CAD systems, records management systems, analytics tools, etc.

INDUSTRY-LEADING LOCATION
There is no information more critical to 911 than location, and c-Live provides device-based location for more calls than any other solution in the industry. Pulling from multiple sources and presenting the best available, c-Live supports location information from:

- Advanced Mobile Location (AML). Whether obtained from Carbyne's own AML endpoint or from a 3rd party source, AML is the first choice for device-based location.
- Carbyne's mobile solutions. Carbyne's web-based c-All and the app-based c-Now can provide device-based location for many calls where AML is unavailable.
- Carbyne's indoor positioning. Carbyne's patented indoor positioning technology leverages crowdsourcing and statistical machine learning to deliver precise indoor location, including floor and room.
- ANI/ALI. For landline calls and calls where no device-based locations are available.

INCIDENT LOGGING
Next Generation 911 requires a fresh approach to incident logging. c-Live's incident logging functionality ensures that all available information - including caller details, location, video, chat, etc. - is stored and can easily be retrieved when needed.
Carmenta Public Safety has been supplying world-class emergency management software systems for more than 30 years – systems in which robustness and superior situational awareness are 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.

Whether you run an emergency response centre or manage a border control system – Carmenta is your trusted global partner.

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.

**Systems for emergency response and critical infrastructure protection**

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 CoordCom™**

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 ResQMobile
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.

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Steve Watson
Sales Director
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Celltick is a recognized global leader in mobile mass communication products and the world's largest CBC provider. Celltick CBC has been adopted by over 70 mobile operators around the world for both emergency alerting and commercial purposes. Celltick's CBC, that is part of Celltick MAGENTM (Mass Alert Geo Emergency Notifications) suite of products serves today over 1 Billion mobile subscribers in 20 countries. Celltick's CBC sends thousands of cell broadcast messages per day supporting CMAS, EU-Alert and general cell broadcast protocols.

Celltick MAGENTM suite includes the following products:

- **CBC** - Cell Broadcast Center, for mobile operators and government agencies
- **LBSMS** - Location Based SMS Alerts, for mobile operators and government agencies
- **MAGEN™ App** - emergency alerting native app, for government agencies and enterprises, available for Android and iOS devices
- **MAGEN™ SIM** - a unique SIM based app for emergency notifications, to assure 100% public coverage, for government agencies and mobile operators.
- **Command Post** - the control and management system for any of the distribution channels above, that is also used as a CBE for cell broadcast solutions. Aimed at government agencies and enterprises.

Possessing a very high-performance capability, Celltick's MAGENTM CBC has unique features including local and geo-redundancy capabilities on the application level as well as self-monitoring capability along the entire broadcast flow. The MAGENTM CBC may be utilized in both centralized or distributed topologies, managed either by the government agency or the mobile operators, according to the customer requirements. Celltick successfully utilized its MAGENTM CBC during the 2004 Tsunami disaster in Asia spreading across India, Thailand and Sri Lanka by instantly alerting its citizens in real time directing them to safety. Today Celltick works closely with the IDF (Israel Defense Force) on stretching its performance envelop to limits that have never before been reached to match up with Israel's unique threats.

Celltick also provides a unique patented interactive cell broadcast solution (ICB) that allows citizens to respond to the emergency messages in a single click. This allows rescue forces to get infographic views of the situation identifying the largest group of people who need help.

Celltick's MAGENTM LBSMS allows sending SMS bulks to specific users in affected areas together with the cell broadcast message or as a standalone channel. This solution has been successfully implemented in the Philippines by Globe in 2017. As in the cell broadcast case, these location-based SMS may be interactive as well, allowing citizens that need help to contact the authorities via various means.

Celltick's MAGENTM app has been developed for government agencies as a complementary solution for cell broadcast, or as a standalone solution. It is also aimed at large enterprises that wish to stay in
a continuous touch with its employees. Available on both Android and iOS, the MAGEN™ app includes detailed infographic reports on message delivery, reception and response and has a unique SMS button for a single-clip help calling.

Celltick’s MAGEN™ SIM app has been developed for government agencies as a complementary solution for cell broadcast, or as a standalone solution. Due to its OTA (Over The Air) uploading capabilities, it is the easiest way to reach out to mass mobile subscribers. It is available on all Java based SIM cards and requires practically zero integration efforts with the mobile operator.

Celltick’s customers include Vodafone-Idea, Airtel, BSNL, Beeline, Telia, Bite, Tele2, America Movil, Globe, Taiwan Mobile, Taiwan Star, APT, Mobifone, Dialog, Mobitel, VNM, and Israel Defense Forces (IDF).

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**Arlette Cohen**  
Admin Manager  
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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 PEMA 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. Website: www.cestel.es.

Fernando Ortiz
CEO
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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

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.

Contact:
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Dr Paul Dardel
Volunteer CEO
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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.

Hessel Aukes
Project Manager
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Comtech Telecommunications Corp. (Nasdaq: CMTL), is a leading provider of public safety solutions for wireless technology and we continue to demonstrate our dedication to public safety through the delivery of secure and reliable solutions.

Public Safety solutions offered:

- **Indoor location** – one of the only companies to provide seamless indoor and outdoor location, Comtech delivers accurate and reliable X, Y and Z access in real time and even in areas without GPS or mapped wi-fi.
- **Location APIs** – a complete, modular Location and Geo-Services platform designed for developers building applications for mobile, automotive or IoT public safety use cases. Platform includes positioning, search, enhanced local content, maps, navigation, geo-fencing and tracking via cross-platform APIs and SDKs supporting all leading operating systems.
- **Location-Based Services** – either in-network, hosted, or virtualized, we offer both active and passive location solutions to determine a mobile device or caller’s location.
- **Location Data Platform** - full Automatic Location Identification (ALI) functionality for 9-1-1 systems plus complete access and management of ALI information via a comprehensive ALI Database Management Service (DBMS).
- **Short Message Service (SMS)** - a compact, high-capacity, multiprotocol SMS delivery platform with multiple deployment options.
- **Wireless Emergency Alerts** – facilitates the origination and accurate delivery of geo-targeted emergency alerts to keep the public informed about life-threatening events.
- **Wireless E9-1-1, Next Generation 9-1-1 (NG9-1-1)** - an Emergency Services Internet Protocol network (ESInet) and seamlessly connects originating service providers with public safety answering points (PSAPs)

Comtech has over 20 years of experience developing and deploying public safety solutions. with location platform deployments in more than 70 mobile operators around the world. Additionally, we support nearly half of all U.S. wireless E9-1-1 calls and lead the nation in text to 911 and Emergency Services IP Network (ESInet) deployments.

Comtech understands the goals and objectives associated with deploying platforms for emergency, security and commercial LBS on 2G, 3G as well as the emerging 4G-LTE and 5G networks. At Comtech, we have an extensive experience deploying our technologies to be used for and comply with both government regulated public safety and security requirements, as well as Mobile Network Operator driven commercial use cases.

**Meet Comtech Telecommunications Corp.**

**Tom Magnusson**  
Senior Director of Global Sales  
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Corti is a revolutionary research-led healthcare startup that uses unsupervised and supervised machine learning to help dispatchers diagnose faster and more accurately by supplementing patient interactions with data from thousands of calls.

The company was founded in 2016 in Copenhagen, Denmark. Since then, the team has grown across Europe and the US, attracting talented team members who are dedicated to improving the way in which medical diagnosis is conducted all over the world.

Corti creates AI-drive decision-assistance tools for medical professionals. 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.

Corti is focused on developing the way in which healthcare organisations learn from everyday interactions and use this information to improve their processes. Artificial Intelligence re-defines the bounds of possibility in regards to data collection and interpretation. For example, by tracking questions asked and answers given, we can help interviewers with the triaging process by finding the fastest route to getting to the true issue.

Currently, Corti works used its machine learning models with emergency dispatchers, assisting with eliminating fatal errors and reducing their guesswork, most notably detecting cardiac arrest. Like a dispatcher, Corti analyzes everything a caller says and shares, and the data is sent through layers of artificial neural networks in real-time. As an emergency call proceeds Corti looks for patterns in the call data to help the human dispatcher be more thorough and efficient, never missing a single clue. The dispatcher ends up with clear advice from Corti during the call, enabling them to make faster and more qualified decisions and reduce errors. We 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.

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.

Andreas Cleve
CEO
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For Emergency Alerts / Reverse 112, our technology enables precise, accurate and reliable caller location information. Creativity Software (CS) is a European company that specializes in providing location solutions in support of emergency services.

Creativity Software (CS) has been innovating and delivering highly accurate and reliable mobile location technology for over 16 years. Advisory board member of EENA since 2010. First location specialist company to work with Google & Apple on making AML available in support of emergency calls.

