# SHIELD4CROWD



# CATALOGUE
# OF SOLUTIONS

PROTECTION OF EU PUBLIC SPACES ————

SHIELD4CROWD is an EU-funded project that focuses on enhancing the protection of public spaces in EU cities against security threats related to crowd management. The project is led by SNCF, French railway operator and 9 other partners, among which 3 ministries of Interior from 3 EU Member States (France, Slovakia and Spain), 2 security practitioners, and several end-users involved as User Observatory Group (UOG).

# SHIELD4CROWD
## 10 scenarios

To enhance the protection of public spaces in EU cities against security threats related to crowd management.

**1** Coordinated Attacks

**2** Drone & CBRN Threats

**3** Public Panic Situations in planned major event

**4** Overcrowded Area threats

**5** Unplanned incidents threats

SHIELD 4CROWD

# SHIELD4CROWD
## 10 scenarios

To enhance the protection of public spaces in EU cities against security threats related to crowd management.

**6** Cold weapons threats

**7** Firearm threats

**8** Explosive threats

**9** Public panic situations in daily life

**10** Unattended items

SHIELD 4CROWD

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# ACCU:RATE

accu ⟳ rate
INSTITUTE FOR CROWD SIMULATION

📍 Munich, Germany

# About Accu:rate

**Accu:rate** is a spin-off of the Technical University of Munich and specializes in the analysis of pedestrian flows. With its in-house developed software crowd:it, accu:rate enables the precise analysis and optimization of visitor and pedestrian movements in various environments such as event venues, buildings and public spaces, and is involved in many research projects for the further development of this technology.

# Description

With **crowd:i**t different environments or buildings can be simulated and analyzed to test crowd safety, to improve security measures and to design safe and efficient spaces.

# Solution

## Crowd:it

The analysis of the people flow over time enables you to design a safe evacuation concept, which is often required according to regulations. By testing different variants, you can directly see the influence of different constellations and thus develop the optimal concept.

## TRL of the technology

TRL 9

## Commercial strategy

Conducting consulting projects, Accurate specializes in visitor flows and crowd simulation. Understanding the needs of our customers, it provide customized solutions for their projects.
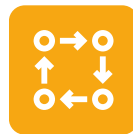
## Scenarios

**Scenario 3:** prevent public panic situations in planned major events or overcrowded areas such as stadiums by simulating crowds to ensure a venue can be evacuated quickly and safely.
**Scenario 4:** optimize measures for a safe evacuation in buildings in case of fire or other safety threats.
**Scenario 9:** Public panic situations in daily life.

## Innovation

Crowd:it is the only commercial crowd simulation software that uses the Optimal Steps Model (OSM). In contrast to other simulation models, the OSM is not derived from physical models, but from human movement behavior.

Vendargues, France

## About Actia Telecom

**ACTIA** is a designer and publisher of solutions for Safes and Smart Cities, focused on the management of large public spaces and public transport. System designed to facilitate smooth operation involving several organizations (state, law enforcement, communities, public transport operators and authorities, firefighters, etc.).

## Description

Actia Hypervision is a solution developped by the company:
Fully integrated between cities CCTV systems and public transport systems.
The features of the technology include interoperability and Standardization systems.
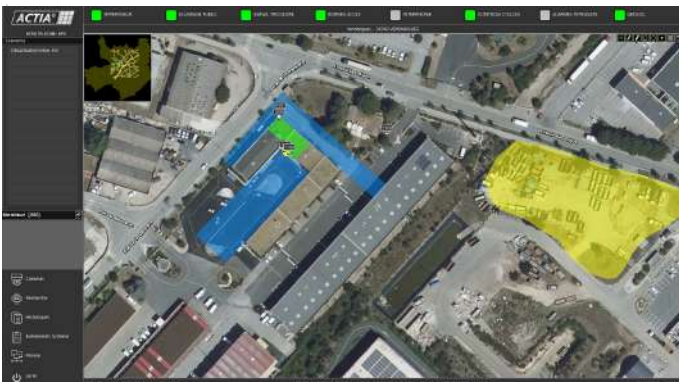


## Solution

**ACTIA HYPERVISION**
Seamless videoprotection operating between Cities and Transports.

**TRL of the technology**

TRL 8

**Commercial strategy**

There is some solution for cities CCTV, for they don't integrate transports CCTV (or in a complex way for operators). The solution can be proposed to any city managing its own public transports network, or working with national public transports networks.
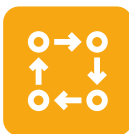
**Scenarios**

**Scenari 1-9:** Fully integration between cities CCTV systems and public transport systems.

**Innovation**

In the absence of standardization between the world of urban video protection and transport video protection, ACTIA provides a unique solution to enable, via integrated mapping, crowd control in public spaces and rolling stock, and the tracking of suspects without risk of losing them.

📍 Nicosia,Cyprus

# About ADDITESS

**ADDITESS** is a scientific, consulting, and research company whose purpose is to conduct theoretical and applied research and to produce studies, at strategic and tactical levels, on issues concerning Security policies, Border Management, Critical Infrastructure Protection,Cyber Security and also to develop state of the art applied Security Solutions hardware or software based in the above-mentioned areas.
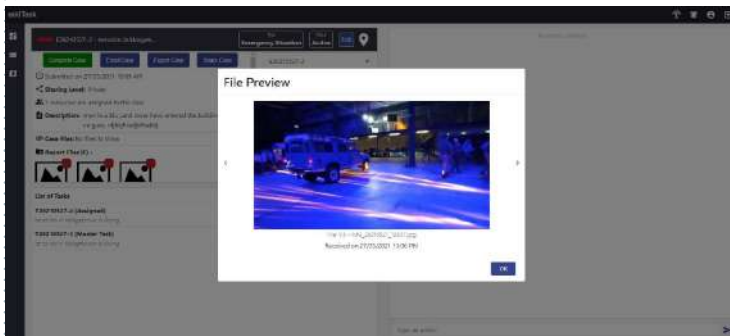
# Description

**ADD-Task** solution does not aim to replace the operator but rather to provide credible information and functionality that would otherwise take precious human resources and time to acquire. Real-time information is provided by the citizens and vice versa from LEAs.
ADD-Task is already GDPR compliant.



# Solution

### ADDTask
ADD_task operates on the principle that LEAs will make better decisions if they have relevant and accurate information delivered appropriately and at the appropriate time.

### TRL of the technology
TRL 7

### Commercial strategy
ADD-Task does not aim to replace the operator but rather to provide credible information and functionality that would otherwise take precious human resources and time to acquire.
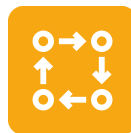
### Scenarios
**Scenario 1:** ADD-Task provides good practice procedures to promote effective incident management and successfully exploit its benefits.

**Scenario 2:** Strengthen bonds within the targeted community ADD-Task develops a creative and sustainable solution, built upon personal relationships.

### Innovation
ADD-Task supports report aggregation in instances where multiple reports are found to be describing the same incident. The processing of both structured and unstructured data and the extraction of knowledge and key concepts from data are integral components of the ADD-Task solution.

**A-NSE**
AERO-NAUTIC SERVICES & ENGINEERING

La Ciotat, France

# About Aero-Nautic Services & Engineering

A-NSE is the French Leading company for zero-emission flying aircrafts. Since 2010 A-NSE designs, manufacture, operate and supports Aerostats filled with Helium for Surveillance. It includes tethered aerostats, blimps, stratospheric ballons as well as a zero emission e-vtol call e-lium (e-lium.com). A-NSE is a highly innovative company with both an industrial and operational expertise (missions for Frontex, UN, Bundeswehr, French Police and firefighting agencies...).

# Description

The solution T-C60 includes Camera, Radar, IMSI Catcher, SATCOM, any type of payload attached below the balloon is possible.



# Solution

### T-C60

T-C60 offers Crowd Surveillance like at UEFA Euro 2016 in Paris with the product in front of the Eiffel Tower Fan Zone.

### TRL of the technology

TRL 9

### Commercial strategy

Vert High, it is perfect when combined with drones. The aerostat monitors 24/7 and when it detects something, our customer send a drone or a soldier/ a helicopter on site to check or to act.
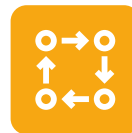
### Scenarios

**Scenario 1**: T-C60 uses a helium-filled Tethered Balloon/aerostat, monitors large crowds 24/7, floating at 50-500m, towable, powered by a ground station.

### Innovation

Zero-emission flying vehicle, flying for weeks continuously, zero noise and a low operating cost ( below 20€/flight hour). Agnostic in terms of payloads that it can carry. Multi mission possible. Mobility thanks to a car towing the aerostat while flying.
Easy set-up, take off and landing with 2 operators only.

**AIRBUS**
**XXII**

📍 Elancourt, France
Puteaux, France

# About AIRBUS & XXII

**Airbus SLC** provides advanced communications solutions for public safety, defense and transportation, utilities and industry.

**XXII** is the French leader in computer vision software publishing. Their CORE platform connects to infrastructure camera networks to perform real-time detection and counting analysis. CORE automates visual perception, offering infinite applications in a variety of contexts. Whether to improve operational efficiency, enhance safety, or analyze performance, CORE represents a significant advance in the harmonious convergence of technology and man.

# Description

**AGNET GUARD**'s features are : Detection skills: Crowd, Persons, Vehicles with classification; Abandoned objects; Fire or smoke detection + MCx communication of all this elements.


VALUE PROPOSITION
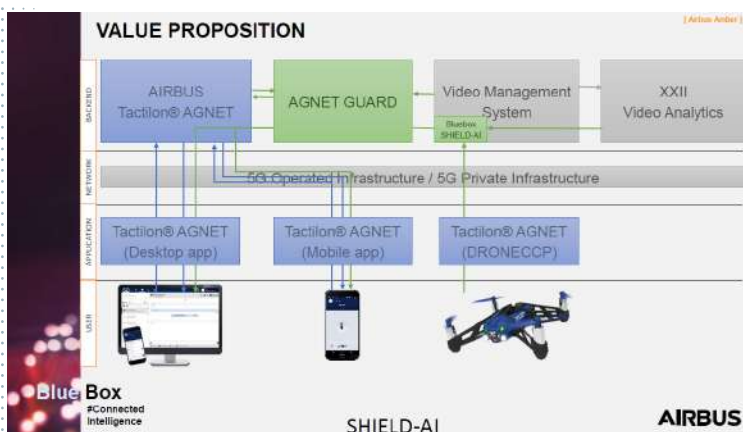
# Solution

**AGNET GUARD**

Global Security solution based on Critical Communication complete System (AGNET MCx) linked with an AI computer vision system.

**TRL of the technology**

TRL 9

**Commercial strategy**

The heritage and global experience enable reflections to be led in a multidimensional manner and knowledge to be expanded in innovative ways. Collaborative efforts span across all continents, and, enriched by our diversity, new ideas are generated and shared with our customers. Total compatibility and flexibility are emphasized, irrespective of the infrastructure type.
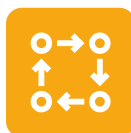
**Scenarios**

**Scenarios 1-10:** The video analysis results can be viewed and exploited through our own interfaces as well as other systems.

**Innovation**

The Innovation is the merge of one of the best critical communication system in the world (use by Police, Firefighters, SWATs,... arpud the world) and the power of AI for critical situations detection. The software facilitates a multi-skill floating analysis across a variety of video feeds.

# AISEEMO



📍 Kraków, Poland

## About Aiseemo

**ADDITESS** is a scientific, consulting, and research company whose purpose is to conduct theoretical and applied research and to produce studies, at strategic and tactical levels, on issues concerning Security policies, Border Management, Critical Infrastructure Protection,Cyber Security and also to develop state of the art applied Security Solutions hardware or software based in the above-mentioned areas.

## Description

**AISEEMO Solution** - Real-time AI-powered Video Analytics for Automated Object and Event Detection, is designed to be universally compatible, working seamlessly with any modern IP-based CCTV system, eliminating the need for costly hardware investments. We provide our service in a Software as a Service (SaaS) model, offering customers a straightforward API for data input and alarm reception. AISEEMO provides robust, EU-based processing capabilities to support this.



## Solution

### AISEEMO
AISEEMO's technology enables precise, real-time identification of objects and events within CCTV footage.

### TRL of the technology
TRL 9

### Commercial strategy
AISEEMO offers a flexible, pay-as-you-go financial model, ensuring cost-effectiveness. Clients are billed only for their actual usage of the service, with a licensing option available upon request.
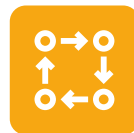
### Scenarios
**Scenario 1,4,5,6,7,8:** AISEEMO's technology enables precise, real-time identification of objects and events within CCTV footage.
The system is adept at identifying signs of fire and smoke.

### Innovation
solution's key innovation lies in the integration of cutting-edge, adaptable video analytics within a Software as a Service (SaaS) framework, offered through a convenient pay-as-you-go business model.
AISEEMO's team brings a wealth of experience, resulting in solutions that stand out for their high accuracy and remarkably low rate of false alarms, especially when compared to our competitors, all while functioning in real time.

# A.I. TECH

📍 Avellino, Italy

# About A.I. Tech

**A.I. Tech** is a company that designs and realizes video analytics solutions based on the cutting-edge technologies of artificial intelligence for more than ten years.

# Description

A.I. Tech has ten years experience in the realization and commercialization of video analytics application; it has more than 20 video analytics solutions that are distributed in more than 50 countries thanks to its technological partners.

**AI-CROWD-DEEP** provides People crowd estimation, people counting, dwell time estimation, loitering detection, gathering detection.



# Solution

**AI-CROWD-DEEP**
AI-CROWD-DEEP is a video analytics software to analyze people and their behavior using the most advanced computer vision algorithms combined with deep neural networks.

**TRL of the technology**

TRL 9

**Commercial strategy**

The solution is based on the most advanced artificial intelligence methodologies applied to computer vision. Differently from other similar solutions, AI-CROWD-DEEP do not only detect people, but also provides advanced functionalities based on people tracking. The solution can be installed on more than 20 software platforms including smart-cameras, servers and embedded devices.
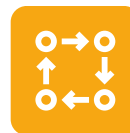
**Scenarios**

**Scenario 4:** Video analytics software in overcrowded areas.

**Innovation**

The software can estimate the number of people within one or more areas of interest as well as counting people crossing virtual lines.

📍 Paiania, Greece

# Angely

## Solution

# About Angely

Angely sets out to market a solution that tracks concealed weapons at a distance, allowing free traffic flow, by fusing space-derived magnetic technologies and neural-network processed image data.

# Description

Angely is developing a **eponymous solution** that tracks concealed weapons at a distance. In this use case, the potential perpetrator can be identified without affecting the free traffic flow in the public space (e.g. train station).



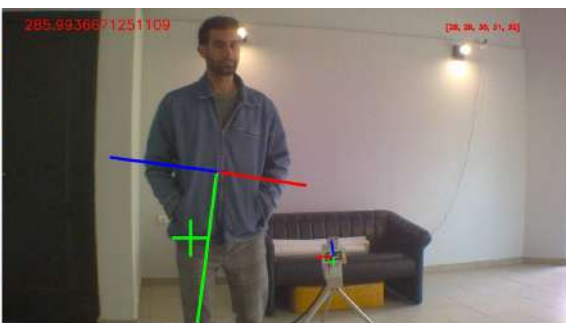Frame while tracking (green cross is the threat)



Test setup and final product render

### Angely
The output of the device can be either push notifications with information about the potential threat (position, visual cues/picture) or information flow to an existing integrated DSS system of the space operator/law enforcement authority.

### TRL of the technology
TRL 4

### Commercial strategy
The system fuses magnetic measurement and modelling technologies derived from space with crowd sensing neural networks applied to visual range video streams in order to track concealed weapons at a distance. In open public spaces, free traffic flow is paramount to their utility. One such place is a metro station, where traditional security screening measures.
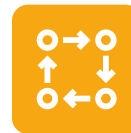
### Scenarios
**Scenario 7:** Angely offers a gif of the system operating in a lab (tracking a concealed weapon at a distance).

### Innovation
The innovation lies in the fusion of the magnetic and image data, deriving from the operational needs of such a system. Angelus aim to make possible the security of spaces that never had the option to, given that existing measures would limit their utility.