With systems installed across 5 continents, covering more than half a billion subscribers, our software platform provides high-accuracy mobile location to support Emergency Services, Law Enforcement, Mobile Network Operators and Financial 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.

CALLER LOCATION
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 working on EU sponsored projects (HELP112 Phase 1 and Phase 2) that examine, test and currently support the deployment of AML across 7 member states. This project highlights the recognition of CS as a technical expert in all matters pertaining to caller location.

HANDSET AND MOBILE NETWORK EXPERTISE
This expertise is based on deep experience of both network and handset-based location technologies. For example, as far back as 2005 CS was assisting Motorola, Samsung and Nokia with the deployment of location-based services on their handsets across Europe, with no access to mobile network data.
On the other hand, in Colombia since 2015, CS has been delivering the highest accuracy location data based purely on mobile network data – i.e. without access to handset data. The accuracy that our systems generate is down to 50 metres at statistically significant values – and is audited by MINTIC - the Colombian Regulator. This illustrates how your needs for location data can be met, regardless of technology constraints within your country.

In summary, CS provides the following products relevant to the needs of Emergency Services:

- Reverse 112/Emergency Alert system that uses the knowledge of all subscribers across all networks at all times as the basis upon which messages are then sent to those within or near an area exposed to risk.
- AML compliant solution that delivers Android/Apple handset-based location information
- Network-based location solutions

All of these are delivered from the CS LocationWise software, which is used by government agencies to locate over half a billion people worldwide. We bring this experience to improve the effectiveness of the services that you provide in your country, and reduce the technology risk of deployment.

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Gill Taylor  
Marketing Executive  
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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 500 employees across seven global offices.

Paula Finkelstein
Director of Marketing, Public Sector
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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 gateways, 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, ...


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Deloitte is the world’s largest network of professional services firms, employing more than 263,000 professionals. With operations in over 150 countries and territories, including over 40 offices in Europe, Deloitte provides a comprehensive range of services across consulting, audit and assurance, tax, financial advisory and risk advisory to clients of all sizes, geographies and industries.

Deloitte has an established and reputable public safety and emergency services practice which services industry leading clients across the globe, ranging from national and local policing organisations in the UK, North Western Europe, Canada and Australia, to national and state based safety and emergency services organisations in the UK, Northern Europe, US, Canada and Australia. With over 2,500 specialist practitioners globally, Deloitte delivers a range of innovative and purpose-built services to its public safety clients. Deloitte’s solutions aim to address challenges encountered across the industry, including digital disruption, threats to cyber security, legacy technology systems, public pressure to improve citizen experience and increasingly data-driven decision making.

Deloitte’s flagship services focus on delivering technology-enabled business transformation, implementing innovative operating models and harnessing insights from data. These include:

- **Mission Analytics.** Implementation of mission analytics solutions to enable clients to better respond to changing public threat environments
- **Cyber Security Solutions.** Advisory and implementation of cyber security solutions to address increasingly prevalent and malignant cyber threats
- **System Integration.** Integration of contemporary technology platforms and migration of legacy data with a focus on DevOps, Agile, Cloud and System Architecture capabilities
- **Digital Policing Solutions.** Implementation of digital policing solutions to enhance operational policing technology and the digital experience of citizens
- **Mission strategy and Innovation.** Advisory and transformation of mission strategy and innovation, including the implementation of disruptive technologies such as smart cities, biometrics and blockchain
- **AI Assistants.** Implementation of AI Assistants that release staff from administrative tasks, assist in complex decision making and draw insights from the large qualities of digital information.

Deloitte offers a robust value proposition to its public safety and emergency service clients, which stems from its:

- Commitment to mission outcomes, adding value to the front line through practitioners who are fluent and experienced in public safety and emergency operations and culture
- Capabilities which span the end-to-end life cycle of public safety and emergency services, ranging
from advisory to implementation and operations

- Leading credentials and experience with large technology players across the globe
- Demonstrated ability to drive collaboration across public and private sector entities to facilitate strategic relationships and outcomes.

Deloitte also has established partnerships with a number of leading technology and software vendors and industry bodies, which it leverages to deliver wrap-around solutions for public safety and emergency services. To find out more information about our practice or our insights on the industry, please visit our website www.deloitte.com.

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Peter Overton
Lead Partner, Australian Security and Justice Sector
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Founded in 2003, Deveryware is a French company that specialises in the design and development of innovative real-time geolocation solutions that relay on an industrial Platform, The GoeHub.

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 7 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 (ETSI TS 103478), delivering interoperability to emergency Apps, facilitating roaming and improved accessibility to emergency services for citizens experiencing disabilities or impairments. The Deveryware GHALE platform was launched in the second half of 2018 and is now in commercial deployments with the Emergency Services sector across Europe. GHALE, as part of the EENA-PEMEA Programme, is helping EU PSAPs and Application Providers to tests and deploy PEMEA using GHALE services (8 countries involved).

In addition, GHALE has successfully demonstrated full interoperability of PEMEA core services as well as advanced video calling with several other vendors during the latest ETSI Plug Test NG112. GHALE enables PEMEA to interwork with SIP-based NG112 solutions and enables easier roaming for OTT SIP-users since ESI.net discovery is performed using easy to implement PEMEA functions and bridging location and user information from PEMEA into the ESI.net-based PSAP.

Don't hesitate to contact us for a demo 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!

Bertrand Casse
Public Safety Director
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DGT is the provider of comprehensive telecommunication and IT solutions. The company develops and integrates the innovative technologies of fast data, video and voice transmission, Internet access, and broadband multimedia services access using traditional media and convergent networks.

DGT was founded in 1991. The company represents Polish capital (100%), employs Polish engineers, and incorporates unique solutions. The granted certificates: ISO 9001 - the Quality Management System certificate and AQAP 2110 confirm the highest quality of the offered solutions.

DGT solutions are used by the Ministry of Defense, the Ministry of the Interior and Administration, mobile and traditional telephony operators, as well as by the representatives of the public administration, industry and business.

Our company specialises in designing software and electronic equipment as well as implementing ICT systems. We have our own production potential, enabling us to manufacture our own equipment and provide its long-term service.

1. DGT PTT Connect

DGT PTT Connect is a Push-to-Talk solution where calls are made using standard or enhanced Android smartphones. The smartphones must have a DGT app installed and Internet access (GSM, Wi-Fi).

DGT PTT Connect offers all the functions available in trunking systems, using wireless data transmission. The system does not require the construction of dedicated radio infrastructure and has virtually no geographic limitations.

As a DGT PTT Connect system user you can make group calls (one-to-many), individual calls (one-to-one) and priority calls. You can also send text and multimedia messages to individuals or groups. The task management module streamlines team work. The positions of all group members can be tracked with the integrated map module. A motion sensor operating in three dimensions can generate an alarm that is activated when a user remains motionless for a specified time. If the user does not react to the alarm, a call specifying the position of the casualty is sent to the other users.

DGT PTT Connect can operate as an autonomous solution or in conjunction with any radio system. This means that a smartphone can communicate with two-way radios. This solution requires a RadioBox linking the DGT PTT system with the radio system. Radiobox now supports TETRA, DMR, NXDN, P25 and analogue systems.

DGT offers individual solutions tailored to the specific needs of each customer. The solution can meet the expectations of many organisations with respect to internal communication, management and security. It can also enhance the existing means of radio and/or telephone communication with PTT communication using smartphones and similar devices.
Selected features:
- two-way-radio-like voice communication between application users
- voice communication with two-way radio users via the DGT MCS system
- group calls
- individual calls
- group and individual SDS messages
- user's GPS location
- map and visualisation of user locations within a particular group
- high level of communication encryption
- transmission channel using GSM operator network or WiFi
- telephones with a dedicated PTT button can be used, e.g. Kyocera
- compatible with headsets equipped with a PTT button
- multiple options of using Bluetooth sets (headsets, earpieces etc.) , call recording

2. DGT Cyber Protektor - Secure communication in the face of a real threat of cyber-attack

Is the threat of cyber-attack real?
Cyberwar is part of the reality that surrounds us. It is fought with the purpose of causing maximum
damage using the latest technologies by intentionally disrupting the interactive, organised circulation
of information in cyberspace. The reasons behind it are political, ideological and economic, especially with
regard to infrastructure of major importance for the economy and/or the country's defence.

Each ICT system has been or will be affected. The question is: when?
According to the reports prepared by the Polish Ministry of Internal Affairs and Administration on the
basis of data provided by the Police General Headquarters, Internal Security Agency (ABW), Customs
Service, Ministry of Digital Affairs and the Ministry of Justice, cyber-attacks are increasingly ordered
by foreign governments. It must be assumed that attacks on ICT systems operating in the institutions
responsible for security in our country are unavoidable.