# APEX SOLUTIONS



📍 Flaujac-Gare, France

## About Apex Solutions

APEX solutions is a private R&D laboratory focused on risk analysis and defense and security applications. The services cover consulting and expertise activities, analysis of massive data (especially geospatial data), development of innovative algorithms and models, numerical simulation of explosion events, advanced computing techniques (signal and image processing, etc.), and the implementation and management of collaborative research projects.
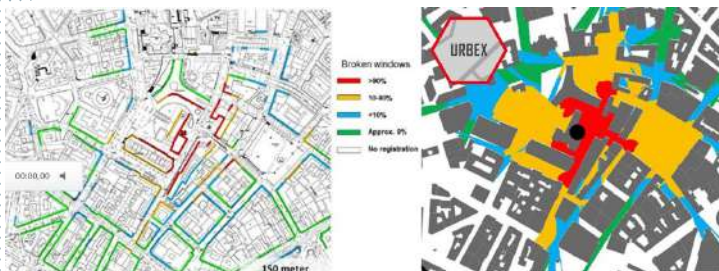
## Description

**URBEX** is a solution aiming at addressing critical infrastructures, SEVESO sites and public-access establishments. This solution can be also used for the training of end-users (fire and rescue services...) and in the assessement of explosive scenarios for specific events (JPO2024...) or in critical infrastructures.



**Percentage of broken windows following the Oslo bombing**
Left: Ground truth (Christensen, 2012); Right: URBEX results (Green Book model)

## Solution

### URBEX (Urban explosions)
URBEX is a breakthrough, validated model able to provide accurate computations of explosion consequences in urban environments in less than a minute on a standard laptop.

### TRL of the technology

TRL 5

### Commercial strategy

The model will soon be extended to indoor and tunnel configurations. It will benefit from the BIM2SIM project funded during the SecurIT European project (import of numerical twins of buildings - BIM models - in order to perform security / safety simulations of indoor configurations).
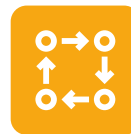
### Scenarios
**Scenario 1** : fast danger zone assessment.
**Scenario 4** : Overcrowded areas.
**Scenario 8** : end-users training, fast danger zone assessment and potential consequence analysis, help during evacuation process.
**Scenario 10** : u fast danger zone assessment, help during evacuation process.

### Innovation
Developed during an R&D project, URBEX surpasses international explosion modeling standards. Validated against simulations and experiments.

# AXIS COMMUNICATIONS



Lund, Sweden

## About AXIS COMMUNICATIONS

AXIS provides network solutions in video surveillance, access control, intercom, and audio systems. They are enhanced by intelligent analytics applications and supported by high-quality training. Customers across the world use our solutions to protect people and property and improve business performance.

## Description

Supporting a broad range of Axis devices, **AXIS Camera Application Platform (ACAP)** addresses a wide range of use cases. ACAP offers access to one of the widest portfolios of analytics in the security industry.

## Solution

### Cameras with AI

Embedded analytics for early on-edge detection Features of the technology: Gunshot detection, movement detection, abandoned objects, etc..

### TRL of the technology
TRL 9

### Commercial strategy
The heart and the brain of every Axis product is its system-on-chip (SoC). Most of the products feature our own ARTPEC SoC developed in-house, specifically for network video.

### Scenarios
**Scenario 3:** Public panic situations.
**Scenario 10:** along with our partner ACIC, detection of abandoned objects
**Scenario 7**: gunshot detection with our partner Sound Intelligence, who developed an application

### Innovation
Axis is one of just a few device manufacturers developing proprietary SoCs in-house. That lets us drive innovation in the best direction for our market. In addition, we retain complete control of the SoC production process, which is very good from a trust and cybersecurity perspective.
Supporting a broad range of Axis devices, AXIS Camera Application Platform (ACAP) addresses a wide range of use cases.

📍 Nanterre, France

Axone
Innover est dans notre ADN

# About Axone

Axone is a security solutions and service provider offering to its customer a high level of expertise.  Axone is able to use and mix technologies to solve customers issues.
Axone supports top level end-users such as national entities in France and Europe.

# Description

Axone, with its sister company Obvious Tech., bring also on the market the unique 3D C2+ platform called **OODA** offering operators many feature and benefits such as chat, dispatch, hypervision, data management, teams management, data visualisation.
The solution is currently used by private companies (large french private companies) but also but public authorites (Police, Cities, Ministry) from a local use (city, smart city) to country level / smart territory.



# Solution

## OODA
With a focus on safety and security, OODA provides advanced tools to prepare, monitor, detect, and respond swiftly to threats.

## TRL of the technology
TRL 9

## Commercial strategy
The platform is able to connect any kind of sub-system (drone, AI, cameras, ...) and in real-time locate teams on the field for mission management. OODA could be the global platform to centralized all the event and sensors of the project. OODA has a mission to simplify actionable data visualization, streamline operational workflows and accelerate decision-making & action across a variety of industries & use cases.
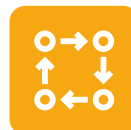
## Scenarios
**Scenarios 1, 2, 3** : It ensures the protection of people, assets and operations.

## Innovation
OODA World disrupts traditional market by addressing the past, the present & the future, covering strategic, operational & tactical needs, & positioning as an added-value ecosystem catalyst for all organizations needing to save time.

📍 Narón, Spain

## About Beagle Technology

Beagle Technology is a spanish SME that provides software tools for emergency management: accurate projection of live aerial video from drones or helicopters over the 3D digital terrain model; detection, location and tracking of assets (emergency vehicles, police cars, rescue aircraft), etc.

## Description

**The Beagle solution** allows quick situation evaluation, coordination of forces, rescue and evacuation teams, firefighting teams. After the first moments, the event can be replayed and evaluated from different angles for debriefing, and later for training purposes.



# BEAGLE LABS

## Solution

### Beagle
Live aerial image sharing and reviewing. Accurate image projection over terrain. Live positioning of available resources on or near site (vehicles, units, helicopters). Fast coordination. Effective debriefing and reviewing.

### TRL of the technology
TRL 8

### Commercial strategy
Direct sales of the Beagle Cloud platform: the customer (smaller administrations, private companies) pays an all-inclusive monthly usage fee and gets access to the Beagle platform in the cloud.
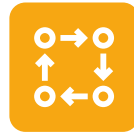
### Scenarios
**Scenario 1, 4, 6, 8:** After the first moments, the event can be replayed and evaluated from different angles for debriefing, and later for training purposes.

### Innovation
- New methods and techniques have been developed for very accurate video projection, while keeping a very fast response time (60fps).
- Fusion of multiple protocols, formats and data sources enables live or recorded video and telemetry from many different UAVs (drones), helicopters, or land systems, with no modification of those systems.
- Extremely efficient software allows for low operational cost.

Montigny le Bretonneux, France

# About Bertin Technologies

Bertin Technologies is a French industrialist in scientific instrumentation that designs and manufactures, in France and in Europe, measurement, observation & detection systems and instruments for critical applications. Bertin Technologies pursues technological advances in the fields of Nuclear, Defence, Space, Big Science, Life Sciences and Health.

# Description

The **SaphyRAD System** is a multiprobe survey meter developed to cover the needs of the nuclear and security market.
The SaphyRAD S system meets safety and security standards with robust design, user-friendly features, and CBRN compatibility.

# Solution 1

### SaphyRAD MS

SaphyRAD S: Robust, sensitive multiprobe meter for nuclear/security needs. LCD displays dose, Gamma rates in harsh environments.

### TRL of the technology

TRL 9

### Commercial strategy

SaphyRAD MS and its probes are on a high degree of competition/ wide market with many suppliers. It is best product on the market today for armed and security forces. The identification capacity is an asset that can bring huge opportunities for both the company and the users. You can detect and identify with the survey meter and the probe in a really short time (few seconds).
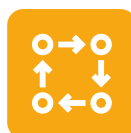
### Scenarios

**Scenario 1, 2 ,4, 8, 10:** All data are stored on a removable SD card, for more convenience when performing a post-operation analysis.

### Innovation

SaphyRAD MS and its probes are on a high degree of competition/ wide market with many suppliers. It is best product on the market today for armed and security forces.

# BERTIN TECHNOLOGIES

📍 Montigny le Bretonneux, France

## About Bertin Technologies

Bertin Technologies is a French industrialist in scientific instrumentation that designs and manufactures, in France and in Europe, measurement, observation & detection systems and instruments for critical applications. Bertin Technologies pursues technological advances in the fields of Nuclear, Defence, Space, Big Science, Life Sciences and Health.

## Description

The detector ChemProX, has been supplied to multiple countries and is actively used by both, military and first responders. The ChemProX is one of the leading products in its class.



## Solution 2

### ChemProX

ChemProX is a handheld chemical detector designed to detect and classify Chemical Warfare Agents (CWA) and Toxic Industrial Chemicals (TIC). ChemProX is a "first alarm" type of detector that continuously measures the air and detects the presence of a potentially toxic chemical within seconds.

### TRL of the technology

TRL 9

### Commercial strategy

ChemProX is suitable for both, military and first responder operations and is often used by firefighters, hazmat teams, and military personnel. ChemProX is used to actively measure the immediate surroundings of the operator. Not only is the detector capable of detecting and classifying the type of chemical threat.
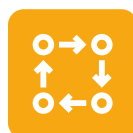
### Scenarios

**Scenarios 1-10:** ChemProX can also be used to locate the unknown chemical sources or spills by using the unique trend display.

### Innovation

Intense global competition; ChemProX widely used by military, responders worldwide. Top-class detector, deployed globally for diverse users.

Montigny le Bretonneux, France

# About Bertin Technologies

Bertin Technologies is a French industrialist in scientific instrumentation that designs and manufactures, in France and in Europe, measurement, observation & detection systems and instruments for critical applications. Bertin Technologies pursues technological advances in the fields of Nuclear, Defence, Space, Big Science, Life Sciences and Health.

# Description

The solution provided, **SecondSight,** offers Early warning by real-time detection of the chemical gas cloud and the widest monitored field of view to enable source localization and cloud movement.

# Solution 3

### SecondSight

The Second Sight MS is a passive, long range gas clouds detector. With its unique gas X feature, it also detects gases that are not in the database, which is ideal when gases are impure, mixed or unknown. Based on thermal sensor, it shows as an overlay gas cloud such as toxic industrial gases or chemical warfare agents.

### TRL of the technology

TRL 9

### Commercial strategy

The Second Sight measurement principle uses the heat of the background scene as an ithermal source, then image processing algorithms to highlight the presence of a gas cloud in the field of view. Second Sight is a universal gas detector with its Gas X detection algorithm.
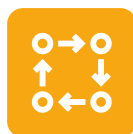
### Scenarios

**Scenarios 1,2,8,10**: Second Sight is a universal gas detector with itsGas X detection algorithm.

### Innovation

SecondSight has an embedded web server. The graphic user interface also embedded is based on this web server. The web server allows integration into third-party application like a global CBRN application via a standard IP link with IP commands and URLs.

# BERTIN TECHNOLOGIES

📍 Montigny le Bretonneux, France

**bertin** technologies

## About Bertin Technologies

Bertin Technologies is a French industrialist in scientific instrumentation that designs and manufactures, in France and in Europe, measurement, observation & detection systems and instruments for critical applications. Bertin Technologies pursues technological advances in the fields of Nuclear, Defence, Space, Big Science, Life Sciences and Health.

## Description

The solution, **CamSight Family** is a thermal compact camera, a system proven through successful mission operations.

**CAMSIGHT® FAMILY**

Low Power IR    High Definition IR    Low SWaP IR

## Solution 4

💡 **CamSight Family**
CamSight is a lightweight and compact thermal core camera to be integrated into complex optronics systems and it comes in three versions: CamSight LP for Low Power, CamSight HD for High Definition and CamSight LS for Low SWaP (Size, Weight and Power).

**TRL of the technology**
TRL 9

**Commercial strategy**
The market for LWIR infrared camera integration modules is competitive. There are a lot of products on the market, but also a lot of demand. But Bertin Technologies has the ability to innovate and adapt (on-board AI, patented shutterless technology, contouring and polarisation algorithm, digital zoom).
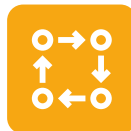
**Scenarios**
**Scenarios 3, 4, 10:** It is a surveillance technology.

💡 **Innovation**
It is an innovative product range because it meets detection, recognition and identification needs for critical applications. It is a patented solution with shutterless technologies developed in France, providing a low SWAP product, robust and adaptable.

# BULL - EVIDEN



📍 Les Clayes sous Bois, France

## About BULL - EVIDENT

BULL SAS is an Eviden company. European leader in mission-critical digital systems Combining computing power and security, Bull designs, implements and operates internationally recognized solutions for businesses and public sector bodies, making information systems a lever for excellence, differentiation and value creation. As a trusted partner, Bull enables its customers to seize all the opportunities offered by the digital revolution and manage the risks involved.

## Description

The features of **GEMMAVISION** solution are Video Analytics, Artificial Intelligence, interoperability. : The aim is to address any of the 10 ten S4C scenarii selected by the consortium with GEMMAVISION, combining existing assets and development:
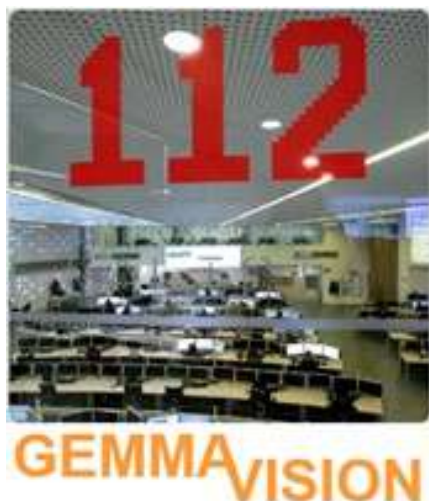


## Solution

### GEMMAVISION

GEMMAVISION is a crisis management solution based on a core technology (GEMMA product) & a module to capture events.

### TRL of the technology

TRL 5

### Commercial strategy

Commercial strategy will use Eviden inhouse sales force to push solution to existing GEMMA and CVP customers or prospects, and leverage Eviden network of partners integrators in security domain.

### Scenarios

**All scenarios:** via standard crisis management processes and coordination, between multiple stakeholders, GEMMA triggers actions based on the situation and location, and coordinates such interventions and actions, [available in GEMMA]. Dynamic adaptation of processes via AI, based on real-time information [evolution of GEMMA].

### Innovation

Crisis management automation adding AI algorithms for real-time data analysis, enhancing decision-making. This ensures rapid, informed responses by predicting and assessing evolving situations. Integrated Crisis & Automation streamlines multichannel communication to end users on the field, utilizing interfacing dedicated existing channels.

# CERBAIR

📍 Montrouge, France

![CERBAIR ANTI-DRONE SOLUTION logo]

## About CERBAIR

CERBAIR is a worldwide provider of advanced counter-drone systems (C-UAS), using radio-frequency identification, characterization and signal jamming:
Our C-UAS solutions are operated 24/7 on 5 continents with military and civilian end-users alike.

## Description

CERBAIR has been chosen by the French MoD to secure the Olympic sites of the Paris 2024 Olympic Games.
The use-case addressed is the protection of mass-gatherings and critical public sites against malicious drones.
The solution is HYDRA detection + MEDUSA neutralization. The core-technology relies on Hardware (military-grade sensors equipped with "best-in-class" sensors), Software (Extensive library of drone protocols, in-house data fusion technology), Plug&Play, user-friendly man-machine interface (MMI), European components.

## Solution

### HYDRA detection & MEDUSA

Radio-frequency passive detection of drones / Radio-frequency protocol & signal jamming. Detection of UAVs with a radius of over 10 km. Pilot and drone location trajectory.

### TRL of the technology

TRL 9

### Commercial strategy

Optronics/Surveillance/Detection. Civilian end-users, Police force end-users, Military end-users.
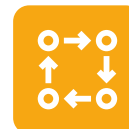
### Scenarios

**Scenarios 1,2,3,4,5,9,10:**
For the protection of mass-gatherings and critical public sites against malevolent drones.

### Innovation

CERBAIR detection and neutralization systems are highly integrable with multi-layer protection solutions, such as complex radar+optronics+kinetics security solutions.