DGT Cyber Protektor – a product for a new era
Cyber-attacks can successfully block or interfere with the operation of ICT systems on IP networks. In
the face of known and unknown cyber-threats, DGT has developed a solution for its communications
systems, ensuring the maintenance of critical voice communication even in the event of a total paralysis
of the IP network. Our customers benefit from a standard protection of the IP layer, while ensuring
separation of the layer in which critical voice services are executed.

Key Features

Innovative and unique
Modern ICT solutions today are practically completely based on IP infrastructure. Any as firewall or
session border controller, provide a more or less effective protection of cyber-attack. It is impossible to
provide complete security against new, yet unknown attacks or vulnerabilities of the IP layer. DGT Cyber
Protektor, in addition to IP layer protection, from the IP, which cannot be blocked or infected by cyber-
attack.

Versatile
Each DGT telecommunications system can be upgraded to support DGT Cyber Protektor. Having been
specially developed to enable the user to keep most of the existing infrastructure, of upgrade significantly.
Each new DGT system is equipped with the DGT Cyber standard feature.
Cybersecurity

DGT Cyber Protektor is perfectly aligned with the current 2017–2020 Cyber-Security of Poland. Despite the rapid increase in the number of cyber-threats, they are still ignored due to the great extent of risk. Each system (including systems that operate in the critical area) can fall victim to a cyber-attack. DGT Cyber Protektor ensures critical communications are secured against cyber-attacks.

Layered structure – multiple protection levels

The IP layer is protected in accordance with best practices. Nevertheless, it must be assumed that it is infected or disabled. Therefore, the DGT Cyber Protektor solution uses a layer based on a different technology. This layer can operate entirely autonomously, even if the IP layer is completely disconnected/disabled.

Technology redundancy

DGT systems use IP technology to provide multiple services and functionalities. Also, provided by means of a standard digital switching network, which is available in the right system architecture, available in DGT Cyber Protektor solution, we could redundancy. When the IP technology fails, the other technology maintains communication.

Open to future upgrades

Telecommunications is constantly evolving. New technologies are emerging, offering sometimes also carrying new threats. DGT Cyber Protektor is designed to enable expansion and integrate future technologies while maintaining the security of critical communications.

New functionalities

The DGT Cyber Protektor solution above all provides system security, but also modern (UC) functionalities, e.g. video calls, calls via a web browser, and many others, previously users. This has been made possible by redesigning the system and providing it with and software.

Adam Pogorzelski
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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.

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 March 2017: Lives Saved by Drone


Romeo Durscher
Director of Public Safety Integration
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Over 80% of all emergency calls are now made through a mobile device and all current methods of finding the caller are insufficient. They are only able to provide an estimation of a caller’s location, at best is represented as a blue dot or circle on a map at street level. The Public Safety Industry needs dispatchable, accurate address information. If you’re calling from an apartment block or other urban location, current methodologies cannot locate you. The significance of this issue is best exemplified by the NENA statistic of 10,000 US lives being annually lost due to this problem.

Meet **ELi Technology**, a Canadian company who has patented and developed “Emergency Mobile Location” (EML) methodology to resolve this pressing public safety issue.

We have been dedicated to resolving the ongoing public safety concerns surrounding inaccurate mobile location information. Our thoroughly tested EML utilizes the existing ecosystem of WIFI access points and handset set location to provide a multitude of information pertaining to a 112-mobile call.

EML benefits all 112 stakeholders, namely 112 Operator, Communications Companies, Telecom Regulators and Consumers. Implementation is highly cost efficient, with faster response times faster resulting in significantly improved caller outcomes.

EML provides Dispatchers with accurate, real-time, indoor, rural and urban location information:
1. Verified, dispatchable, civic address
2. GPS; latitude and longitude.
3. Vertical reference (actual floor/apartment number)
4. Technologically neutral
5. GDPR compliant
6. Technically audited
7. Multitude of additional call information including altitude, battery level readings and more

To assist in ongoing development and testing, we have also built a partnership with Kista/ Urban ICT Arena in Stockholm Sweden. We call it the **Kista 112 Initiative** and it’s the world’s first open end-to-end IP development centre and testbed. With Kista 112, we now have a platform within Urban ICT Arena that allows us to conduct rigorous, transparent, and replicable testing of our methodology, including benefits and outcomes. It also affords us the opportunity to invite other innovators to join us, to develop and demonstrate their technologies and programs alongside our own.

112 mobile localization, including dispatchable address and indoor location is now available for rural, urban and indoor 112 mobile calling. If you would like to know more about EML and ELi Technology, please contact us.

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**Emily Valiant**  
Director of Communications  
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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.

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.

Meet EMERES

Albert Israel
President & CEO
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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

Meet ER24

Werner Vermaak
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Esri, the global leader in GIS (Geographic Information Systems), is forging new ground in the emergency call-taking industry with unprecedented investments in research and development on next generation 112 capabilities for better information sharing in and between PSAPs. Our platform provides a canvas for intelligent collaboration, operational awareness and cutting-edge capabilities that consume and manage sensor data, IP intelligence and the IoT (Internet of Things). PSAPs are using Esri to improve CAD and RMS solutions with new address database management tools and techniques for digital transformation of outdated analog methodologies.

Esri supports the PSAP with capabilities in address database management, geospatial tools for service area creation and maintenance, real-time analytics and field mobility... on any device, anytime, anywhere.

Esri’s scientists 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 40 years. A proven technology that brings clarity to location data and the ArcGIS platform offers a stable environment for designing and managing solutions with “out of the box” capabilities and a growing library of free templates and tools.

Esri • THE SCIENCE OF WHERE™

Meet Esri

Mike King
112/CAD/RMS Global Industry Manager
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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.

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 eMID) 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.

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 technical 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.

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**Volker Schulze Neuhoff**
Sales Director
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Everbridge was founded in 2002 in the aftermath of the tragic events of 9/11 with the mission of helping to keep people safe amid critical situations. Everbridge provides a solution for citizen communication and public warning which ensure messages are received without fail when life safety is at risk.

Over time we have significantly broadened our capabilities to meet customer needs and in April 2018, Everbridge acquired Unified Messaging Systems (UMS) based in Oslo, Norway. By uniting the proven mobile alerting, crisis management, and notification applications from UMS with Everbridge’s market-leading Critical Event Management (CEM) software platform, we have created an unparalleled set of solutions to help customers assess threats, initiate and manage incidents, and notify the affected population and first responders at a regional, municipal or countrywide level or even across an entire continent.

Today Everbridge Critical Event Management solutions are used by over 4,800 organizations to keep people safe and avoid and/or lessen disruption to operations when such events as severe weather, workplace violence, active shooters, terrorism, IT and power outages, environmental spills, brand attacks on social media, product recalls, and medical emergencies occur.

About Everbridge Public Warning

Everbridge Public Warning is a solution for managing an integrated response to any critical event which poses a threat to life or property. The platform is designed to be both flexible and scalable providing a choice of communications channels including (but not limited to) sending messages via location-based SMS, cell broadcast, Radio, TV, sirens, electronic display boards, social media, push notifications to mobile apps and email, voice messages and more.

Customers

Everbridge Public Warning has an unparalleled record of reliability and is trusted by more national governments than any other solution. Our public warning system is used in diverse use cases from the Scandinavian fjords to Cyclones in India with successful national alerting systems in Sweden, Netherlands, Singapore, Iceland and Greece along with regional alert systems in Norway and India. Everbridge reaches over 500 million people worldwide and in 2019 we began implementing the national alerting system for the entire continent of Australia.

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

Unique Advantages of Everbridge

Everbridge is a worldwide leader and pioneer in the development of population alert systems using multiple technologies to leverage existing telecom infrastructures to send critical alert messages. Everbridge Public Warning is the only solution that has been deployed on a national scale for dissemination of both cell broadcast and location-based SMS alerts. With our location-based SMS capability and leveraging the telco infrastructure, it is possible to ascertain how many people are in a target area and send messages to everyone in the area connected to a cell tower without predefined databases of mobile phone numbers.

With Everbridge’s technological prowess, authorities can benefit from higher situational awareness before, during and after disasters. The advancements in location-based alerting offered by our solutions allow authorities to ascertain population distribution in the affected area without violating citizen privacy.

The location-based alerting technology can also be used by governments to alert their travelling citizens, should untoward incidents occur in any particular part of the world.

The latest instance of reliability and scalability of Everbridge’s alerting solutions was in May 2019, when authorities in Odisha, India used the platform to reach out to 12 million people during Cyclone Fani, a high-end extremely severe cyclonic storm—the equivalent of a high-end Category 4 major hurricane, the likes of which had not been seen for nearly 2 decades in Odisha. The efforts of the authorities, including evacuations, search and rescue, disaster shelters and the usage of Everbridge’s alerting platform for informing citizens reduced the fatalities by 99.3% in Odisha, when compared to the cyclone storm of similar intensity in 1999.

Summary

Built with extensive professional knowledge gained from working with governments and first responder groups across the world, our solutions are capable of saving lives and minimising material damage before, during and after disasters.

Everbridge delivers:

- Unparalleled track record in public warning, having the greatest number of active and successful deployments of national alerting systems in the world
- Proven capabilities in location-based alerting, with solutions that are capable of using cell broadcast and location-based SMS using the same platform. Everbridge is the only platform that has proven, successful implementations of both technologies at national level and also completely conforms to article 110 of EECC.
- More than 20 years of experience in the field of emergency and mass notification with more than 1200 customers, reaching over 500 million globally
- Solutions offered on hosted, cloud-based model as well as customized platform deployments
- Flexible solutions that can be customized according to the needs of country / region. This helps meet functionality expectations and budget constraints.

For more details, please visit: www.everbridge.com

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About Ford Motor Company

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, 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 Euro NCAP Advanced Award.

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

Emergency Assistance Free Training Materials

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

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

Educating to Help Save Lives

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

**eCall Overview**

eCall** 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.

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**Esra Demirhan**
Emergency Assistance / eCall Engineer
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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 service-oriented 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.

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Reinard van Loo  
Senior Advisor / Subject Matter Expert Public Safety  
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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.

Meet GEDICOM

Thomas Belkowiche
Commercial Director
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Genasys is a leading provider with more than 20 years of experience in critical communications and advanced location-based mass messaging solutions, mainly focused in Public Warning Systems.

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**

A mission-critical, efficient, modular and scalable solution, which allows to use multiple channels to:
- Maximize the covered population
- Minimize the time needed to send a warning
- Get the attention of the people
- Send the information in different ways to guarantee a correct understanding of the messages

Our multi-channel approach is key to reach all these objectives:
- Mobile network based solution to send located-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, Whatapp, Google Public Alerts and Youtube

**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.

Please, for more information do not hesitate to visit our website http://www.genasys.com

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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).

GEOS360° – This membership is designed for people that are traveling or working internationally. GEOS360° is a full crisis management resource that offers the ultimate protection in potentially high-risk areas.
Operating internationally, GoodSAM (Smartphone Activated Medics) solutions are used by ambulance, police, fire and other services, such as hospitals and GP surgeries, to support a host of clinical and emergency situations across the world.

Our first innovation, **GoodSAM Cardiac**, provides the world's most advanced emergency alerting platform bringing together a community of over 60,000 highly governed trained and trusted Responders. The system integrates with Ambulance Service CAD (computer aided dispatch) systems to trigger bystander response in the minutes before Ambulance arrival. By harnessing CPR skills in the community, the system has saved lives globally. **GoodSAMPro** provides a sophisticated Community First Responder (CFR) dispatch system supporting statutory dispatch beyond cardiac arrest.

Our newest innovation, **Instant-On-Scene**, enables emergency services to see the scene and patient via a video link - with no app download required. Working on any smartphone and any network, Emergency Services can send a text to any smartphone which, when clicked, generates a video stream and provides precise caller location. Video also contains Vital Signs technology, enabling pulse rates of multiple patients to be read simultaneously. Video can be shared across organisations, as well as with personnel on the ground and in Control.

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**Professor Mark Wilson**  
Medical Director  
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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, multi-path, 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, OS-agnostic 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.
Meet Heartrunner

Heartrunner Sweden was established in its current form in 2016. The company was founded by resuscitation experts, researchers and techies with a strong belief in the power of volunteers we are proud to provide the Heartrunner system. The Heartrunner system is a reliable supply-and-demand system that recruit volunteer lifesavers in sudden cardiac arrest. Our system is tried and tested in operation since 2014 and over 18 000 alerts on suspected cardiac arrest are sent since the start.

We believe that volunteers can be a valuable complement to ambulance and other resources in the first critical minutes of a cardiac arrest. Volunteers download our app and can be alerted if they are nearby the victim and perform CPR and use an AED to increase the chance of survival. The Heartrunner system is currently active in Sweden and Denmark with over 110 000 users ready to save lives. It is easy to configure the system if your region want to let anyone who knows CPR to download the app from Appstore/Google play and join, or if you want to distribute the app to a select number of specified individuals within your organization.

Our system can be incorporated with any CAD software and alerts are sent through an API to our MissionServer. This is a hassle-free solution with no build in buttons or switches. It is a redundant system built on Microsoft Azure servers and we don't have any bottlenecks in number of alerts handled or number of volunteers in the system.

The MissionServer handle the logistics in selecting candidates to alert nearby the location of a suspected cardiac arrest. We can easily incorporate data from a national or regional AED network in the alerts to further increase the effect on survival.

The Heartrunner system is developed in a research environment and we currently support research at Karolinska Institutet, KTH Royal Institute of Technology and Copenhagen university. We can help your region with research and evaluation of the effect of volunteer lifesavers in cardiac arrest.

We provide real-time feedback to the region in terms of number of volunteers and their actions and you can quickly see the benefit in terms of increasing rate of bystander CPR and defibrillation. In a Swedish randomized controlled trial the bystander CPR rate was increased by 32 % with volunteer heartrunners first on scene. [https://www.nejm.org/doi/full/10.1056/NEJMoa1406038](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. [https://professional.heart.org/idc/groups/ahamah-public/@wcm/@sop/@scon/documents/downloadable/ucm_502884.pdf](https://professional.heart.org/idc/groups/ahamah-public/@wcm/@sop/@scon/documents/downloadable/ucm_502884.pdf)

Join us and make sure that your region makes the most use of the power of volunteers. Let CPR trained citizens and publicly available AEDs come to use and your region can greatly benefit from volunteer heartrunners. Any CAD software on the market can integrate to our MissionServer and the app is designed as a white label solution, to be branded in compliance with regional or national concepts.

For further inquiry please contact david@heartrunner.com

David Fredman
Operations manager. Founder, Ph.D.
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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)
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 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.

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications. Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future. Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn Euro.

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.

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.
Hexagon’s New Public Safety Product Portfolio

Hexagon has recently launched its 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

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**Nick Chorley**
Director EMEA Public Safety & Security
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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 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 eLTB 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.


[http://www.huawei.com](http://www.huawei.com)

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**Bruce Wangxiaofeng**

Solutions Manager

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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 practical 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 susceptibility 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 board the Technical Committee of the OASIS (Organization for the Advancement of Structured Information Standards) Emergency Management standardization group.

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**Uberto Delprato**
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Meet Inter Mutuelles Assistance (IMA)

The IMA Group develops, assembles and implements assistance service solutions for the shareholders and clients who use our services.

Whether in an emergency situation or for longer-term needs, IMA beneficiaries enjoy a extensive range of assistance services for automobiles, travel, property, health, personal services, international mobility, and customer relations and services.

Helping and advising people in facing the unexpected, anywhere in the world.

IMA was founded in 1981 by 3 leading mutual insurance companies (MAAF, MACIF, MAIF), which were later joined by MATMUT, Mutuelles des Motards, AGPM, and MAPA...

All of these shareholders are part of the social economy, and their primary ambition from the onset was to offer top-notch service to their policy holders. In line with its original purpose and history, IMA S.A., a company managed by a Directorate and Supervisory Board, is still headquartered in Niort (France) where it has maintained most of its activities.

IMA Group Core Values

People are at the heart of all of our business activities.

Respect allows us to understand each individual's needs and expectations.

Our common commitment is reinforced by our knowledge of the challenges and objectives to be met, and is based on a strong feeling of belonging to an enrichingly diverse and supportive Group.

Our professionalism is based on our know-how and our humane approach to service.

Our efficiency is guaranteed by the fact that we are prepared, responsive, flexible, rigorous and ethical.

IMA is an international Group with 19 different legal entities located throughout Europe and in Morocco. All of the companies belong to IMA S.A., the Group's holding company (with a capital of €31,407K), and form an integral part of the Group's business dynamics.