# CERTH



📍 Thessaloniki, Greece

## About CERTH

CERTH is one of the leading research centres in Greece. Its specialties include multiple domains like Energy, Environment, Industry, Mechatronics, Information & Communication, Transportation & Sustainable Mobility, Health, Agro-biotechnology, Smart farming, and Safety & Security.

## Description

**EMERGENCY EVACUATION OPTIMIZATION** solution optimizes the evacuation process during an emergency event using Artificial Intelligence.

The solution can fit to many scenarios related to security threats in public places with a large number if civilians present.
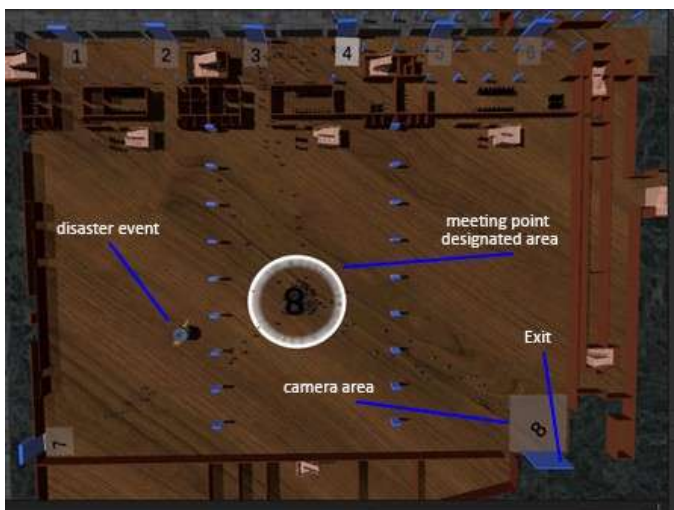


## Solution 1

### Emergency Evacuation Optimization

It is able to efficiently allocate people to emergency exits based on case specific information: site structure and available exits.

### TRL of the technology

TRL 4

### Commercial strategy

Intelligent Evacuation System Market size was valued at USD 13.16 billion in 2022 and is expected to grow to USD 33.76 billion by 2030 and grow at a CAGR of 12.5 % over the forecast period of 2023-2030.
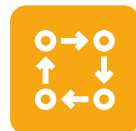
### Scenarios

**Scenario 1**: where site evacuation is required.

**Scenario 2:** the solution can be used proactively (to potentially avoid such situation) or re reactively the mitigate the effects.

**Scenario 3,4**: The solution optimizes the evacuation process during an emergency event using Artificial Intelligence.

### Innovation

Use of standardized data formats and APIs and open standards, ensure compatibility with existing infrastructure. Close collaboration with emergency services, user training, and feedback mechanisms for continuous improvement based on user and stakeholder input.

# CERTH



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## Description

The solution **Threat Object Detector and Tracker** permits the detection and tracking of guns, knives and backpacks in CCTV footage. The tool is designed for seamless integration, ensuring compatibility with various security systems and technologies. The tool's success in pilot scenarios underscore its proven interoperability in diverse security environments.
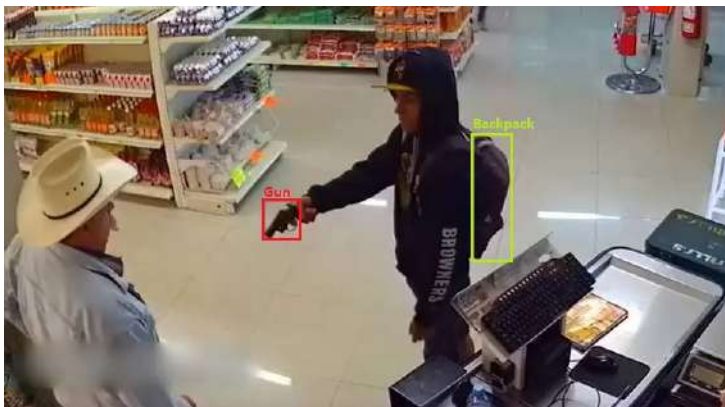


## Solution 2

### Threat Object Detector and Tracker

The tools provides assistance to Law Enforcement Agencies (LEAs) in their attempt to provide crowd security in public and private spaces.

### TRL of the technology

TRL 6

### Commercial strategy

Choosing a video surveillance provider involves considering software features, scalability, and ease of installation. The module shines in versatility, suitable for diverse needs.
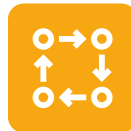
### Scenarios

**Scenario 6:** Cold weapons threats, in order to prevent or react in an efficient and fast manner to possible incidents avoiding casualties, such as knife attacks

**Scenario 7:** Firearm threats, in order to prevent or react in an efficient and fast manner to possible incidents avoiding casualties

### Innovation

The module leverages a cutting-edge object detector renowned for its exceptional performance across diverse environmental conditions, including varying lighting and scene dynamics such as action speed and relative camera position. The AI model undergoes rigorous training using meticulously curated datasets, blending existing collections with manually annotated data from the internet.



www.certh.gr          dimou@iti.gr

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# CERTH



📍 Thessaloniki, Greece

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## Description

**Crowd Evolution Prediction** solution detects anomalies in crowd gathering. In the case of detection of an emerging anomaly, such as overcrowding, unusual traffic etc., it raises alerts and can give the opportunity to stakeholders to act beforehand and take precautionary measures.



## Solution 3

### Crowd Evolution Prediction

Crowd Evolution Prediction tool focuses on specifying trends and discovering anomalies in crowd gathering in sites of interest. It raises alerts to stakeholders.

### TRL of the technology

TRL 4

### Commercial strategy

Using AI -based predictive analytics approaches and spatio-temporal information (crowd counting from CCTV cameras), the tool is able to specify the typical trends related to crowd formation in specific sites, while detecting deviations.
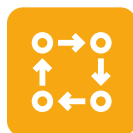
### Scenarios

**Scenario 1**: the solution can be used proactively (to potentially avoid such situation) or re reactively the mitigate the effects.
**Scenario 2:** same use as in scenario 1.

### Innovation

The tool is based on video footage from publicly installed CCTV cameras and used computer vision techniques for crowd counting and AI -based spatio-temporal predictive analytics approaches to identify typical patterns in crowd formation

# CERTH

**CERTH**
**CENTRE FOR**
**RESEARCH & TECHNOLOGY**
**HELLAS**

## About CERTH

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## Description

**Crowd Behaviour Analysis solution** is an AI-based crowd abnormal behaviour analysis for panic and violence detection by utilising video streams from UAVs and CCTVs.



## Solution 4

### Crowd Behaviour Analysis
Near real-time on-board and off-board processing of visual streams by employing deep neural networks.

### TRL of the technology
TRL 7

### Commercial strategy
Crowd Behaviour Analysis incorporates on-board deployment on the UAVs for processing acquired visual content on the edge, aiming to tackle the communication limitations in cases where the network connectivity is limited or corrupted.
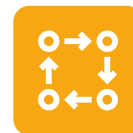
### Scenarios
**Scenarios 3, 5, 9:** CNN and 3D-CNN deep neural networks for near real-time analysis of the visual content by CCTV and UAV-mounted cameras.

### Innovation
Crowd Behaviour Analysis (CBA) solution is capable of processing, analysing, identifying and raising alerts when abnormal events are detected in crowd-centred scenes. It employs innovative deep neural network architectures for detecting abnormalities, i.e. crowd panic and violence, and persons running or staggering. In addition to the detection of the aforementioned abnormal events, CBA provides the temporal boundaries of the detected events.

# CHAPSVISION

**CHAPSVISION**
DATA MAKE SENSE

📍 Suresnes, France

## About Chapsvision

As a specialist in sovereign data processing, ChapsVision enables businesses and public authorities to succeed in their digital transformation and create value thanks to a software suite built around its system for exploiting massive, heterogeneous data. The group's impetus is the result of carefully selected acquisitions, international expansion and substantial development investment in massive data processing.

## Description

ChapsVision Enterprise focuses on customer engagement in the corporate world, and ChapsVision CyberGov, dedicated to cyber intelligence and cybersecurity for governments and public authorities. The solution proposed is **ACIC All-in-one AI.**

## Solution

### ACIC All-in-one AI
Chapsvision plans to address the detection of abnormal or unusual crowd movements as well as the detection of certain objects that represent threats (UAVs, weapons, abandoned items…)

### TRL of the technology
TRL 9

### Commercial strategy
The R&D and market strategy has raised us to become one of the three companies chosen by the French Ministry of Interior to secure and analyze crowd behaviors during the Olympic Games in 2024 through video analytics.

### Scenarios
**Scenarios 2,3,4,5,6,7,9,10:** software is a video analytics solution that can acquire live video streams either from the cameras or from the VMS and raise statistics and alerts.

### Innovation
ACIC by Chapsvision has been one of the very few competitors to start addressing the video analytics market at the beginning of the 2000's. Our solutions have successfully evolved to follow the trends and get benefit from the emerging technologies in detection, tracking and behavior identification.

# CISPE

📍 Laval, France

## CISPÉ

## About Cispé

CISPE is leader in planning, coordination & management of global security, supports event organizers and establishment directors in the cultural and sporting fields, for stadium and exhibition center operators but also with local authorities.

## Description

**SMART SECURITY EVENT** permits to improve intelligence and save time managing your security device. This solution is designed to become a global security management tool for all business sectors. It allows you to integrate plans, instructions and documents into a cloud and manage your services providers in real time on site and remotely.

**58%**
of customers feel unsafe at an event.

**17** min
is the maximum waiting time accepted by customers in the queues.

**80%**
of customer unsatisfaction is due to poor communication.

**Our services**
**Engineering & global support**

We aim to inspire our customers and elevate the market through our ability to differentiate ourselves:

**PILOT** — Reinventing reception and security

**TRAIN** — Establishing a strong safety culture

**INNOVATE** — Adapting the customer experience model in real time

## Solution

**SMART SECURITY EVENT**
This solution is designed to become a global security management tool for all business sectors. It allows you to integrate plans, instructions and documents into a cloud and manage your services providers in real time on site and remotely.

**TRL of the technology**
TRL 9

**Commercial strategy**
This tool allows analysis, planning and management of overall security services, integrating different feedback from sensors.
It allows an unique language to better coordinate different actors in charge of securtiry issues.
Bringing together plans, resources positions, instructions as well as financial mangement, it provides decision support to people in charge of an event.
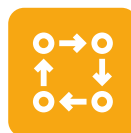
**Scenarios**
**Scenario 3,4:** Stadium crowd management, Convention center crowd management, Celebrations sites overall security management

**Innovation**
Added to the strength of a senior consultant in flow management, it is a unique model allowing man and technology convergence. Crowd management needs people who understand and master its language.

# CS GROUP

📍 Le Plessis Robinson, France

## Solution 1

**CS** — a Sopra Steria company

## About CS GROUP

CS GROUP - France is a large and very innovative company based in Paris. It is a European Leader in the design, integration, deployment, and operation of smart cyber-protected mission-critical systems such as protection and crisis management platforms as well as counter-UAV systems.

## Description

**Crimson** is an innovative and widely adopted European solution for monitoring and protecting public and natural spaces, critical infrastructures, and systems of systems. It provides an effective multi-domain C2/C4ISR platform for the effective and safe management of all kinds of natural and man-made incidents and crises impacting these environments.

### Crimson

Crimson facilitates situational awareness and information sharing, operational command and decision-making by providing to the command chains.

### TRL of the technology

TRL 9

### Commercial strategy

It is widely adopted by operational end-users from the civil protection and law enforcement domains as well as third-party system integrators, for the surveillance, protection.

### Scenarios

**All scenarios:** Crimson proposes an innovative and tightly integrated platform based on the following technological components. A web-based architecture supporting thousands of simultaneous users.

### Innovation

- A high-performance, secured and highly interoperable web-based architecture supporting thousands of simultaneous users;
- A multi-dimensional (This AI-powered system can effectively differentiate between thermal and electric vehicles. The sounds captured by the embedded system are transmitted to the AI, which classifies the vehicles in real time based on their engine type. This system based on real-time audio collection and recognition enables public authorities.

# CS GROUP



📍 Le Plessis Robinson, France

## About CS GROUP

CS GROUP - France is a large and very innovative company based in Paris. It is a European Leader in the design, integration, deployment, and operation of smart cyber-protected mission-critical systems such as protection and crisis management platforms as well as counter-UAV systems.

## Description

Designed and developed in France, **Boreades** is a European leading anti-drone system widely adopted in France since 2016, and in use within LEA and Armies to protect critical sites and major events such as G7, UEFA championships, Rugby World Cup, and the upcoming Olympic Games. Boreades features a modular architecture enabling to adapt to various use cases.



## Solution 2

### Boreades
BOREADES is a field proven highly innovative solution,. Dozens of systems' ve been delivered & are now in operation within French army, law enforcement agencies, critical infrastructure operators.

### TRL of the technology
TRL 9

### Commercial strategy
Boreades is a solution commercially exploited by CS GROUP and widely adopted for C-UAV use cases. Our solution ranges within the high-end solutions that can address both military and civilian use cases.

### Scenarios
**Scenario 1:** 2D-3D realtime visualisation of the UAV/drone situation integrating fused multi-sensor data.
**Scenario 2, 3:** Highly automated solution with friendly HMI.

### Innovation
A high-performance, secured and highly interoperable architecture tailored for numerous use cases; Performances already tested and validated in dense urban environments. Urban environments are particularly challenging for C-UAV and many solutions can be rendered inefficient due to visibility ground clutter and high noise levels in UAV frequency bands, in addition the regulatory framework can limit the technologies that can be used;

Ballerup, Denmark

# About Damasec Global Group

Damasec Global Group consist of three key business areas:
1) Mine Action world wide
2) Defence equipment supply
3)Physical protection - design, delivering and installing(Operational deployment) of protective solutions within blast-, ballistic and vehicle attack protection systems.

# Description

**Surface Guard**, Impakt defender or acombination of both, or fixed bollards or automated bollards, is the options for securing people in crowded spaces from hostile vehicle attacks.

# Solution

### Surface Guard
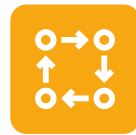Fixed, automated and temporary solutions for hostile vehicle mitigation

### TRL of the technology
TRL 9

### Commercial strategy
The key factors is using certified solutions and utilise vehicle dynamic analysis and thereby define the required protection level, choice of solutions and guidelines.

### Scenarios
**Scenario 5:** The solutions are all certified and tested according to PAS68, IWA14 or ISO 22343. Knowledge of deployment is vital and requires trained and skilled staff. The temporary surface laid solution.

### Innovation
The temporary surface deployed protection solutions for crowded spaces are innovative in design, protection level, speed of deployment, and functionality. The fixed solutions are innovative in design and options for integration into the city/area dynamics.

Rosières-près-Troyes, France

## About Data Smart Process

The Aquilae team, based in Aube, developed video analysis technology based on artificial intelligence in 2017. The company offers a complete video surveillance solution adaptable to customer needs ranging from anomaly detection to counting system.

## Description

**VISIA** permits to deploy quickly a plug&play solution to process 8 video streams in order to supervise human activity without calibration, to detect in real-time any abnormal situation involving humans : high/low people concentration, fall, violence, and to interact with the analyzing system to get the appropriate results depending on the needs.

### VISIA BY AQUILAE

**Quick and easy installation**

Ergonomic interface
Easy camera association thanks to the ONVIF protocol
Direct or remote access via a web interface

**Intuitive calibration**

Simplified calibration by automatic sequence analysis
Manual validation of detected silhouettes
Guaranteed low false positive rate from the start

**Optimized configuration of areas of interest**

Intuitive definition of detection zones in the cameras' field of view
Creation of zone groups and different scenarios
Pre-detection zones can be activated to optimize alerts

**Pertinent transmission**

Transfer and escalation of alarms via SMS, email or to remote monitoring centers and VMS
Schedule for putting into and out of service
Cascading transmission with doubt removal delays

## Solution

### VISIA

The algorithm developed allows a very detailed analysis of flows from one or more cameras to respond to quality control issues in industry, intrusion detection in public or private buildings for example.

### TRL of the technology

TRL 5

### Commercial strategy

The strategy key is the hardware as it could be sold or rented with floating licences and a support credit (8 hours / installation). This mode would be operable through dedicated distributors.

### Scenarios

**Scenarios 1, 3, 5 :** LLM meets video analytics to make results of AI-powered processing more relevant to the final user Features of the technology: Human body posture and gesture detection.

### Innovation

Unsupervised machine learning with a touch of NLP to understand the final user requirements.
The hardware ressources optimization is in the heart of the innovative process to prove the ability of processing 8 video streams in real time. 10min configuration for 1 camera in order to reach satisfying performance rates.

📍 Montbonnot, France

## About Digigram Digital

Digigram is a leading provider of digital audio solutions since 1985. The 40 years experience have granted them a unique market perspective, and today we see an increasing demand for versatility and reliability in each and every audio solution, especially when it comes to critical communications.

## Description

**Digigram IQOYA TALK** portable IP audio codec was designed to ease your life when live remote broadcasting. Used as a standalone device, PYKO will convert analog audio sources into an IP audio stream sent to one or several destinations.

## Solution

### IQOYA Talk and Pyko

IQOYA Talk and PYKO that can be integrated within solutions to automaticallydetect abnormal situations thanks to audio, monitor audio activity.

### TRL of the technology

TRL 4

### Commercial strategy

The go to market is either direct or indirect through distributors. For this project the strategy would be to create a solution based on commercialized building blocks, prototype.

### Scenarios

**Scenarios 1, 2, 3:** Audio signals provide the invisible, yet vital, connecting lifelines that bond individuals on a daily basis, especially when operating critical communications systems.
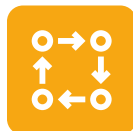
### Innovation

This AI-powered system can effectively differentiate between thermal and electric vehicles. The sounds captured by the embedded system are transmitted to the AI, which classifies the vehicles in real time based on their engine type. This system based on real-time audio collection and recognition enables public authorities to adjust their circulation policies immediately or serve as a probing system to elaborate future global policies.

# DRONE GEOFENCING

Nîmes, France

## Drone Geofencing

## About Drone Geofencing

Drone Geofencing is developing a solution for supervising a fleet of drones from a control center. The drones can operate independently or in swarms.

The supervisor can follow-up the progress of the drones, control the UAV's fleet sensors and take control of the UAVs (automatic flight and/or manual flights (in dual control mode).

## Description

The solution DroneStation permits the supervision of a UAV's fleet deployed to monitor the smooth running of an event. The ground station enables all types of UAV to be operated. The data are collected and centralized within a supervision center (crisis room). The operator, located in the control center, can pilot the drone (in dual command) and its sensors. He can send specific live streaming to the teams on the ground (equiped with a mobile Apps).

## Solution

### DroneStation

The solution is a Supervision station for a multi-vendor UAV's fleet assigned to monitor an event AND reconnaissance on a site suspected of having been hit by a nuclear, biological or chemical attack.

### TRL of the technology

TRL 6

### Commercial strategy

The solution offers mission preparation software for compliant flight declarations, facilitates high-speed drone-to-ground station connections independent of GSM network, allows centralized streaming & inference of multiple AI algorithms on video streams, integrates a specialized aerial image processing AI library with the option to add custom or 3rdparty algorithms, enabling redirection of video streams to specific field teams for enhanced information sharing.
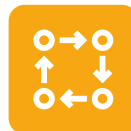
### Scenarios

**Scenario 1:** Supervision of a UAV's fleet deployed to monitor the smooth running of an event.
**Scenario 2:** Setting up a reconnaissance mission using a swarm of UAVs on a suspected contaminated site

### Interoperability

The architecture of the solution is heamless and built on micro-services., it can therefore be easily interoperable with other systems.

# DRONE XTR

📍 Le Havre, France

## About DRONE XTR

Drone XTR is the French leader in UAV detection, ensuring the protection of more than 60 sensitive facilities in France. The company works with industrials (Total Energies ExxonMobil, Ineos), the French Army, airports (8 major airports in France - EUR 7M tender won in November 2023), VIP, French authorities. Drone XTR offers detection and targeted jamming.

## Description

The technology **XTR5** is able to detect commercial and home-made UAV (those that are used in Ukraine for example). The technology is based on Radio Frequency & protocol hacking (over 450 UAV are registered in our library that is regularly updated).

## Solution

### XTR 5
The solution comprises a passive antenna, facilitating shared access to multiple facilities. It is versatile and effective across various markets, including public bodies, law enforcement, civil protection, cities, and defense.
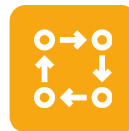
### TRL of the technology
TRL 9

### Commercial strategy
Public bodies, law enforcement agencies, civil protection, cities, defence, private sector, security services, event security, mixes public private sector.

### Scenarios
**Scenario 2:** Drone & CBRN Threats Descripion of your technology and how it fits to the selected scenario and responds to the challenge: Our system has already been approved by major customer: french state / french major airports / french army / Big events "ARMADA ROUEN" (5 millions people on one week) / Industrial facilities over 50 are equipped by Drone XTR.

### Innovation
Ready for use, easy installation requiring only 220V power supply, 10km detection range, customizable frontend, high performance, passive solution, non-interference with various networks.

# ELISTAIR & TWO-I

📍 Dardilly, France
📍 Metz, France

**Solution**

## About Elistair & TWO-I

Elistair's leading aerial surveillance technology provides continuous, timely and actionable intelligence to help teams in the field protect lives and assets.

The Two-i Video Analytics software solution provides value from your video-protection infrastructure investments by transforming videos into actionable, searchable, and qualifiable data.

## Description

KHRONOS is a dronebox can be used in multiple missions of surveillance and assist operators in their video analysis, with some AI functionnalities. KHRONOS is conceived to provide a full liberty of actions, a reduction of the operators insecurity and a wide area coverage. The innovation consists in the level of modularity, the power of the tethering station, the integration of the camera, the height and duration of flight, the size and weight of the drone, the AI functions 5real-time analysis and alerts, post-event analysis and reporting system, statistical analysis and data aggregation, target tracking, recognition).

### KHRONOS

KHRONOS is a mobile tactical surveillance system mounted on a vehicle, capable of delivering a global and continuous aerial intelligent view of several hours.
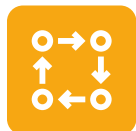
### TRL of the technology

TRL 8

### Commercial strategy

The KHRONOS dronebox can be used in multiple missions of surveillance and assist operators in their video analysis. with some IA functionnalities.

### Scenarios

**Scenarios 3, 4, 5:** Ready fot integraton, mountable on a vehicle or on buildings. Fully automated, with a simple push-button system, automated from take-off.

### Innovation

This tethered dronebox has a flight monitoring interface really easy to handle for drone control, tethering box control, take off/landing and autonomous height deployment. KHRONOS is conceived to provide a full liberty of actions, a reduction of the operators insecurity and a wide area coverage. KHRONOS has responded to 3 scientific challenges : the drone positioning in GNSS denied, the follow-me of the vehicle and the landing on mouvement.

# ETRA INVESTIGACIÓN Y DESARROLLO

📍 Valencia, Spain

## About ETRA Investigación y Desarrollo

GRUPOETRA is a global technology player, Centre of Excellence for Smart Cities thanks to its intense activity in R&D and innovation in Smart technologies. Its mission is putting in the market the most advanced solutions and services. The main market areas of GRUPOETRA are Spain, Portugal, Eastern Europe, LATAM and MENA.

## Description

HOPLON provides a command and control platform to detect possible physical threats in a given environment, generates the corresponding detection events in the form of incidents that can be analyzed by the operator, and offers both real-time information and incident history, for subsequent review.
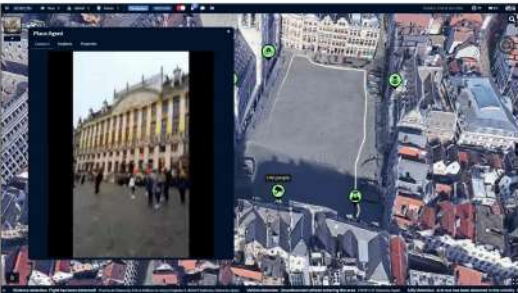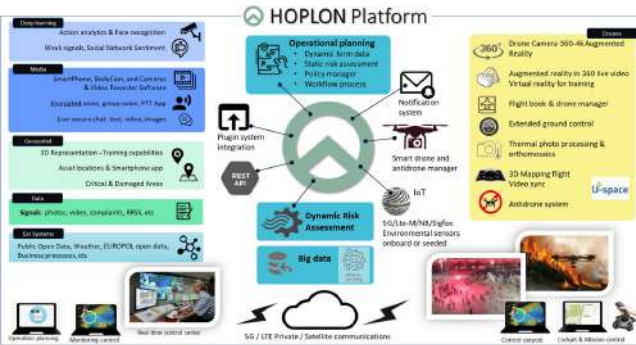




## Solution

### HOPLON

HOPLON is an innovative solution providing complete situational awareness, advanced data analysis and multilayered countermeasures to protect EU public spaces and its citizens against current and emerging threats.
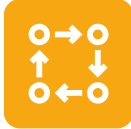
### TRL of the technology
TRL 7

### Commercial strategy

HOPLON can be validated in a scenario of mass gatherings, where combined attacks may take place and multiple sensors can contribute to the detection of the threat and real-time response mechanisms can optimize the operation of the LEAs and FRs in charge of the emergency.

### Scenarios

**Scenario 1-9**: It provides a command and control platform to detect possible physical threats. It generates the corresponding detection events in the form of incidents. The system allows the integration of heterogeneous data received from a wide range of sensors.

### Innovation

The innovations associated to HOPLON include the integration of UAV detection, and advanced visualization techniques based on AI such as the abnormal behavior detection.

# EVITECH



📍 Orsay, France

## About EVITECH

Established in 2005, with 20 employees, EVITECH is a French company specializing in intelligent image processing systems (software). EVITECH offers products (usage licenses) and services (maintenance, support, integration) to its clients in the field of global security. Its achievements are the result of proven technology, derived from the military domain, for intelligent video surveillance applications.

## Description

**LYNX** combines in-house trained AI solutions with image processing algorithms and high level scenario matching to trigger accurate alarms Features of the technology: DNN, AI, Image processing Innovation of the technology.



## Solution

### LYNX
Global Solution for Crowd Management: advanced counting and abnormal situations detection to smooth public flow.
Each feature of the solution is a dedicated AI engine that hasbeen uniquely trained for that feature. It requires minimal to zero on site configuration, that can even handle drone cameras.
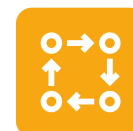
### TRL of the technology
TRL 9

### Commercial strategy
Video analytics & Global Solution for Crowd Management: advanced counting and abnormal situations detection to smooth public flow. Targets: cities, stadiums & festival venues (both whereabouts and inside), train stations and on board, airports halls.

### Scenarios
**Scenario 4, 7**: Whereas many actors solely rely on classification AIs (detecting heads, bodies, etc.)

### Innovation
The sollutions come with a full IP based integration API, pretty much compatible with any third party system, and was already integrated in several video management systems and hypervisors.
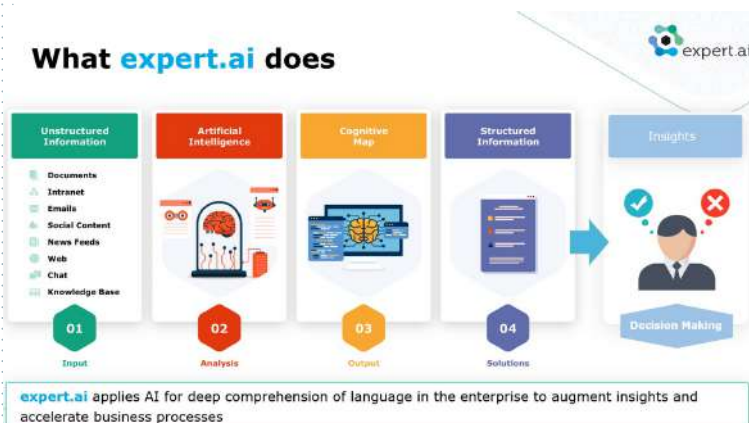
Rovereto, Italy

## About Expert.ai

Expert.ai provides the premier AI platform for language understanding. The company, founded in Modena in 1989 (under the name Expert System) is listed on Euronext Growth Milan since 2014. Its unique hybrid approach to NL combines symbolic human-like comprehension and machine/deep learning to transform language-intensive processes into practical knowledge, providing the insight required to improve decision making throughout organizations.

## Description

**AI/NLU Deep Semantic Technology** addresses the use-case "Unplanned incidents threats" by discovering insights from unstructured contents.



**What expert.ai does**

expert.ai applies AI for deep comprehension of language in the enterprise to augment insights and accelerate business processes

## Solution

### AI/NLU Deep Semantic Technology
Expert.ai is a technology company founded on 1989 and fully focused on Natural Language Understanding by means of deep semantic algorithms based on either on Knowledge Graph/Taxonomy or Machine/Deep learning (Hybrid AI).
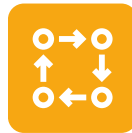
### TRL of the technology
TRL 9

### Commercial strategy
Extracting insights from unstructured data, AI/NLU algorithms enhance intelligence activities. Deep semantic analysis combines online/offline sources for Open Source/Social Media Intelligence, improving information superiority and decision-making.

### Scenarios
**Scenario 1**: by discovering insights from unstructured contents.
**Scenario 3, 5, 6, 7, 8, 9:** If the goal is to improve human reasoning with insights.

### Innovation
Analytics solutions based on pure Machine/Deep Learning (ML/DL), typically do not rely on an embedded pre-existing knowledge: to build it, a large set of training documents is required which should also be manually pre-tagged by humans. This kind of system can learn only through the above process. Here accuracy grows only with the number of documents and with the frequency of training.

# FOXSTREAM

📍 Vaulx-en-Velin, France

**FOXSTREAM**
SMART VIDEO ANALYTICS

## About Foxstream

Foxstream is a software company, founded in 2004, that specializes in real-time automated processing of video content analysis (VCA). Foxstream offers solutions that extract meaningful information from video feeds. The objective is to provide users with solutions that increase the efficiency and efficacy of their video system and to reduce their operating costs.

## Description

**FoxVigi** is a generic software solution for video analytics, with a strong focus on security solution. For this project, we handle the security situations related to crowd and unattended items.

## Solution

**FoxVigi**
The solution combines multiple layers of DeepLearning with high-level analytics to extract pertinent data. The DL layers detects individual elements.
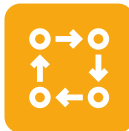
**TRL of the technology**
TRL 6

**Commercial strategy**
The main target for our solution are the transport infrastructures (railstation, metro, airports, etc). Besides crowd-releated analytics, our solution provides other security-related scenario (intrusion, unauthorized vehicle) or flow management (area people counting, in/out counting, density).

**Scenarios**
**Scenarios 1-10:** The solution combines multiple layers of DeepLearning with high-level analytics to extract pertinent data from video streams.

**Innovation**
Interoperability, Simplicity, Adaptability, Security Innovation of the technology:
The basis of the innovation is to use video camera to extract pertinent, actionable data. The video analytics has greatly evolved in the last years. The main advantage of Foxstream resides in its experience. We master a collection of tools and we choose the best one for the task.
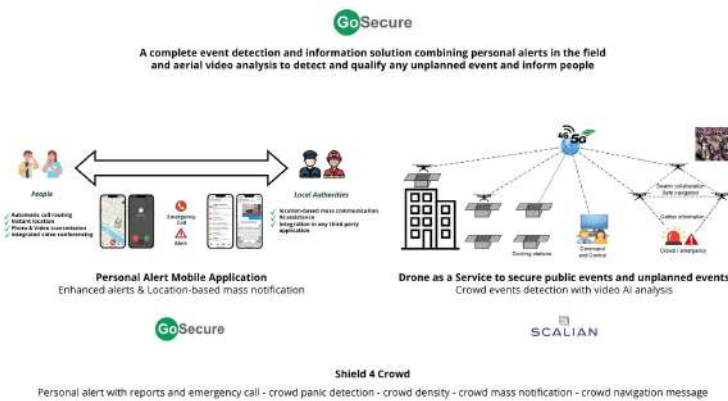
# GOSECURE



📍 La Garenne Colombes, France

## About GoSecure

GoSecure is a startup created in 2017 that offers an innovative connected personal security solution that connects people to all local security authorities, public and private with augmented alert functionalities and instant information on danger zones.