Logistics and means deployed

- + 3.2 million people benefited from our assistance services (1 person receives assistance every 8 seconds)
- 13.4 million telephone calls
- 1,672,000 roadside assistance calls (1 intervention every 20 seconds)
- 152,380 vehicles rented
- 1,299,248 hours of home help
- 2,176 medical transportation (medical evacuations)

Network
• 55,000 professional service providers selected, in France and internationally
• 190 airline companies are regularly solicited, seven of which have established commercial and operational agreements with IMA
• 9,400 registered medical facilities (hospitals and clinics)
• 132 technical and medical correspondents
• Total staff*: 3,381

IMA serves over 45 million people

• 602 € million in consolidated turnover
• 11.5 € million in net consolidated income
• 2,041,674 assistance claims processed (IMA E.I.G. and subsidiaries) including 100,450 « Geolocation Emergency Calls/ eCall » claims including 41,451 medical claims
• 404,761 service requests handled by Inter Mutuelles Habitat (IMH)
• Over 65,000 sites under surveillance, 307,000 alarms processed and 15,800 interventions by private security and prevention agents managed by Inter IMA Protect
• 2.25 million service contracts with multichannel processing by IMA Technologies

Euro 602 million* in consolidated turnover for the Group.

Antoine Trarieux
Director - Connected Services Automotive Sector
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**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.

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**Rokas Kvedaras**  
Director  
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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 (vendor-independent), automatic fire alarms and access control systems and presents all alarms, incidents and tasks in the same user interface.

Innovative Security Manager™ 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.

Meet Innovative

Jens Larsen
VP Sales and Marketing
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Insta Response Oy is part of independent and family owned Insta Group Corporation. Insta Response Oy is located in Tampere, Finland and employs currently around 70 public safety software professionals. Insta Response is part of the Digital-Security-Defence business area within Insta. Other companies on that business area are Insta DefSec Oy and Intopalo Digital Oy. Together these companies provide their customers products, solutions and services for network-based command, control and communication systems, as well as for networking, security and data analysis. We also supply integration and maintenance services for critical systems in defence, security and public safety industry.

Insta Response™ for Emergency Management

Insta ResponseTM product family builds up a genuine Next Generation Emergency Services system. It consists of two independent product suites that also integrate seamlessly together:
- Insta Response Command Center for ERCs, PSAPs or command and control rooms
- Insta Response Field for field units

Insta Response Command Center

Insta Response provides integrated command and on-call tools for both single and multi-authority emergency response center and command and control room use. Several sites can be networked in such a manner that work loads are automatically balanced and situational awareness is upheld among them. Insta Response has been designed to operate in real-time 24/7, under heavy load and to withstand a variety of fault situations.

The main functionalities of Insta Response Command Center are: Contact Handling, Risk Assessment, Response Evaluation, Dispatching, Incident Monitoring, Co-operation and Informing, Public Safety Situation Picture and Reporting and Analysis.

The main “non-functionalities” of Insta Response Command Center are:
• Seamless integration to various communication channels (e.g. PSTN, TETRA, email, SMS, automatic alarm systems)
• Service oriented architecture to support high availability and maintainability
• Supreme usability to support the operator in decision making when saving lives
• Decentralized data handling to enable reliable system scaling and load balancing

Insta Response Field

Insta Response Field is a field command system that provides all the necessary information from command and control rooms to the field and enables seamless communication between command and control rooms, and other field units. Insta Response Field integrates with the other elements of the Insta Response product family. Field units can operate efficiently either by self-direction or under upper management control. When Insta Response Command Center is used at the emergency response and command center level and Insta Response Field in the field, both products provide the highest possible benefit.

Marika Bonn
Sales Director
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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
- Cloud based solution
- Seamless over-border communication (lightweight client for non-operators and API's for non-greenfielders)
  - 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

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**Bostjan Rupnik**  
CEO  
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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

Meet International Public Safety

Michael Justus
Partner
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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 in various situations.

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**Ana Robnik**
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**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.

Our unique experience and insights gained through working with UK Police, partners and security agencies enables us to develop innovative digital transformation services that include enhanced business and operational models. We include the development of client staff to support successful implementation of enabling business and technical capabilities.

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. In delivering major modernisation and change programmes, a key role we have fulfilled for our clients has been successfully conducting landscape reviews that include a view of the ‘as-is’ ways of work, including technical capabilities, with an aim to changing the ways of work to operate in a new ‘to be’ model.

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.

**Amanat Hussain**
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“HELPNET” is the name of an Emergency Call Service for automobiles offering by Japan Mayday Service Co., Ltd. (JMS).

This service mainly consists of eCall and ACN, Automatic Collision Notification, and it covers the whole of Japan.

Currently, JMS is preparing for AACN, Advanced Automatic Collision Notification, together with auto OEMs to be introduced within a couple of years.

JMS was established in September 1999, inline with the “ITS Plan & 9 important goals” set by Japanese government in August 1996.

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 17 years all over Japan. As of October 2017, one million vehicles are supported by JMS.

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.

JMS is the only emergency call service provider that can connect the call to the most appropriate Police/ambulance head office, and it can send accident/vehicle data and voice calls to 52 police and 733 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”.

Ichiro Ando
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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 NG 112 services (audio, video and text emergency call over internet). The flexibility of the solution enables links with communications systems to other emergency services, to ensure more detailed collection of information and most effective response to emergency situations.

Dražen Pavlić
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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.

Arno Tiemeier
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**MDGo** is building the bridge between connected cars and the healthcare industry.

MDgo is set out to utilize AI in order to deliver medical insights from the vehicle to medical services starting from emergency events and all the way to well-being. By utilizing the vehicle’s existing sensors and connectivity (dongle, telematics, e-call) our AI algorithms create a medical report regarding the type & severity of the passenger's injuries (AIS) in case of a car crash. This report can be delivered to PSAP's and trauma units automatically.

MDGo seeks strategic collaborations with CAD providers and PSAP software providers in order to embed its real-time medical insights into existing systems.

Currently, MDGo is deployed and integrated to the Israeli single medical PSAP. MDGo **does not charge** the medical side (PSAP, trauma units) for this service.

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**Shahar Samoelov**  
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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.

Over the past decade, rising threats of terrorism, organised crime and challenges to public order, malicious use of social media, the advent of cyber-crime, as well as all crime sets have underscored the vital role police, fire and rescue, mountain and sea rescue, and civil defence officers play in managing public events from a local football match, to music concert or an international athletics competition and ensuring public order during times of unrest.

Meanwhile, natural and man-made emergencies and disasters are increasing and can occur anywhere and, on any scale, from a house fire or motorway accident, to a regional flood alert to an earthquake impacting an entire country. However, first response organizations are under increasing pressure to cut costs, even as they reduce response times and often while coordinating their activities with those of other agencies, both in the control room and on the ground.

Due to first responders operating in this complex and ever-changing working environment, it’s essential that they maximize their operational effectiveness and efficiency and do so within increasing resource and budget constraints. This is particularly apparent as governments are implementing austerity measures at all levels and guidelines for first responders that require them to review their operational and resourcing models, organizational structures, and cross-agency collaboration with the challenging objective to improve levels of service while reducing operational costs.

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, make informed and timely decisions 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.

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.

If you would like to learn more about how Microsoft-based Coordinated Response, Intelligence-Led Policing, Citizen Interaction and Digital Officer solutions and technologies.

For additional information please contact Dr. Andrew William Hawkins or Kirk Arthur or go online and visit our worldwide government website.
Mobile Arts provides location solutions to mobile operators. The Mobile Location Centre supports location of mobile devices in GSM, UMTS, LTE and CDMA networks using a wide range of control plane (Cell-Id, Enhanced Cell-Id, Assisted-GNSS, OTDOA), user plane (SUPL A-GNSS) and passive location methods.

The 35+ customers are distributed over 10 time zones in Europe, Asia, Africa and the Mid-East, and include operators in the MTS Group, Vodafone, Reliance Group, 3 Group, Tele 2 Group and TeliaSonera Group.

Meet Mobile Arts

Peter Sjögren
VP Research and Development
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A Smart Choice Today Will Prepare You for Tomorrow

A more powerful, Next Generation Integrated Command and Control platform is here. And it's backed with Motorola Solutions' years of proven mission critical experience and innovation. Within the information flowing between the public, responders, and agencies, it is the intelligence that builds a safer city. We'll help you collect more of it, make it actionable and securely distribute it across mission critical devices and easy-to-manage networks. Our solutions will transform the way you respond and help build a reliable, standards-based operational environment – on your terms – so you can focus on your mission.