## Description

GoSecure propose a application that allows enhanced alerts and crowd location information: **GoSecure global crowd management and communication solution.**



## Solution

### GoSecure global crowd management

GoSecure solution A + AI Panic detection with AI panic movement detection through Drone and/or GoSecure mobile app.

### TRL of the technology
TRL 6

### Commercial strategy
The solution that GoSecure proposes adresses all the market segments with crowd management : event industy, public transportation, municipalities, etc.

### Scenarios
**Scenarios 1,3,4, 8, 9, 10**: Augmented alerts for people: location, photo, video, videoconferencing, messaging; real-time information via location-based mass notification.

### Innovation
GoSecure offers a universal personal security solution that connects people to all security services in all territories where they are present in their journeys, thus with enhances features : reports with messaging, photo, video, location, emergency call with location and videoconference. GoSecure allows monitoring of crowd density and average movement. With Geofencing, GoSecure routes the reports and calls AUTOMATICALLY to the correct LOCAL service.

Ayguesvives, France

# About HEMERIA

Hemeria Airship designs and produces aerostats (tethered balloons, drone airships, stratospheric balloons, equipped envelopes) and thermal protection for satellites (called MLI – Multi Layer Insulation). Its production site is located in Ayguesvives, south of Toulouse.

# Description

**SPARROW** is a tethered aerostat system. HEMERIA offers a solution which will be easily accepted by the public during festive events. Indeed, the envelope of the aerostat can be customized with the logos of the events or the sponsors. Thus, it fits into the event's scenography, making the visitors forget that it is mainly a surveillance system. The solution does not disturb the running of the event.

# Solution

### SPARROW

With the SPARROW tethered aerostat system, HEMERIA addresses the issues of Coordinated Attacks and Public Panic Situations in Planned Major Event.

### TRL of the technology

TRL 6

### Commercial strategy

SPARROW is dedicated to missions lasting from one day up to several weeks while being easy to use, cost-effective and eco-friendly. SPARROW aims to detect and track targets of interest in an area of 3 km. It is composed of a tethered aerostat platform with enhanced stability thanks to a 3-point mooring design, a state-of-the-art optronic gimbal and a control and command ground station.
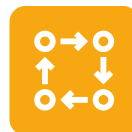
### Scenarios

**Scenario 3:** SPARROW is a tactical airborne surveillance system based on a tethered aerostat.
**Scenario 1:** Its sensors are deployed in altitude so they enable a 3D vision of the situation

### Innovation

Compared to both drones and helicopters, the SPARROW system is more persistent (flight duration is longer). Thus, it is best suited to long term missions (a few days, several weeks and even several months) such as the security of major events.

Madrid, Spain

## About HI IBERIA

With over 20 years in the telecommunications sector and more than 150 renowned professionals, the best guarantee lies in the experience and expertise amassed. Collaboration is established with the most prestigious companies and leading Spanish and international corporations to spearhead sustainable projects of high added value.

## Description

**LAILA -** Large Language Models and AI Agents for the Optimization of Information and Knowledge Management - has a high level of innovation in the current market, featuring state-of-the-art AI techniques not commonly implemented in existing similar solutions, providing a significant competitive edge. Its unique combination of real-time data analysis and rapid response systems differentiates this technology from others in the market.
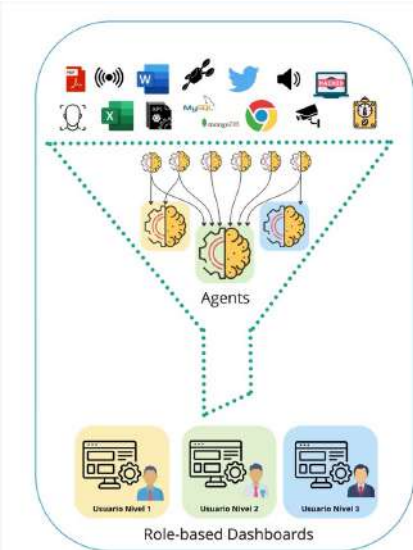


## Solution

### LAILA

An innovative solution employing artificial intelligence techniques for data analysis to manage and mitigate public panic situations, and to effectively respond to unplanned incident threats, enhancing safety and responsiveness in critical moments.
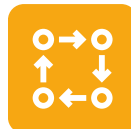
### TRL of the technology
TRL 7

### Commercial strategy

.The solution utilizes advanced artificial intelligence techniques for data analysis. This includes processing and interpreting large volumes of real-time data, enabling the identification of patterns and predicting potential public panic situations and unplanned incident threats.

### Scenarios

**Scenarios 1, 5, 9:** LAILA will serve as the platform to connect all data, designed to assess every scenario considered and to include new ones, ensuring comprehensive and adaptable coverage across various situations.

### Innovation

The solution is adaptable and can be customized to meet the specific needs of the environment in which it is implemented. This ensures that the technology is relevant and effective in different contexts and scenarios, maximizing its usefulness and efficacy in managing emergency situations.

# HOLOGARDE

📍 Paray-Vieille-Poste, France

**HOLOGARDE**
A WORLD AHEAD

## About Hologarde

Hologarde, a subsidiary company of Groupe ADP, is a leading French company in counter-drone and management of collaborative drone, multi-domain and multi-environment offering scalable, agile and adaptable systems.

## Description

Hologarde's expertise is applied to the most sensitive sites. It is the only proved and operational device used by the French Forces. The software is sensor agnostic and scalable, as it constantly adapts to new technologies; It is disruptive because it is the only system to combine anti-drone and collaborative drone management at the same time.

HOLOSAFE can be mutualizedfor several applications: for example, the use of sensors for drone control can also be used for perimeter protection.



## Solution

### HoloSafe
Hologarde offers a software solution for detecting, identifying, classifying and neutralizing unwanted drones, while facilitating the planning, deconflicting and real-time tracking of force-accredited drone flights.
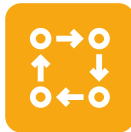
### TRL of the technology
TRL 9

### Commercial strategy
Hologarde develops airspace protection, drone management, anti-drone solutions, and perimeter control. It designs, operates Command & Control software, providing real-time situational awareness and precise drone positioning.

### Scenarios
**Scenario 2:** Multi-site hypervision capability: the C2 can be deported and can broadcast tactical information in real time.

### Innovation
1-It The only system that has been operational and proven in the French Armed Forces since 2019.
2-Hologarde ensures LAD security at France's most sensitive sites
3-Hologarde manages collaborative drones in Paris airspace
4-Hologarde is the only system to combine LAD and UTM
5- Multi-environment

# IANUS CONSULTING

Larnaca, Cyprus

## About Ianus Consulting

IANUS conducts research, develops innovative solutions and provides consultancy and management services to its clients in both the public and the private sector.

## Description

IANUS has developped the solution **MAESTRO - Incident Management Platform,** to address firearm threat. MAESTRO stands at the forefront of innovation in incident management and public safety, revolutionizing the landscape with its comprehensive and adaptive approach. One of its key innovations lies in seamlessly integrating real-time data from diverse sources, including IoT devices, sensors, and social media feeds, creating a dynamic and holistic understanding of incidents. The advanced geospatial visualization tools further elevate MAESTRO, providing a live map interface for enhanced situational awareness.
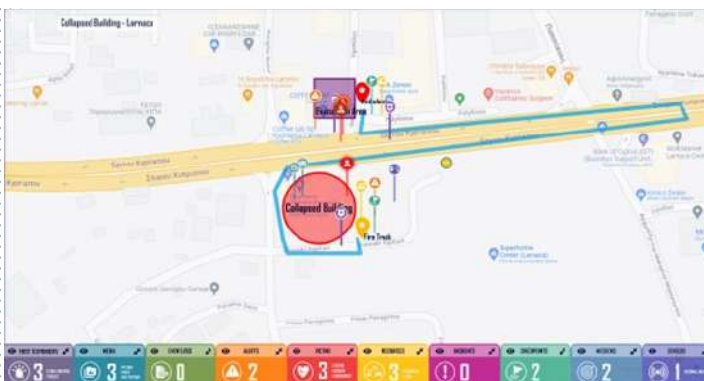
## Solution 2

### MAESTRO

MAESTRO, an in house developed incident management platform, designed to address diverse and dynamic scenarios in real-time.

### TRL of the technology

TRL 6

### Commercial strategy

Features like real-time data integration, geospatial visualization MAESTRO excels in facilitating seamless coordination, communication, and response across various scenarios. Its geospatial visualization tools enable LEAs to have a global view of the field while supporting peer-to-peer information exchange in all steps of a mission.

### Scenarios
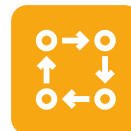
**Scenario 1,2,5,6,9:** in house developed incident management platform, designed to address diverse and dynamic scenarios in real-time.

### Innovation

The platform enables swift incident reporting for first responders, coordinating responses by security personnel. Intelligent categorization ensures efficient resource allocation. MAESTRO's app enhances on-the-go communication, optimizing response times.

# IANUS CONSULTING

Larnaca, Cyprus

## About Ianus Consulting

IANUS conducts research, develops innovative solutions and provides consultancy and management services to its clients in both the public and the private sector.

## Description

IANUS **SVA - Security Vulnerability Assessment** is a web-based platform to assist security planners on the identification of vulnerabilities of any public space and has a suite of a number of possible threats that can accommodate a large number of attacks.
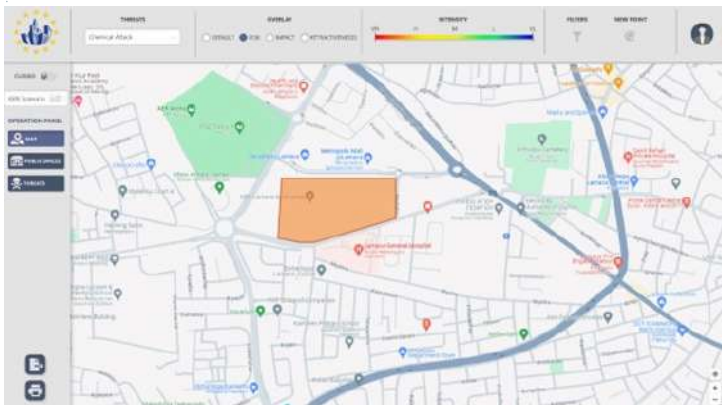


## Solution 1

### SVA

The SVA platform allows users to mark and select precise areas and users are prompted to answer a series of comprehensive questions, assessing the intention, likelihood, and attractiveness of the chosen areas to potential threats.

### TRL of the technology

TRL 5

### Commercial strategy

The platform assesses firearm attack risk, maps it visually with color-coded indicators, aiding security responses and improvements. Integrates with Google Maps for precise security assessments, using questions to evaluate threat likelihood and intention. Visualizes results with a color-coded map for easy interpretation of risk levels in marked areas.
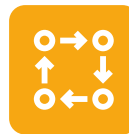
### Scenarios

**Scenario 3:** security planning for public spaces.

### Innovation

The tool caters to government and safety agencies, aiding security planning, resource allocation, and urban development. Implementing a targeted segmentation strategy for key markets, our approach tailors solutions to diverse sectors.

# ICM INDUSTRIE LYON

📍 Chassieu, France

## About ICM Industrie Lyon

ICM Industrie Lyon is part of a family group founded in 1993 and specialising in the manufacture of equipment in plastic and composite materials. From their 6 production sites in France, they deliver parts and sub-assemblies for the Defence, Security and Safety sectors all over the world. They are certified ISO 9001 and EN 9100 for the aeronautics sector.

## Description

**ICM Protect** is first and foremost a device that protects, secures, dissuades, channels, prohibits and stops any terrorist attack. It slows down the attackers' ability to penetrate and gives the forces of law and order, the security services and even the army time to intervene (e.g. protecting the entrances to military bases). The boxes are neither flower pots nor street furniture (even if they do contribute to the décor), but a practical solution to counter any malicious action and protect property and people.

## Solution

### ICM Protect
ICM Protect provides discreet protection, stop ram car and channel the crowds.
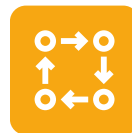
### TRL of the technology
TRL 8

### Commercial strategy
The box is designed to limit or make it difficult to access the site by car. Covered in vegetation and concealed in an urban setting, it provides discreet protection without the anxiety-inducing features of conventional systems.

### Scenarios
**Scenario 1:** protecting people in the vicinity of the FCKNYE Festival in Brussels.
**Scenario 2:** protection of sites such as the Promenade des Anglais in Nice for 14 July.
**Scenario 3:** protectinf people and property during the opening ceremony of the Paris Olympics.

### Innovation
The combination of the honeycomb structure of the box and the contents to ballast the device (sand, earth, gravel, etc.) gives the system its strength and weight face to a ram car attack or to isolate the impact of a bullet.

**IDEMIA**

Courbevoie, France

## About Idemia Identity & Security

IDEMIA Public Security is the premium provider of convenient and trusted biometric-based solutions, transforming public & private organizations across the globe. The industry-enabled and client-specific solutions draw upon decades of expertise in biometrics to revolutionize the fields of public security and identity, travel and transport, and access control. Built on privacy and trust, the market-leading iris, fingerprint and facial recognition solutions top independent benchmarking.

## Description

Augmented Vision is using biometric templating to re-identify persons and therefore improve the ranking of potential matches and remove low score candidates
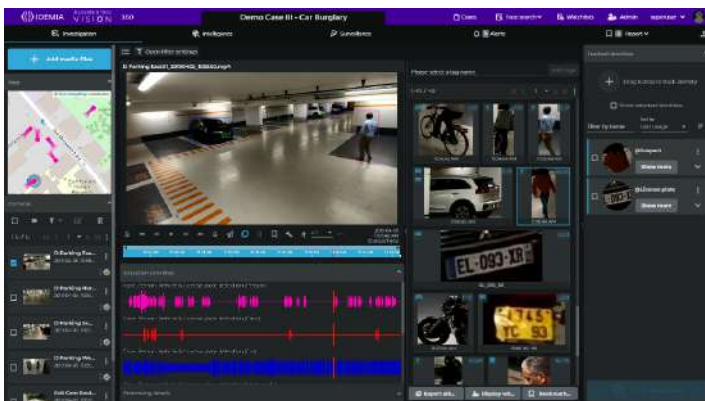


## Solution

### Augmented Vision (AV)

AV is an video analytics solution which detect and alert in real time abnormal events in order to provide actionable intelligence to various stakeholders in the security workflow.

### TRL of the technology

TRL 9

### Commercial strategy

The licensing model on post-event is based on speed of injection and do not care about the numbers of sources, therefore reduce the price for large scale system.

### Scenarios

**Scenarios 5, 6, 7, 10:** Augmented Vision is a video analytics platform that provides a large set of features, covering video and image processing and AI based detection.

### Innovation

The quality of the detection and identification : IDEMIA is at the forefront of biometric research, constantly top ranking on NIST FRVT with its own algorithms. FRVT 1:N Identification (nist.gov). Going with Augmented Vision is benefitting from the whole company commitment to continue invest massively into fundamental research & products for many years and therefore for customer to benefits from latest technologies. IDEMIA is serving Gov & Agencies for more than 40 years.

# INDRA SISTEMAS

![Indra logo]

📍 Madrid area, Spain

## About INDRA SISTEMAS

Indra is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defence markets. Its business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component.

## Description

Evacuation module for **iSafety** is an intelligent infrastructure evacuation system (buildings, ships, etc.) reacting in real time to changes and controlling the movements of the masses.
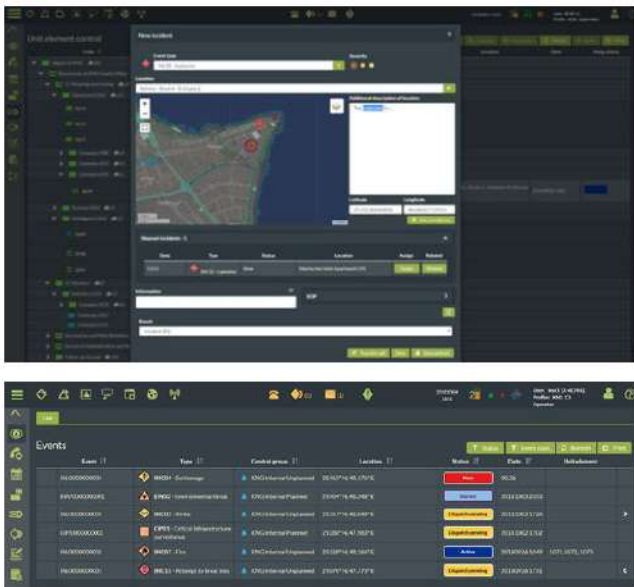


## Solution

### iSafety

iSafety is an emergency management platform that facilitates daily operations and decision making by proposing the best response options for each situation, assisting operators and providing updated information in real time.
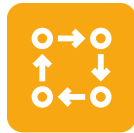
### TRL of the technology
TRL 6

### Commercial strategy

Analyse target market trends, needs and competition to understand the demand for emergency command and control tools. Continuous product improvement based on evolving market requirements. Ensure compatibility with technologies.

### Scenarios

**Scenario 3:** Crowd digital modeling
**Scenario 4:** Holistic system to guide in the evacuation of facilities
**Scenario 6:** Provides a valuable tool to guarantee total Situation-Awareness
**Scenario 7:** Adapts dynamically evacuation plans
**Scenario 8, 9:** Study of the legal, regulatory and ethical environment.

### Innovation

Evacuation module for iSafety is an intelligent infrastructure evacuation system (buildings, ships, etc.) reacting in real time to changes and controlling the movements of the masses.

📍 Vélizy-Villacoubay, France

## About Ineo Defense

Ineo Defense, an entity of Equans France, intervenes throughout the value chain of a project. Its interventions are based on technological excellence & multidisciplinary skills of its teams of specialists in signal processing, radio frequency, optronics, optics, electromagnetism, hardening, electronic security, cybersecurity. The combination of expertise makes it possible to cover a wide spectrum of activities and offer a range of turnkey solutions that meet the specific expectations of state and industrial customers.

## Description

SAVEC solution permits to stop a vehicle and to limit serious injuries on people during an event.
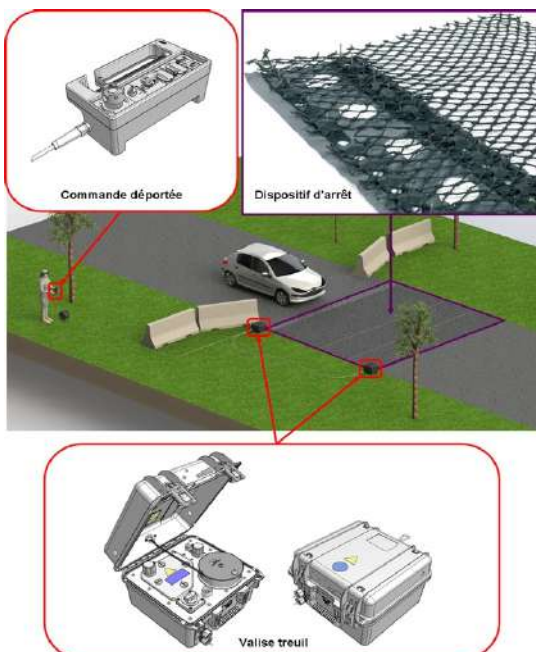


## Solution

### SAVEC

SAVEC is a device designed to protect areas from malicious vehicle attacks of up to 10 tons. Thanks to its ease of use and implementation, the system can meet all types of needs: force protection, peacekeeping operations, protection of sensitive areas, securing major events.

### TRL of the technology

TRL 9

### Commercial strategy

The SAVEC allows, for example, to leave free access to emergency vehicles during an event such as the Rugby World Cup or the 2024 Olympics while deploying a barrier if a malicious vehicle approaches this entrance.

### Scenarios

**Scenario 1:** Stop a wheeled vehicle up to 40 km/h and weighing up to 10 tons. The scenario will show a control of the vehicle (linear stop) while limiting serious injuries on people and an efficiency against tires type "run flat".

### Innovation

The system can be coupled with other longer range detection solutions or simply alert solutions that would facilitate the evacuation or prevention of surrounding people.

# INOCESS

📍 Sophia Antipolis, France

## About INOCESS

INOCESS designs complex electronic devices for crowd flow and energy management. The realization is entirely led by its internal teams, from the most upstream R&D phases to prototypes and industrialization.

## Description

**Nextent solution** offers real-time field information to help manage a crowd. This solution is suited in any scenario that requires monitoring crowd behaviors and reacting to reduce the risk of a crisis happening and/or minimize any harm that may affect the crowd.



## Solution

### NEXTENT

Nextent measures real time density and flow of people to give an overview of the crowd current behavior, which can greatly help operators to manage a crowd and take well informed decisions in any situation that can be dangerous.

### TRL of the technology

TRL 8

### Commercial strategy

This solution allows to monitor the crowd and check whether the crowd is behaving according to expectation or if any unexpected behaviors are rising.

### Scenarios

**All scenarios:** Nextent includes a set of sensors and data processing algorithms that measure the presence of IoT devices in specific areas and provide information about the crowd.

### Innovation

Unlike most crowd monitoring solutions, ours is based on IoTs detections. This is a huge advantage for GDPR as it is far less intrusive than video camera systems. Moreover, the solution is able to recognize devices, carried by people, in the different measured areas using the MAC address, which is easily crypted on sensors and contains no sensible personal information. This allows the solution to not only give indication on the crowd size but also on the movement inside the crowd while staying GDPR compliant.

# INOV INESC INOVACAO - INSTITUTO DE NOVAS TECNOLOGIAS

📍 Lisboa, Portugal

## About Inov

INOV INESC INOVAÇÃO is part of INESC – Institute for Systems and Computer Engineering, a leading Portuguese private non-profit association of public utility, founded in 1980, dedicated to education, scientific research, technology development, innovation, business incubation and consultancy.

## Description

The solution CrowdAlert permits pre-event preparation, crowd engagement, real-time monitoring and response, and post-event analysis.
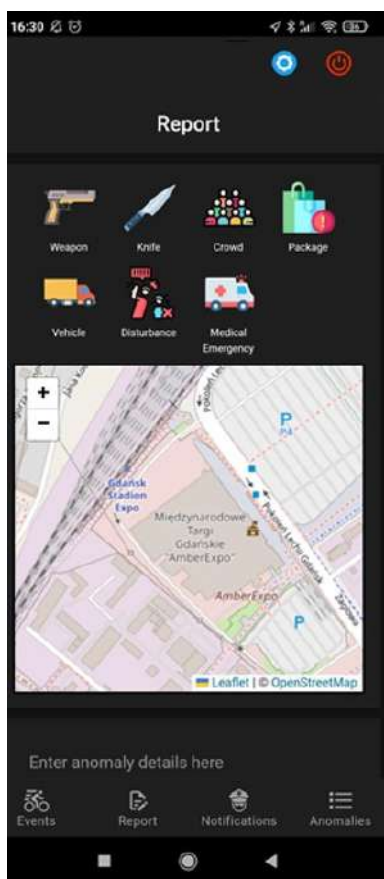


## Solution

### CrowdAlert

The objective is to enhance public safety and security management during large urban events (e.g., festivals, parades, sporting events) using the integrated crowdsensing system.
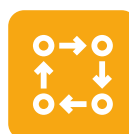
### TRL of the technology

TRL 7

### Commercial strategy

Innovating event safety, this system integrates dual-component architecture—mobile app for public, web app for authorities—ensuring comprehensive crowdsensing, real-time management, and analytics.

### Scenarios

**Scenarios 3, 4, 6, 7, 8, 9, 10:** Users receive notifications about event updates, changes in schedules, or emergency instructions through the mobile application.

### Innovation

Inclusive interface engaging public and authorities for comprehensive safety, enhanced crowdsourcing, advanced crowd management, deep analytical insights, proactive risk assessment, efficient evacuation tracking.

# ISYMAP

📍 Pont Saint Esprit, France

## About ISYMAP

Isymap develops technological bricks adaptable to the measurement needs and implementation constraints of its customers, for investigation, monitoring and mapping purposes, for classic to severe environments, presenting a risk for humans or access constraints.

Isymap offers products and solutions in radiological, chemical and physical measurement for the nuclear and defense security markets as well as in the context of industrial and environmental risks.

## Description

The features of the technology **SAFER** includes: Radiological sensors, autonomous, geolocated, long autonomy (10 years), real time secured information, low cost. The sensor network informs security personnel in order to prevent an attack, but also gives real-time information about attack and helps first responders to properly handle the situation and adapt their tools.

## Solution

**SAFER**

SAFERs work as a network of autonomous and long-lasting radiological beacons to secure crowded environment.
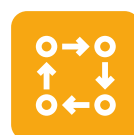
**TRL of the technology**

TRL 8

**Commercial strategy**

SAFER disrupts the status quo by prioritizing innovation over cost reduction. Emphasizing increased sensor deployment, SAFER enhances threat detection and security within existing budgets, presenting a compelling value proposition.

**Scenarios**

**Scenario 2** : SAFER offers a unique awareness system for scenario 2, its sensor network creates an early detection system for nuclear and radiological threats.

**Innovation**

Ultra-low power, low-cost radiological sensor with 10-year continuous measurement. ISYmap's breakthrough tech enables easy installation, secure wireless communication, and geolocated data for threat detection and crisis management.

# ITERATO

📍 Vilnius, Lithuania

## About ITERATO

The main activity of the company is software development. The MAPLI platform is capable not only of planning public events but also of managing them when the action begins. Mapli facilitates collaboration among diverse safety forces, such as the police, private security companies, firefighters, ambulance services, and others, within a unified framework.

## Description

**Mapli** includes: Event planning: draw zones, add objects and signs on the map, upload evacuation plan, plan security resources, create and assign tasks for them Event management: complete tasks, mark incidents, stream video from mobile phone directly to Mapli control room, relocate agents, turn on/off emergency exit mode Search&Rescue operations: see real-time area coverage, plan drone flying routes, and show its coverage on the map.

## Solution

### MAPLI

Mapli serves as an advanced communication platform tailored for the planning and coordination of public events and emergencies that involve collaboration between various public safety forces.

### TRL of the technology

TRL 8

### Commercial strategy

Mapli serves as a collaborative platform, automating security operations related to outdoor public events. This solution proves extremely useful in event planning, offering an efficient and user-friendly interface to establish event zones, delegate tasks, and allocate security resources —all accessible through a single interactive map.
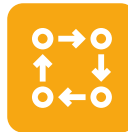
### Scenarios

**Scenario 3:** The complete tasks, mark incidents, stream video from mobile phone directly to Mapli control room, relocate agents, turn on/off emergency exit mode
**Scenario 4:** See real-time area coverage, plan drone flying routes, and show its coverage on the map

### Innovation

Mapli strives to establish a platform that promotes openness to integrate various innovative security solutions, creating opportunities for innovation and fostering growth in the security sector.

# ITTI

📍 Poznan, Poland

## About ITTI

ITTI is an SME from IT sector providing dedicated software solutions and innovative applications since 1996. ITTI offers its solutions in the following markets:

- Space sector – mainly to European Space Agency, e.g., solutions for Ground Segment, on-board communications and Space Safety.
- Private and public entities in Poland, mainly solutions for digitalisation of dedicated business processes.

## Description

**PROCeed** provides Simulation games with various scenarios (currently) for crisis management training, Multiple player roles for each game, Conducting Training On Crisis Situations, Extensive Platform Personalization System, Advanced Platform Management System, Conducting Analyses Of The Game Results.
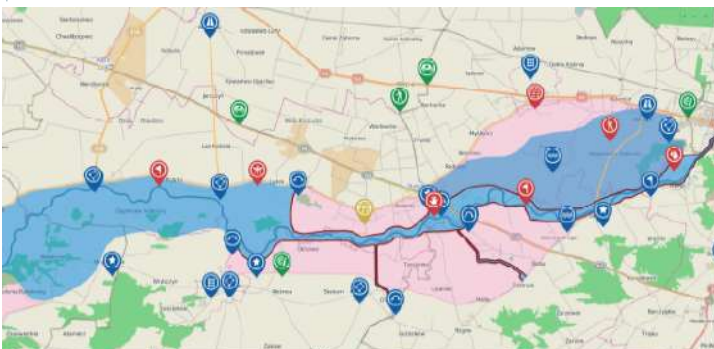


**FLOOD**
**CRISIS MANAGEMENT**
A simulation decision-making game

## Solution 1

### PROCeed

PROCeed is a software tool that has a model engine that allows adding new scenarios and create simulations and multi-criteria analysis involving various characters (roles) in the game.

### TRL of the technology

TRL 8

### Commercial strategy

PROCeed is a tool that uses multi-criteria analysis to create simulations and correct mapping of the time and data flow progression of the response of agents in crisis situation. Training using PROCeed allows you to work with real data in a simulated environment.

### Scenarios

**Scenarios 1-10:** Scenarios are visualized on a map. The tool can be used in other areas, for example for crowd management. Scenarios are visualized on a map. The tool can be used in other areas, for example for crowd management.

### Innovation

PROCeed's innovation is multi-level and includes both the probabilistic methods used, technologies, the ability to implement subsequent scenarios.
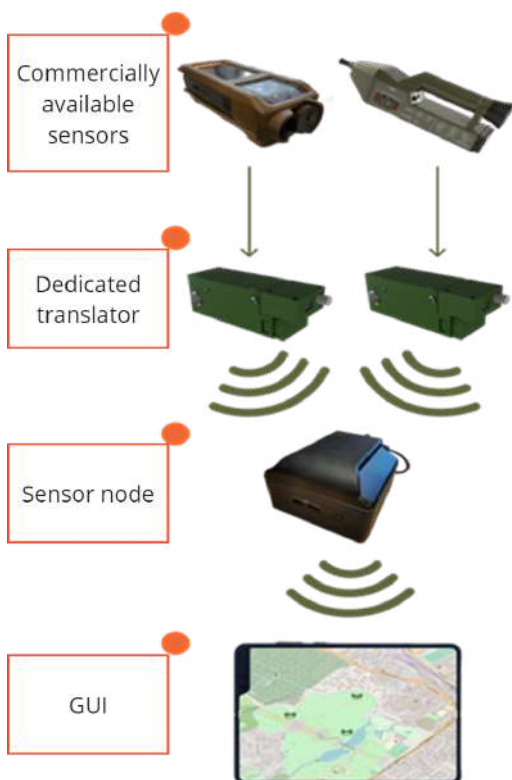
# ITTI



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- Private and public entities in Poland, mainly solutions for digitalisation of dedicated business processes.

## Description

ITTI-NODE is a system for detection and identification of chemical hazards.

.



## Solution 2

### ITTI-NODE

ITTI-NODE offers a system for chemical threat point detection and identification with the use of heterogeneous sensors, i.e. utilizing different detection technologies such as ion mobility spectroscopy (IMS) and flame photometric detection (FPD), which contributes to increased situational awareness and limited false alarm ratio.

### TRL of the technology

TRL 8

### Commercial strategy

ITTI-NODE is a microcontroller-based device integrating commercially available chemical detection instruments . It can be placed on any platform, both handheld and on UGV/UAV, allowing for operating in mass crowd incidents while keeping the first responders safe.

### Scenarios

**Scenario 8:** System for detection and identification of chemical hazards
**Scenario 2**: ITTI NODE can be placed on UGV.

### Innovation

ITTI-NODE is a heterogeneous sensor node, which enables end-users use all the benefits of different technologies, e.g. ion mobility spectroscopy and flame photometric detection with reduced drawbacks.

# JANUA

📍 Le Rouret , France

## About Janua

Janua is a software editor. Janua develops, sells, installs, parameters and maintains JAGUARDS in numerous large public and private organizations throug Europe. Janua's management team is composed of senior safety and crisis management specialists, all working for more than 30 years in the risk management industry.