Expertise That Helps You Prepare

Today, command and control operations are taking centre stage. How do you keep up with the rapidly changing technology landscape and the expectations that come along with it? How do you drive greater efficiency into your operation? Where do you begin? We can help you identify what you need – infrastructure, applications and resources – and map out a plan to integrate the next generation technologies that make sense first, evolving into a fully integrated platform over time. To begin this process, we’ll help you consider how to:

- Handle new non-voice information without overwhelming staff
- Integrate and enable innovative new applications
- Create more intelligent, intuitive work flows
- Manage and secure all data sources, including devices
- Train personnel on new incident management procedures
- Enable interoperability and data access outside your operation
- Support and update networks, hardware and software cost-effectively
- Ensure that new and legacy systems work seamlessly together

Stephen Beach
Sales Director, EMEA Software Enterprise
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Meet NotrufPlus

NotrufPlus - the barrier-free direct emergency call

At the University of Applied Sciences in Brandenburg (THB), the emergency call situation in Europe is being researched as part of a project. It should be noted that the accessibility for people with and without disabilities, the location detection and transmission as well as the direct accessibility of the PSAPs, especially in connection with the actual technologies such as VoIP and VoLTE, require new implementation approaches.

According to research, network-based routing, especially in administrative border areas, as well as the expense of the number-based assignment to the responsible PSAP are currently problematic. In addition, the different emergency call numbers unsettle especially foreign citizens. But transnational emergency roaming is also associated with high demands on the network operators, such as required interface adjustments. Thus, even the currently prioritized methods such as AML and the integration of the position data in the SIP header is not a comprehensive solution to the problems. In this case, only the location data and any additional information is transmitted, the reception can only be made possible by other hardware. Nonverbal communication, e.g. a chat is not possible.

Together with the BSN BürgerServiceNetz UG and in cooperation with representatives of disabled persons, a system has been developed that fully meets their requirements. This is the “barrier-free 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

In a pilot operation with the PSAP Brandenburg, the application has been successfully tested by people with and without disabilities 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 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 app, the NotrufPlus server and the Web client within the NotrufPlus communication 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 connection
• 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 web client for PSAPs to handle emergency calls and to be included in the existing PSAP-software
• the automatic retrieval of messages from the emergency call communication server by the Web Client
• 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 web links to the caller (for example, for the instructions for resuscitation)
• Consideration of the wishes of the users and the PSAP dispatchers
• ensuring data protection
nWise develops, sells, deploys and supports the MMX® Communication Platform and MMX® RTT. 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. We have worked with RTT since 2005, and the MMX® is used by 19 national services in 13 countries. Our team works with development, integration and implementation of RTT.

Our solution can be used as a gateway to connect RTT calls to telecommunicators in PSAPs. This can be done by integrating our solution to next generation 112 services, enabling SIP-based calls to be connected. Key information and features such as geolocation, call recording, call logging, conference call, call transfer, etc., are available in the platform. Apps can be provided to end-users that enable them to call 112, regardless if the individual is deaf, hard-of-hearing, deafblind or has other communication or cognitive impairment. The same apps are used to connect calls to Relay and Remote Interpreter Services.

Following is the high-level representation of the architecture, showing both the Enterprise/Cloud-based server, as well as the web application.

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. If there is a queue or other information, the MMX® will play a message to the caller.
3. The call is connected to the next available telecommunicator in a pre-defined operator group that receives RTT calls.
4. The nWise WEB agent application automatically opens on screen.
5. The Enterprise/Web application connects to the MMX® server (API)
6. MMX® sends a SDP (session description protocol) with call information (SIP).
7. SDP negotiation with IP-address and port information between the RTT-enabled user equipment and the agent application.
8. Session is established between the two parties above – using RTT and sound (activated on the connecting device once the session is initiated) to communicate between the end user application and the telecommunicator position.
9. 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 and 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.

Meet nWise

Thor Nielsen
VP, Global Sales
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One2many is the leading global vendor of nationwide public warning solutions for governments and the telecom industry.

We are headquartered 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.

The one2many Cell Broadcast System is the most advanced and high performance Cell Broadcast System in the market and with more than 80 deployments worldwide the leading system in the world. 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 the only company in the world that is capable to deliver a full end-2-end nationwide public warning system by providing the necessary infrastructure 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, Saudi-Arabia, 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.

Manuel Cornelisse
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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.

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**Venci Evangelatov**  
E-Business and Marketing  
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**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. Some success stories include: Essex County Fire and Rescue, Maricopa Region 911 and Morgan County Next Generation 911.

Read more: Oracle Enterprise Communications solutions

**Oracle SD-WAN**

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, real-time communications needed for emergency services.

- **Secures** telephony service during emergencies, call bursts, DoS attacks & more
- **Scales** up to the largest, most complex environments
- **Protects** QoE by assessing QoS & utilizing dynamic routing
- **Protects media quality** with dedicated, fast path resources (multiple processors)
- **Prioritizes** emergency calls to ensure the highest QoS
- **Nearly eliminates** service outages with best-in-class HA
- **Enables** recording & analytics with an integrated, standards-based interface
- **Simplifies** VoIP monitoring & troubleshooting

Read more: Oracle Enterprise Session Border Controller

**Success Stories**

- Essex County Fire and Rescue
- Maricopa Region 911
- Morgan County Next Generation 911

**Gianluca Vegetti**

Sales Consulting Senior Manager

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Orbita Consultancy Limited (Orbita) is a UK-based company, founded in 2011, with the primary objective of assisting organisations to deliver exceptional customer service. The company builds on over 20 years of experience with contact centres, covering a wide range of industry sectors from an emphasis on the emergency services through retail, travel, utilities and finance to central and local government.

Orbita's heritage spans more than 30 years – creating the availability of a renowned pool of talent and access to highly effective, bespoke techniques for contact centre design, implementation and review.

Orbita is accredited by EENA and has already assisted with quality assessments of European providers of emergency call handling services.

Key services include:

- **EENA – Accredited Consultants and Quality Assurers** – associate member of the EENA Team;
- **Operational Review and Improvement** – comprehensive review of contact centre design, operating processes, technology and people, producing a road map for change. Providing support and expertise to successfully implement change and manage the process.
- **Location Services** – using various authoritative information sources to analyse the pros and cons of candidate locations for contact centres (emergency services); then conducting a detailed evaluation of short-listed sites in order to recommend the way forward.
- **Workforce Planning (WFP)** – forecasting the volume of contacts by season, month, week and intra-day; and generating the necessary capacity plan (required staffing) in order to respond to contacts within service targets (emergency services typically require 95% of calls to be answered in 5 sec).
- **Contact Centre Solution Delivery** – implementing the operational and technical solutions; recruiting as required.
- **Benchmarking** – using our own data and internationally recognised sources to provide a detailed benchmark of contact centre services, covering: performance, competitive comparisons and leading practice.
- **Emergency Call Answering Services** – review of cost per emergency call to determine value for money, operating model design, technical architecture definition, delivery of capability, performance review and improvement.
- **Programme & Project Management** – we are always ready to deliver our consultancy recommendations; and have a successful track record of doing so – to the required standards, e.g. Prince 2.
- **Procurement Management** – working with the client to define requirements, shortlist suppliers and conduct a formal procurement exercise with auditable evaluation and then mobilising the selected contractor.
• **Bid Management** – working with outsource service providers to create the most applicable response to complex opportunities.

• **Business to Business Relationships** – ensuring new business relationships are set-up and managed correctly and providing a reconciliation service to rectify problem business relationships.

• **Business Continuity & Disaster Recovery** – working in accordance with ISO 22301 and BS 25999 – creating the requirements, delivering the plans, implementing the solution and then implementing the necessary tests and assurance.

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**Paul Hatfield**
Managing Partner
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Founded in 2015, Permis de Sauver specializes in the design and operation of Emergency and Safety Mobile Apps.

One of the company’s mission is to significantly increase chances of survival by drastically reducing emergency response time and providing emergency equipment mapping (defibrillators, pharmacies, hospitals...).

The principle is simple, any trained rescuer can download the mobile App Permis de Sauver free of charge and register himself/herself as a first responder volunteer. In addition, Permis de Sauver’s web platform is made available to PSAPs. The victim or the witness of an accident dials the conventional emergency call number (112 for instance). The PSAP operator can geolocate through Permis de Sauver’s web platform the first responder volunteers in the vicinity of the accident and can decide to send a push notification to one or several of them to intervene. The volunteer who accepts the call out is GPS guided to the accident scene to provide first-aid to the victim until the conventional EMS agents arrive on site and take over.

Meet Permis de Sauver

Abdel Bounia
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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. To learn more about ProQA and the PDS, visit www.prioritydispatch.eu.

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

Ron McDaniel
President
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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.

For requests or information about consulting services, please contact Frederic Bruneteau on fbruneteau@ptolemus.com

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

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**Thomas Hallauer**
Research & Marketing Director
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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.

Holly Blanks
Director of International Business Development
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Meet RapidSOS

RapidSOS is an advanced emergency technology company that brings more accurate caller location and additional data to 112/999/911 and first responders.

RapidSOS provides a direct data pipeline from smartphones and other connected devices to Public Safety through the RapidSOS Clearinghouse. The RapidSOS Clearinghouse is a NG911 standards compliant Location Information Server and Additional Data Repository that is accessible to authorized PSAPs through integrations into all major call-taking equipment, mapping software & CAD products.