## Description

Electronic Logbook and Operational Management Software, **the Jaguards Security Supervisor** ensures traceability, security event management and inter-service information exchange. Jaguards equip Command Information Centers, Security Stations, Crisis Management Units, Industrial Maintenance Facilities, Smart Cities, help manage cyber crises and securing major public events.
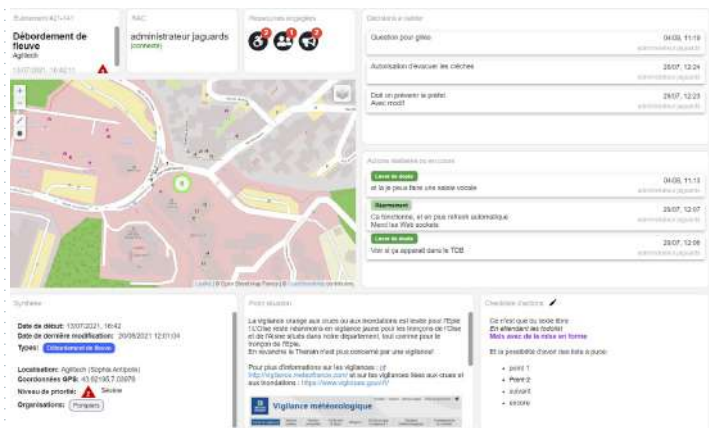


# JAGUARDS
## COMMAND INFORMATION CENTER

## Solution

### JAGUARDS
Jaguards may complement dedicated technologies and software in nearly every listed scenarii through tight integration via APIs. Our slogan is : Communicate – Project – Secure – Organize – Plan – Manage – Streamline

### TRL of the technology
TRL 9

### Commercial strategy
As a complete crisis management solution, Jaguards is a collaborative platform to manage and share information in real time. The electronic Logbook & Reporting System is essential to insure and improve the resilience of organizations and ensures the follow-up, the sharing between different services or organizations and the complete and tamper-proof traceability of events (interventions, incidents, telephone and radio calls, alarms, …).
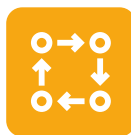
### Scenarios
**Scenarios 3**, **4:** Jaguards may complement dedicated technologies and software in nearly every listed scenarios.

### Innovation
During large public events, Jaguards helps them communicate, exchange, collaborate and respond to events, insuring, improving the resilience of organizations.

# JOHN COCKERILL DEFENSE FRANCE

📍 Distroff, France

**John Cockerill**

# About John Cockerill Defense

A security player with an innovative approach and vision of the security, safety and sovereignty challenges of today and tomorrow, with its four families of technologies used independently or in multi-layers, from design to integration, including deployment, training and maintenance.

# Description

**Biometric Access** offers a dual identification solution to increase the security level of sites requiring it. It permits to offer biometric access control either as a complement to an existing badge-based access control system, or as the main solution with the addition of badge readers.

The solution is adaptable to any field situation and any scenario.



## Solution 1

**BIOMETRIC ACCESS**

Face detection for access control, behavioral studies, dual identification, anti-passback, and anti-fraud analysis using video streams.

**TRL of the technology**

TRL 8

**Commercial strategy**

Sensitive industrial sites (on the outside perimeter as well as in targeted, sensitive sectors) Construction sites (possibility of secure container fitted with a security turnstile) Large gatherings (one-off events) Administrative headquarters of companies, groups Tertiary sector (business centres, for example)
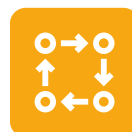
**Scenarios**

**Scenario 3, 10:** Biometric technology for access validation, facial analysis, anti-passback, detection of specific equipment, adaptability to existing video surveillance.

**Innovation**

Biometric access enhances security, addressing fraud in badge systems. It complements or replaces badge access, ensuring adaptability.

# JOHN COCKERILL DEFENSE FRANCE



Distroff, France

## About John Cockerill Defense

A security player with an innovative approach and vision of the security, safety and sovereignty challenges of today and tomorrow, with its four families of technologies used independently or in multi-layers, from design to integration, including deployment, training and maintenance.

## Description

**Stereovision** is a unique technology thanks to the association of 2 pairs of sensors (daylight optical and infrared) combined with advanced algorithms enabling events to be segmented with a negligible false alarm rate (99% probability of real, confirmed detection) filtering of environmental nuisances (fog, wind, vegetation) and multiple, interoperable scenarios depending on use and requirements.

# Solution 2

### STEREOVISION

Perimeter surveillance of installations and/or public areas using stereoscopic detection to analyse behaviour in terms of size, speed, movement, temperature variations, etc.
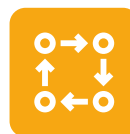
### TRL of the technology

TRL 9

### Commercial strategy

STEREOVISION offers stereoscopic detection combines perimeter detection and video surveillance using advanced algorithms, offering technical and financial advantages, adaptable to various supervision solutions.

### Scenarios

**Scenarios 1, 3:** enables stereoscopic detection using image and behaviour analysis, while discriminating against false alarms that may be caused by climatic constraints and/or third-party events Features of the technology: multi-sensor detection (daylight and infrared) for stereoscopic detection using algorithmic analysis.

### Innovation

R&D department, ability to adapt our solution to third-party systems.

# JOHN COCKERILL DEFENSE FRANCE



📍 Distroff, France

## About John Cockerill Defense

A security player with an innovative approach and vision of the security, safety and sovereignty challenges of today and tomorrow, with its four families of technologies used independently or in multi-layers, from design to integration, including deployment, training and maintenance.

## Description

**EOIR** provides medium- and long-range surveillance with associated functions for securing sensitive sites Features of the technology: wide range of optics and ancillary equipment (rangefinder, infrared, etc.) to adapt to every situation and every security need.



## Solution 3

### EOIR

Long and medium-range surveillance for perimeter monitoring and/or extensive sites with perimeter scanning capabilities, calibrated event detection for triggering alerts, confirmation of suspicions.
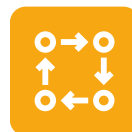
### TRL of the technology

TRL 9

### Commercial strategy

The range of equipment and accessories enables John Cockerill to adapt the monitoring module to the situation, location, surveillance needs, and constraints (environment, climate, etc.) based on the analysis of requirements and the site visit.

### Scenarios

**Scenario 2, 3:** Coastal perimeter surveillance through automatic scanning and alert triggering for operators, including event location and sequence. Medium and long-range surveillance (air) to secure a sensitive site.

### Innovation

Technology with an advanced software interface (GUI) designed for ergonomic use and ease of operation by the operator.

📍 Distroff, France

## About John Cockerill Defense

A security player with an innovative approach and vision of the security, safety and sovereignty challenges of today and tomorrow, with its four families of technologies used independently or in multi-layers, from design to integration, including deployment, training and maintenance.

## Description

**Drone Sentinelle** permits detection and control of drones by jamming-free pick-up and recovery using a passive device adaptable to sector and surrounding wave pollution.



## Solution 4

### DRONE SENTINELLE

Long and medium-range surveillance for perimeter monitoring and/or extensive sites with perimeter scanning capabilities, calibrated event detection for triggering alerts, confirmation of suspicions.
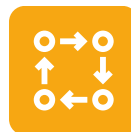
### TRL of the technology

TRL 9

### Commercial strategy

John Cockerill offers to analyse the site to be made safe (or at least the area where it is planned to be installed) beforehand by locating the site (possible interference with infrastructure, etc.), modelling the 3D coverage of the radius of action of one or more devices.

### Scenarios

**Scenario 2**: Geographical identification (GPS coordinates) of the take-off site identification and tracking of the pilot, even in motion identification and tracking of the drone qualification of each drone.

### Innovation

unlike other technologies based on jamming (repulsive or destructive) or destruction by locating and firing, which can generate collateral damage, DRONE SENTINELLE is totally passive and can detect and identify drones and then take control of a drone.

# BLOCK AXESS - KLOZMANN

Saint-Etienne, France

## About BLOCK AXESS

Block'Axess, a Klozmann company, produces perimeter protection systems addressing security concerns, including anti-ram car barriers in various configurations.

## Description

Concerning **Vigiblax AG (Above Ground**), the innovation lies in the low thickness of the system allowing low cars to pass without problem.

For the **Vigiblax IG (Inside Ground)** the system requires a very fine concrete foundation which does not pose any problems with buried networks.

## Solution

### BLAX and VIGIBLAX

**BLAX:** product easier to implement, hot-dip galvanized, no tools needed, no screws or pins.
**VIGIBLAX:** fine product, no installation problems, hot dip galvanized.
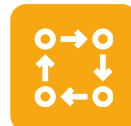
### TRL of the technology

TRL 9

### Commercial strategy

Cities, security services, event security, sport resort, ministry of the interior, private security, infrastructure security...

### Scenarios

**Scenario 1:** Securing sporting events, festivals, episodic demonstrations by rapid installation/deinstallation (less than 5 minutes) of anti-ram car barriers type BLAX crashtested up to 7.5T@50kmh certified IWA14 and PAS68.
**Scenario 2:** Securing sporting events, markets, festivals, regular events by quickly opening (less than 5 minutes) barriers or anti-ram car speed bumps of the VIGIBLAX crashtested type up to 7.5T@50kmh certified IWA14 and PAS68

### Innovation

Modular barriers that are easy to install and effective against car ram attacks up to 7.5T@50kmh

# LIUM SAS

📍 Avignon, France

**LIUM**

## About LIUM

Lium is a start-up with a mission to secure and decarbonize industrial sites. To fulfill this mission, Lium is developing an innovative captive balloon system (Horus) that enables continuous aerial visualization of an entire sensitive site.

## Description

The balloon system, **Horus**, equipped with advanced detection capabilities, excels in assessing real-time crowd density in crowded areas during public events. Its proactive management empowers authorities to optimize crowd distribution, enhancing public safety in diverse scenarios, from football stadiums to air shows and entertainment halls.

## Solution

**HORUS**
The balloon automatically detects fires and terrorism, enhancing security with on-board cameras and artificial intelligence. This drone is able to be fully autonomous, fly for 2 months, detect automatically gaz leaks, fire hazards, drones, possible terrorist attack, radioactivity and so on, see up to 3 km, fly up to 80km/h of wind and fly during nights and days.
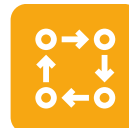
**TRL of the technology**
TRL 7

**Commercial strategy**
The solution proves invaluable for security teams utilizing surveillance camera networks, catering to diverse sectors such as public, private, and mixed security.

**Scenarios**
**Scenarios 1, 2, 4, 7:** Tethered Balloon/aerostat, filled with helium. Floating at an altitude between 50 to 500m for a week (24/7) without interruption.

**Interoperability**
Interoperability is ensured by designing the solution to be compatible with various platforms, including drones, enabling versatile and seamless operations.

# MION TECHNOLOGIES

📍 Arroyo de la Encomienda, Spain

**MION**

## About MION Technologies

MION develops and commercializes analytical instrumentation for threat detection in the gas phase, commercially known as EVD (Explosive Vapor Detector).

## Description

**VPSCAN** is a EVD with the capacity to detect the presence of explosive or other chemical and biological threat at very low concentration (sub-ppq) allowing the implementation in different scenarios Features of the technology: High Detection Rate / Very Low False Alarm / Non-intrusive. The main customers are cargo logistic operators, airlines and airports, and also, customs authorities and LEAs. VSPSCAN has some other applications such as the detection of explosives/drugs in crowded events, checkpoints, etc.

## Solution

**VPSCAN**
Extremely high sensitivity for threat detection in large volumes.

**TRL of the technology**
TRL 8

**Commercial strategy**
The aviation security market and the Maritime container screening for drug detection. VSPSCAN has some other applications such as the detection of explosives/drugs in crowded events, checkpoints, etc.

**Scenarios**
**Scenario 1, 7, 8:** VPSCAN is a EVD with the capacity to detect the presence of explosive or other chemical and biological threat at very low concentration (sub-ppq) allowing the implementation in different scenarios.

**Innovation**
The ultra-low detection limit of VPSCAN for explosive detection has been achieved by the optimal combination of highly innovative analytical instruments, mainly MION's DMA which is a narrow-band ion filter that allows the classification of ions according to their electrical mobility.
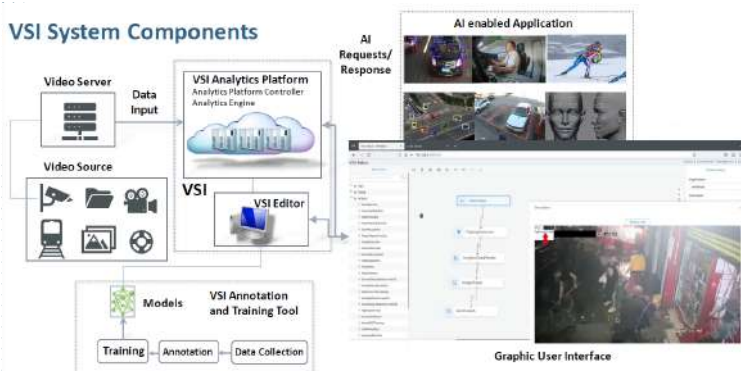
# MODELPLUS

📍 Paris, France

**Modelplus for AI**

## About ModelplusModelplus

Modelplus' is a start-up whose objective is to commercialize and further develop a solution (VSI, Vertical Solution Integrator) that can automatically build complex AI app systems without manual programming. The plan is to further advance AI/ML technologies, promote AI in 5G/6G-based apps, and contribute to Europe's AI leadership.

## Description

**Vertical Solution Integrator Scenario - VSI** provides a solution that will empower organisations to take full advantages of AI without the barriers of high costs, technical complexity, and long development cycles.



## Solution

**Vertical Solution Integrator Scenario**
VSI: Automated platform integrates AI models, customizes hybrid apps, no expertise needed, with a library of 100+ pre-trained models.
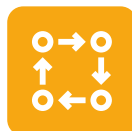
**TRL of the technology**
TRL 8

**Commercial strategy**
VSI provides a GUI (Graphic User Interface) so that users can easily specify their needed AI apps interactively. VSI then automatically analyses and integrates the specification, generates implementation code, and builds the processing flow.

**Scenarios**
**Scenario 1:** Detection of anomalies in crowd density and movement, fighting and falling down, unauthorised vehicles, etc.
**Scenario 2:** Detection of physical intrusions
**Scenario 3:** Detection of children falling, fighting, entering dangerous zones, attendance checking etc.

**Innovation**
Due to its vital business interest, the AI apps market is crowded and competitive. Several technology giants provide AI platforms offering various AI services. Some of the main ones are AI Platforms from Google, Amazon and Microsoft, IBM Watson and Nvidia AI Tech.

# MOLLITIAM INDUSTRIES

📍 Toledo, Spain

## About Mollitiam

Mollitiam Industries is a leading European company in the field of Cyber-intelligence and has vast experience providing solutions and tools to Law Enforcement and Intelligence Agencies worldwide.

## Description

**Phoenix** is a solution that boasts a high level of interoperability, as it has been meticulously designed as an API, ensuring seamless integration with various tools. This deliberate design allows for effortless collaboration with other technologies, facilitating a smooth exchange of information. By adopting an API-centric approach, we prioritize the ease of integration, empowering users to harness the full potential of our OSINT technology within diverse technological ecosystems.

## Solution

### Phoenix
Phoenix: OSINT system for focused mission planning, threat detection, and suspect profiling.

### TRL of the technology
TRL 9

### Commercial strategy
Phoenix can cover use cases : Search for the origin of a movement or trend in social networks; Monitor the reputation or mentions of an entity; Investigate activity o fan identity on social networks; Investigate connections and leaks of an identity. Any kind of threat that can affect a Government can be monitorized through social networks, in order to act in advance of after an incident takes place, to investigate identities, social movements, etc.

### Scenarios
**Scenarios 1, 3, 4, 5**: Search for the origin of a movement or trend in social networks; Monitor the reputation or mentions of an entity.

### Innovation
Phoenix was developed 100% in house by very high qualified developers, which means that we can customize and add new features that customer could need. Phoenix: Independent OSINT tool with robust crawling for unrestricted data retrieval.
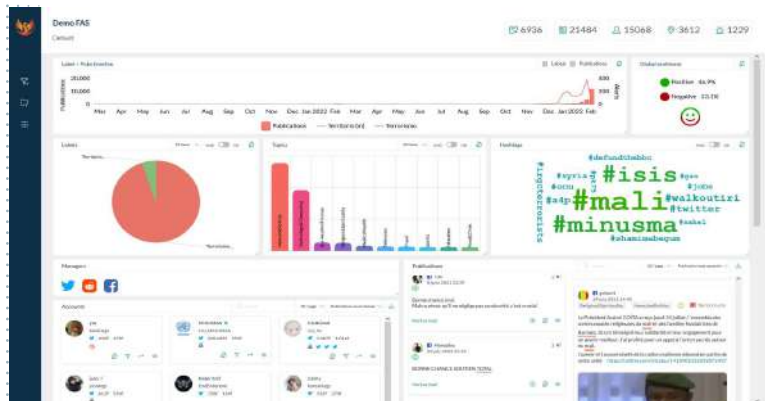
# MORATEX & LUBAWA

📍 Lodz and Lubawa, Poland

**MORATEX**
INSTYTUT

**LUBAWA SA**

## About MORATEX & Lubawa

The main goal of MORATEX activity is to develop modern designs and technologies of textile technical goods and implementing them to the industry. The institute worked-out the leading position among domestic R&D bodies and developers of hi-tech products intended for various branches of national economy.