Through the RapidSOS Clearinghouse, PSAPs 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 Clearinghouse also offers additional data from user profiles (e.g., MedicAlert), smartphone apps (e.g., Uber), wearable devices, connected cars and security systems – all in one place and NG911 standards compliant. The RapidSOS data service is free to Public Safety. You can learn more at RapidSOS.com/Clearinghouse.

There are two ways to access the RapidSOS Clearinghouse.

Get access with RapidSOS Portal. RapidSOS Portal is a web-based portal for PSAPs to access the RapidSOS Clearinghouse within just weeks of claiming their free account. With RapidSOS Portal, any PSAP can receive the benefits of all new data sources available in the RapidSOS Clearinghouse, 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.

Integrate with your existing PSAP software. PSAPs can access data from the RapidSOS Clearinghouse through a 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 Clearinghouse 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.

Jessica Reed
Director of Global Expansion
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Regola is a pure software manufacturing company, headquartered in Turin -Italy-, and focused on mission-critical technology and services for Emergency Services, Control Rooms, Inter-Agency operations.

Although being active since 23 years, Regola maintains its fresh-minded DNA that drives the company towards new innovations, research, markets, openness to contaminate solutions with existing technologies, and ultimately to inspire clients and partners into a gradual pathway.

Regola combines IT software specialists with international Domain experts in its Teams.

Distinctive values of Regola are the highest commitment, in any corner of the world, and the capability to speak multiple languages:

- Technology: Quality and Excellence of any technological solution designed, and provided
- Domain: deep comprehension of Domain-specific (digital) challenges, risks and processes

Consisting of mixed, highly-skilled, and international teams - 80% of its resources are certified in the technology they handle – Regola is keen on making a very low staff turnover, on developing in-house expertise, on scouting and digesting modern technologies for further innovations.

Regola's solutions and applications speak Italian and English, but also Dutch, German, Maltese and Lithuanian, thanks to our established partners in Europe, and globally.

Our operations are accompanied by quality levels and security models, certified to ISO 9001:2015 and ISO/IEC 27001:2013 standards.

Regola's supplied solutions and services gathers an increasing appreciation abroad, for their characteristics of adaptability as well as the robust frameworks and architecture on which they are based.

We are at your disposal as collaborative, flexible, ethical, technical experts, towards partners and customers.

- Unique One - CAD for 112 Emergency Call services
- Unique Police - CAD for Police services
- Unique Fire - CAD for Fire services
- Unique EMS - CAD for Emergency Medical Services
- CareOnLine - CAD for non-Emergency Medical services (low-acuity)
- Unique Crisis - Crisis & Disaster Management
- Unique SWAP – Radio Dispatch system
- FlagMii EML - Emergency Mobile Link
• nowtice - mass alerting, mobilizing & early warning
• ReMe - critical resources monitoring for EMS
• PASS - ERP for transport management and on-board module
• Tempore - Teleconsulting system
Saab serves the global market with world-leading products, services and solutions within military defence and civil security. Through innovative, collaborative and pragmatic thinking, Saab develops, adopts and improves new technology to meet customers’ changing needs.

The SAFE Unified control room system is created in partnership with the blue light market for true mobile working. It is already in operation in over 35 mission-critical control rooms around Europe and US.

SAFEx CONNECT, CONTROL, COMMUNICATE

THE UNIFIED PLATFORM
SSAFE is a truly unified platform for mission critical operations. It replaces legacy disparate solutions, such as C&C, ICCS, CRM and Mobile data with a modern fully integrated solution.

SAFE empowers users to make more informed decisions, faster. It 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. These are configured to tailor the way the solution works to meet the needs of our users. 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 response.

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

SAFE can provide questions and advice 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
Septier Communication Ltd. has been in the forefront of the cellular positioning world since its inception in the year 1999. The company has developed its cellular positioning platform, SeptierWhere™ to provide unparalleled accuracy and reliability and has deployed it successfully in cellular networks worldwide including the US, LATAM, Europe, Africa and Asia. As the need for accurate positioning of cellular emergency callers has risen, Septier has met this challenge with the most complete portfolio in the world of cellular positioning. SeptierWhere™ has been implemented for providing positioning service of emergency callers time and again to the full satisfaction of the cellular network operators and the regulators governing them.

SeptierWhere™ includes the following positioning modules:

1. **SeptierWhere™-A**: standards based GMLC/SMLC, MPC/PDE and A-GPS/SUPL
2. **SeptierWhere™-P**: passive network based positioning based on Septier dedicated probes
3. **SeptierWhere™-D**: application based module, designed specifically for the needs of emergency services
4. **SeptierWhere™-R**: RF based positioning, using Septier’s unique LMUs, for enhanced accuracy in areas of special interest

The SeptierWhere™ platform is complemented by Septier Life Saver, a tactical positioning system enabling rescue forces to pinpoint the location of active cellular devices and physically reach them. This is highly useful for wide scale natural disasters when finding survivors is crucial and each second may make the difference between life and death. Septier Life Saver has been used in countless natural disasters around the globe including the September 2017 earthquake in central Mexico.

In addition to cellular positioning for emergency services, Septier is also active in the law enforcement, intelligence and defense markets, providing interception and cellular positioning products. Other product lines are aimed at enterprise telecom cyber security.

Amit Nachshon
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Meet Sfera

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 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

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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.

Meet ShadowFocus Consultancy

Andy Rooke
Director
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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.

Thorsten Böhmer
Director Business Development Europe
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A publisher and software integrator for Civil Defense customers (Fire & Rescue Services and Emergency Medical Services), SIS has diversified its range of solutions to meet the growing need for alert management for High Risk Areas (airports, nuclear plants, public transportation, etc.) and local authorities (to manage the Establishments Servicing the Public).

By following an appropriate methodology, the SIS team will carry out major projects with you.

From the upstream reflection project to its implementation and operational monitoring, SIS is actively involved and adapts to complex hardware and software environments.

SIS also performs audit services, from needs analysis, training, project control, change management and configuration.

With a continuous innovation policy and relying on advanced technology, SIS has become a reference in the European market for CAD solution and Mobile Emergency Solutions integrated with CAD (smart application for smartphones, tablets).

Our dual expertise (publisher and integrator) gives us a competitive advantage for the solutions’ deployment and a close proximity to our customers. Our specialty is our strength and ensures a control of your project from A to Z.

A software Company dedicated to the alert management, SIS publishes operational solutions that meet your specific needs.

An integrator recognized in the market, SIS offers comprehensive solutions, including both hardware and software materials.

Close to its customers, SIS relies on the availability of its teams and offers maintenance and daily assistance with a 24/7/365 support.

In a complex economic environment where financial constraints are significant, optimizing resources, minimizing delays, gaining productivity and managing regulatory issues are all major levers to increase your organization’s activity.
Based on a powerful and efficient algorithm, our global solutions allow you to activate these levers and quickly get the optimization you are looking for.

SIS solutions are designed, developed and integrated by our teams of specialists who have a recognized expertise and know-how on the market.

Arthur Weisgerber
Director
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Stokhos is a dynamic decision support system for ambulance operators and dispatchers. Our customer friendly application creates oversight on regional coverage and suggests relocations in order to substantially reduce response times. In addition, through effective asset (vehicle/unit) management we enable operational cost savings. Fewer ambulances can improve the regional service.

Currently in the regions in the Netherlands we manage to decrease response times with ~35%.

Please see our website: www.stokhos.nl and watch the introduction: https://www.youtube.com/watch?v=lG6BC7AF1aU.

Meet Stokhos

Vincent van den Brekel
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SYSTEL specialises in the delivery of command & control and integrated communications systems specifically to Fire and Rescue Services and Ambulance Services. Of our current 63 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 into account 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
- Multi-Agency Risk & Crisis Management
- Mobile Data Terminals and Vehicle Mobilisation
- IntelliSys Management Information 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 approximately 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.

Philippe Coupeau
Quality & Strategy Director
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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...

Jean-Paul Mauron
Managing Director
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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.

Telefónica 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.

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**Ana Trigo**  
Emergency Services Product Manager  
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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 & commissioning 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.


Pat MacGrath
Head of Ireland
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As a key player in space infrastructure operations for more than 30 years and with a staff today of more than 425 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, which is a joint venture between Leonardo (67%) and Thales (33%).

Based in Toulouse, Bordeaux, Paris and French Guiana, Telespazio France, the flagship cities of France’s space sector, delivers its expertise and services to institutional and professional stakeholders, in particular to Defense, CNES, Arianespace and Kourou, the European launch base.

Telespazio is part of the Space Alliance together with Thales Alenia Space, with the aim of covering the entire cycle of the spatial value chain: from the design of infrastructures to their operation. Thales Alenia Space is in charge of the design and implementation of space systems (satellites, equipment, instruments, payloads and ground segments) and Telespazio is in charge of operations and services related to space systems.

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 (for example, the European EGNOS and Galileo systems and the Kourou spaceport), 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 ocean-monitoring products and services.

Telespazio France has been involved in the development and Operations of European GNSS such as:
- GALILEO, with supports in technical and Security Architecture, as well as the integration, verification and consolidation of the qualification report, on GSF and GMS;
- EGNOS, in the specification, development and qualification follow-up, as responsible in the procurement of the system maintenance versions in partnership with the EGNOS Service Provider.

To become a key European location-based service provider is at the heart of Telespazio ambition, driven by the navigation downstream activities of the Satellite Systems & Operations. In this field, over the past years, Telespazio France has implemented many projects, in particular through the ELaaSTIC, FLAMINGO, 5G CHAMPION, GEONAV IoT (H2020) and ESA NAVISP POMELO.

Telespazio also leads key activities to leverage Galileo added-value in Emergency Services (e.g. EC HELP112 I & II and GRALLE projects).

Today, more than ever, Telespazio is a true innovator, transforming what were once just possibilities into real services available to an increasingly wide audience worldwide.

Axelle Pomies
Head of Navigation Downstream Department
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Unblur helps Emergency Services to make faster & safer decisions during an incident response. We want to make dynamic information truly useful for Incident Commanders on the field. During an emergency, information on the field is crucial to respond properly. Incident Commanders form fire, police and rescue agencies need information to coordinate their team and evaluate the situation.

In some areas, first responders are using an array of different technologies (drones, cameras, GIS) to obtain real-time data. However, this data is coming fragmented and unfiltered, causing saturation to the Incident Commander who needs to make a decision very fast. Adding to this, the current tools are not user focused, making it hard to use in complex environments. All these issues make the Incident Commander’s tasks harder, which endangers the overall mission and the safety of victims and response teams.

Over the last 2 years, Alfonso & his team have interviewed more than 75 emergency agencies in Europe showing that:
- 98% find real-time information a strategic priority
- 97% agreed new technologies are causing saturation & adoption issues for the Incident Commanders
- Less than 25% agreed that they have a solution to these challenges

In the end, these new tools are becoming a burden instead of an advantage. For this purpose, we are launching IRIS, a digital Incident Command & Control system. IRIS integrates different sources of information (images, GIS, GPS locations...), fusions the data and delivers the relevant pieces of information to Incident Commanders. Adding to that, it allows an easy command sharing between commanders.

Currently, IRIS V2 is available. This version organizes the dynamic data on the field for incident commanders. This includes real time tactical situation, video streaming management and information sharing between teams, levels and agencies.

IRIS is the first Digital Command & Control platform built for and with Incident Commanders. IRIS V2 development included testing and validating with 13 different emergency agencies across Europe. In addition, IRIS is a modular and scalable platform, allowing you to upgrade and adapt it to your number of users, sensors and even to add new analytical capabilities.

If you are interested in hearing more about IRIS or to join our collaboration plan to test it, do not hesitate to reach out to us!

Alfonso Zamarro
CEO
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VÍTKOVICE IT SOLUTIONS has over 25 years of experience and knowledge in building complex systems with several integrated solutions for managing crisis situations. Our software 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:

1. Computer Aided Dispatch System
2. GIS with Caller location solutions
3. eCall solution
4. Advanced Mobile Location (AML)
5. Mobile apps
6. full telephony and other communication systems integration
7. 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 major PBX systems which are certified for PSAP systems.

Our goal is to help PSAP operators with their mission to help citizens in emergency situations. We hear what our customers say and build solutions they are optimal for them.

David Krčmarský
Head of Rescue Systems Division
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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.

Antonio Latorre
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VuWall, leader of video wall control and AV network management solutions, is recognized worldwide for delivering state-of-the-art controllers and intuitive collaboration software. VuWall eliminates the complexities of traditional AV network and video wall management while simplifying the life of AV/IT integrators and video wall operators.

Tailored to each project and providing unrivaled command, control, and visualization support, VuWall solutions feature superior quality and set a new industry benchmark in ease of use and deployment for professional and mission-critical applications.

Its award-winning solutions are installed in the world’s most prestigious control rooms, collaboration rooms, government agencies, and corporate environments of Fortune 500 companies in more than 45 countries. VuWall is headquartered in Montreal, Canada, with European offices in Tübingen, Germany.

www.vuwall.com

Meet VuWall

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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.

Meet Wey Technology

Luca Cannizzaro
Sales Manager
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what3words: how 3 words are helping to locate callers faster in an emergency

Knowing exactly where an incident is taking place helps Emergency Services to respond efficiently and effectively. However, emergencies can happen anywhere, often in places not covered by an accurate street address. This means members of the public, on an Emergency phone call, often struggle to provide their exact location and rely on broad descriptions or general landmarks.

what3words is providing a solution. By converting GPS coordinates into words, the system has given every 3m square in the world, a 3 word address. This means that unique combinations made of three words can now be used to describe locations around the world. For example ///kite.chats.dine is a precise point in a field in York, in the UK.

The free what3words app, which works offline, allows members of the public to find their current 3 word address and use it as a simple way to communicate exactly where help is needed using just three dictionary words. The system is available in 37 languages to date and the app also enables users to share or navigate to 3 word addresses easily.

what3words has therefore found a place alongside other location technology in the Emergency Services toolkit - allowing them a method of accurately located callers in a variety of situations and also being able to use the app and system themselves to pass and share the location between coordinating agencies and individuals.

There are now over 70 Emergency Services in the UK set-up to use what3words within their control room. Many control room software systems have also integrated what3words directly into their incident reporting software so 3 word addresses can be typed directly into the computer-aided dispatch system. These providers include Sopra Steria, Capita and MIS Systems, amongst others. Many services, in particular police, have also deployed the what3words app onto the devices of teams on the ground, to enable these individuals to navigate easily to the precise 3m square and discover and share 3 word addresses between teams.

Many stories are emerging about how what3words is being used effectively to save time, resources and lives. The type of incident varies widely - from locating lost and vulnerable missing persons, to tackling rural fires, to helping to locate perpetrators and crime scenes. Paul Redshaw, Force Control Supervisor at Humberside Police who was involved with the incident said: “what3words is a great tool that helps us get officers to people that really need our help as quickly as possible.”

In many examples, what3words has been reported to reduce the need for expensive resources like helicopters and search units to be deployed, and has been praised for saving multiple lives. With more Emergency Services rolling out what3words every day, these benefits are now being experienced across the country - making what3words an everyday part of emergency response in the UK.
More on what3words

Co-founded in London in 2013 by Chris Sheldrick, what3words is the simplest way to talk about location. The system covers the entire world, never needs updating, and works offline. A 3 word address is a human-friendly way to share very precise locations with other people, or to input them into platforms and machines such as autonomous cars or e-commerce checkouts. It is optimised for voice input and contains built-in error prevention to immediately identify and correct input mistakes.

The free what3words app, available for iOS and Android, and the online map enable people to find, share and navigate to 3 word addresses in 37 languages to date. A 3 word addresses in one language can be switched instantly into any other supported language, and even looked up in one language and shared in another.

The system can be easily integrated by businesses, governments and NGOs into apps, platforms or websites with just a few lines of code, and over 1000 businesses, government agencies and NGOs across 170 countries are using 3 word addresses in sectors including automotive, e-commerce, logistics, mobility, travel, post and emergency services to improve their customer experience and increase efficiency while reducing costs and their environmental impact.

The company’s partners include Mercedes-Benz, who recently launched the world’s first car with built-in what3words voice navigation. Mercedes-Benz, Ford and TomTom drivers can now navigate anywhere in the world by saying three words to their car. Global logistics giant Aramex has integrated what3words to optimise its last-mile operations in the Middle East, increasing efficiency by over 40%. Meanwhile, Domino’s Pizza is delivering food hotter and faster to 3 word addresses around the world, whilst travellers are navigating with ease with the help of Lonely Planet’s and Airbnb’s 3 word address listings. And numerous humanitarian partners are using the technology to help people in need: The United Nations has adopted the technology for disaster response and relief, in addition to the Philippine Red Cross.

Geordie Palmer
Business Development Director
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Delivering unequalled public safety transformation

Zefonar Advisory (Zefonar) brings nearly 40 years of unrivalled hands-on 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:
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This publication provides an overview of the EENA Corporate membership.

For further information, please visit our official website at www.eena.org.

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