The security of the Clients of Lubawa S.A. is a challenge. Meeting this challenge is the mission of the company. Lubawa's offer includes over 500 products which enables the company to fulfill orders for various types of the uniformed services: army, police, municipal police, border patrol, fire brigade and special forces.

## Description

**The New-Generation Protective Suit (EOD ONE)** is designed to provide engineering units and pyrotechnic forces (subordinate to the Ministry of National Defense and the Ministry of Interior and Administration) with complete personal protection when performing direct activities related, in particular, to neutralization of explosives.

## Solution

**EOD ONE**

The New-Generation Protective Suit (EOD ONE) is designed to provide engineering units and pyrotechnic forces with complete personal protection when performing direct activities related, in particular, to neutralization of explosives.
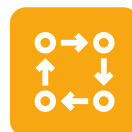
**TRL of the technology**

TRL 9

**Commercial strategy**

The Suit provides maximum, synergistic protection against the factors acting during an explosion, i.e.: from fragments, heat wave and shock wave, which is a product innovation on a global scale.

**Scenarios**

**Scenario 1:** The Suit provides maximum, synergistic protection against the factors acting during an explosion.
**Scenario 8:** The suit provides maximum, synergistic protection against the factors acting during an explosion.
**Scenario 10**: Heat wave and shock wave.

**Innovation**

The Suit's unique design greatly reduces the impact of the shock wave / pressure. Made of the highest quality materials & featuring great mechanical resistance.

# NEURONALYS

📍 Lille, France

## About Neuronalys

Neuronalys is a French startup specializing in transformative AI-driven software solutions. The flagship solution, NeuroCop, is an intelligent video analysis system that enhances safety and security across all public spaces and infrastructure while optimizing operational efficiency. Today Neuronalys is trusted by +15 cities in Europe and other major industry leaders.

## Description

**NeuroCop** stands out from any other solution due to its speed in delivering real-time results that are both qualitative and compelling, all in less than a second. The key features are: Ability to process huge volumes of data, Tracking, event detection, data sovereignty, flexible architecture and is made in France.

## Solution

### NeuroCop

NeuroCop is an intelligent video analysis solution that optimizes existing video surveillance equipment and analyzes all video streams. Empowered by Artificial Intelligence, NeuroCop can detect in real-time any dangerous situation that may threaten the safety of citizens.
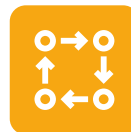
### TRL of the technology

TRL 9

### Commercial strategy

French AI video analysis for city safety. Enhances surveillance efficiency, identifies elements in real-time, detects abnormalities, and alerts security teams swiftly.

### Scenarios

**Scenarios 3, 4, 5, 6, 9, 10**: It effectively supervises surveillance equipment, analyzing video streams in real-time, significantly boosting the efficiency of public surveillance networks.

### Innovation

NeuroCop's unique value proposition stems from its dual expertise in security/safety and in-depth knowledge of Artificial Intelligence. This combination of skills allows us to offer a complete and highly performant solution.

# NEW-R-DRONE

📍 Selestat, France

**NEW-R-DRONE**

## About NEW-R-DRONE

New-r-drone specialises in designing drone-in-a-box solutions for off-the-shelf or custom drones with automatic battery replacement, offering 24/7 service continuity. Controlled by a pilotless interface, equipped with thermal and optical cameras, embedded AI ensures safety, security, and inspection of sensitive infrastructures across extensive sites.

## Description

The provided solution offers automatic drone battery replacement for continuous inspection and surveillance service. User interface allows seamless switching between two drones with data retrieval. Embedded AI in cameras and integrated speakers through certified transport surveillance camera.

## Solution

### Drone in a Box NRD 1000

Drone in a Box NRD 1000 provides 24/7 live image feedback through continuous service and identical drone position switching, allowing positioning in all proposed outdoor scenarios.
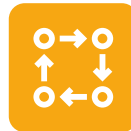
### TRL of the technology

TRL 3

### Commercial strategy

Private sector security services and operators. Long-term contracts: civil protection and public entities in urban areas.

### Scenarios

**Scenarios 1-5:** The custom drone is equipped with a loudspeaker to calm, reassure, or deter crowds, and a camera with embedded AI for detecting behaviors indicative of public disorder.

### Innovation

Automatic drone battery replacement/ UI enabling seamless switch between 2 drones with data recovery/ Embedded AI in cameras and built-in speakers. Technology features: Sovereignty of Made in Europe products/450 KG Drone Box/ Drone wingspan: 120 cm/Weight: 12KG.

SHIELD 4CROWD
🌐 www.new-r-drone.com
✉ y.ledergerber@new-r-drone.com
66

Elmas, Italy

# About Nurjana Technologies

NurjanaTech is a highly specialized systems engineering, development, and integration solutions provider that helps government and commercial entities tackle tomorrow's technical challenges through innovative products, collaborative ideas, and expansive networks.

# Description

**NAIS Surveillance** solution is Artificial Intelligence for Drones. Nurjanatech's technology brings a high level of innovation to the market, characterized by autonomous capabilities, industry-specific applications, and scalability. The fusion of AI and sensor data integration positions the solution as a pioneering force, driving differentiation and setting new benchmarks in the rapidly evolving landscape of drone technologies.

## Solution 1

### NAIS Surveillance

NAIS is the NurjanaTech AI driven Drone for surveillance. Core of NAIS is the onboard edge AI for autonomous object detection and behaviour analysis.

### TRL of the technology

TRL 7

### Commercial strategy

Nurjanatech's technology brings a high level of innovation to the market, characterized by autonomous capabilities, industry-specific applications, and scalability.

### Scenarios

**Scenarios 1, 4, 5:** By processing data from different on-board sensors, it is possible to identify, recognize and track targets of interest such as people, land vehicles and UAVs.

### Innovation

The degree of differentiation lies in the fusion of cutting-edge AI algorithms and extensive experience in sensor data integration, particularly honed in defense applications. This fusion enables our drones to perform complex tasks with unprecedented efficiency and precision, such as real-time object recognition, swarm intelligence, and autonomous decision-making.

Elmas, Italy

## About Nurjana Technologies

NurjanaTech is a highly specialized systems engineering, development, and integration solutions provider that helps government and commercial entities tackle tomorrow's technical challenges through innovative products, collaborative ideas, and expansive networks.

## Description

**NEOS Drone Detection System (DDS)** is based on a RF Scanner et on a OTS (Optical Tracking System) able to meet different scenarios requirements. The core of NEOS DDS is the Detection Library, based on:

• The identification of specific Radio-Frequency signatures of drones' communication protocols (RF Scanner)

• The identification of a specific drone shape, color and size (OTS)



## Solution 2

**NEOS Drone Detection System**

The main function of the RF scanner is to identify the arrival direction of the drone while the main feature of the OTS is the automatic detection and tracking.
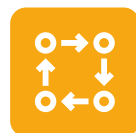
**TRL of the technology**

TRL 7

**Commercial strategy**

NEOS DDS can operate in an outdoor environment (24/7), automatically guaranteeing a continuous, fast, fully automatic, and omnidirectional UAV discovery.

**Scenarios**

**Scenario 2:** The NEOS DDS is a modular solution for drone detection and tracking based on the RF Scanner, the OTS and the central processing system MSCCS.

**Innovation**

NEOS DDS is based on passive radiofrequency technology for the detection, classification, frequency localization and arrival direction estimation of drones (commercial and homemade) and their pilots in order to protect prisons, airports, critical infrastructures and sensitive sites (in urban and suburban contexts), without interfering with the surrounding public infrastructures and networks.
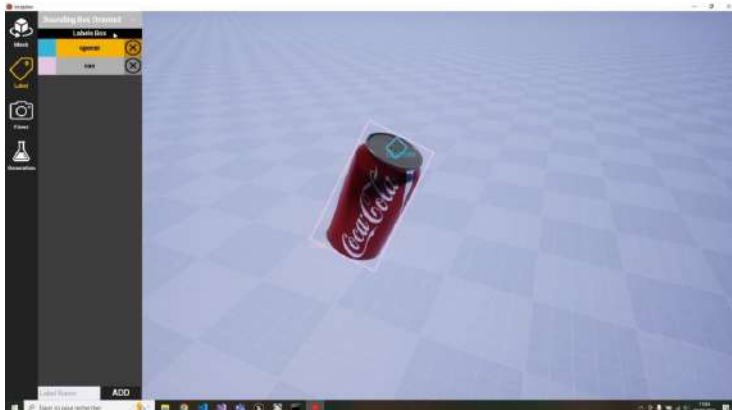
# OCTARINA

📍 Eguilles, France

## About Octarina

Octarina creates innovatives solutions in 3D/AR/VR and computer vision and AI.

## Description

**Pocket Vision** permits the detection of situation through image analysys and provides datasets. The company used avatar to create virtual situations than can be used for training vision model.



## Solution

### Pocket Vision

Pocket Vision provides a complete process with training and vision model to deliver real time analysis situation.

### TRL of the technology

TRL 4

### Commercial strategy

Datasets are provided, whether they are long or complicated. Avatars are utilized to generate virtual scenarios that can be employed for training vision models. Features of the technology include real-time AI image analysis. The model vision can be implemented in any system. Custom apps can also be built.

### Scenarios

**All scenarios**: Detection of situation through image analysys.

### Innovation

The innovation of the technology lies in the fact that machine learning necessitates a significant effort to compile the dataset, involving a large number of photos and a very tedious labeling process. Labeling is frequently outsourced, which does not always ensure quality work. The goal is to develop a tool capable of automatically generating labeled photos using 3D.

# OUTSIGHT

📍 Paris, France

## About Outsight

Outsight's software solutions leverage the unique value of 3D LiDAR data to increase security while reducing false alarms. The company's software allows operators to focus on the most important security issues of a critical infrastructure, like identifying an intruder in a sensitive area and accurately tracking its location, path, and speed in real time.

## Description

The company's software allows operators to focus on the most important security issues of a critical infrastructure, like identifying an intruder in a sensitive area and accurately tracking its location, path, and speed in real time. Outsight's software's ability to deliver real-time, high-resolution monitoring further distinguishes it from conventional security systems, often limited by delays or lower resolution. It stands out for its compliance with privacy regulations, avoiding the use of personally identifiable information, a significant differentiator from many surveillance technologies.

## Solution

### Shift Perception

Outsight Shift LiDAR Software for enhanced crowd management and security. The solution accurately tracks and monitors vehicles and people in real-time for safer and more efficient public spaces.
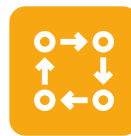
### TRL of the technology

TRL 9

### Commercial strategy

Outsight Shift LiDAR: 3D detection, real-time monitoring for public safety. Capable of identifying and classifying various objects, including vehicles, people, and potentially dangerous items.

### Scenarios

**Scenario 3, 4**: Monitoring crowd density in real-time allows for proactive management to prevent overcrowding.

### Innovation

Outsight Shift LiDAR: 3D detection, real-time monitoring for public safety. Capable of identifying and classifying various objects, including vehicles, people, and potentially dangerous items. paces.

# PIXECURITY



📍 Maisons-Laffitte, France

## About Pixecurity

Pixecurity, a leading provider of intelligent security solutions, collaborates with major camera, access control, and software brands to deliver bespoke security systems for premium clientele. Our expertise lies in tailoring cutting-edge technologies to meet the unique needs of high-end customers, ensuring top-tier safety and protection.

## Description

The groundbreaking technology of **Sauron Analytics,** fueled by machine learning and mixed-reality, is set to redefine threat prevention, and to permit multi-POV analysis, anticipating and thwarting risks in real-time.



## Solution

### Sauron Analytics
The technology empowers users to stay ahead of emerging threats, ensuring a proactive and robust defense against risks.
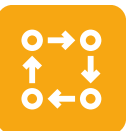
### TRL of the technology
TRL 2

### Commercial strategy
The technology is addressed to a very diverse range of security-focused clients, spanning law enforcement, military, government agencies, and the private sector. From frontline security operators to high-ranking officials.

### Scenarios
**Scenario 3, 4, 5, 6, 7, 9:** Convolutional neural networks for crowd density analysis and anomaly detection Features of the technology: CNN, crowd density analysis, heatmap, machine leaening.

### Innovation
The power of machine learning is harnessed through cutting-edge technology, providing real-time, multi-point-of-view analysis with unparalleled accuracy. Through the seamless integration of advanced algorithms, potential risks can be proactively identified and mitigated, preventing a multitude of hazardous situations.  a proactive and robust defense against risks.

# POLYGONICS



📍 Neuilly-sur-Seine, France

## About POLYGONICS

Polygonics pioneers 3D Surveillance and Smart Threat Detection solutions using LiDAR technology fused with AI-based intelligent sensors to create 3D digital twins and revolutionary 3D spatial intelligence leveraging powerful crowd management capabilities for securing sites, assets and people.

## Description

The **Polygonics 3D Surveillance and Smart Threat Detection Solution** stands at the forefront of security technology, embodying a blend of sophistication, flexibility, and precision.



## Solution

### POLYGONICS 3D SURVEILLANCE AND SMART THREAT DETECTION SOLUTION
Polygonics 3D Surveillance and Smart Threat Detection Solution integrates LiDAR, AI, and camera technologies to (i)3D capture environments and simulate crowds.
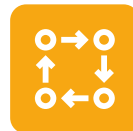
### TRL of the technology
TRL 6

### Commercial strategy
The solution is based on a mobile app, a SDK (Software Development Kit) for integration in third parties mobile apps, and a Supervision / Dispatching console for event management.

### Scenarios
**Scenario 1, 3, 4, 5, 9, 10 :** The solution integrates LiDAR, AI, and camera technologies to (i)3D capture environments and simulate crowds , monitor, and, and (ii) detect and prevent threats using artificial intelligence (AI).

### Innovation
Seamless integration of advanced LiDAR sensors, AI-powered audio detection, and adaptable camera systems in a Light, Compact and Flexible Module capable of performing both (i) Real-Time Capture of its environment to create digital twins allowing situational awareness and ready for security/crowd simulation purposes and (ii) Real-Time Monitoring of indoor and Outdoor open spaces for full 3D Spatial intelligence.

# QSTODIAN SECURITY SOLUTIONS

📍 Madrid, Spain

## Solution

**Qstodian**
One step ahead

## About QSTODIAN SECURITY SOLUTIONS

The company is specialized in the development of mobility solutions focused on citizen security.

## Description

**Qstodian Solution** is a police solution for the management of citizen security (control of people, consultation and enforcement of laws, fines, etc). It would be working on improving the current functionality for crowd management support.

### Qstodian
Qstodian deploys functionality related to the identification of persons, vehicles, law enforcement, fines, arrests, crime reports, etc

### TRL of the technology
TRL 8

### Commercial strategy
The wide functionality of Qstodian allows a growth in: Border Control Police, Ports, Traffic Police, etc. Within the functionalities for the affiliation of people, it can be used by the military.

### Scenarios

**Scenarios 1, 2:** Qstodian technology is an app for mobile devices that can be used by the police.

### Innovation

The application allows the automation of the sanctioning process in both public safety incidents and traffic infractions (and its collection at the time) so it can be used by any collecting agency.
The application allows customs control versions (at ports and borders).

# RECIPROC-IT

📍 Paris, France

## About RECIPROC-IT

Reciproc-IT is an innovative and responsible consulting company that addresses the crucial need of our time to counter cyber risks. A solution has been developed to meet the requirements of a demanding market that is attentive to addressing new risks. Through this tool, learning structures are provided to elevate the level of maturity in information and data security, effectively aiding companies in becoming resilient. The tool stands out not only for its innovative functionality but also for our unique approach to the market. The aim is to make our tool available to all types of organizations and to adapt it according to the specific needs of each user entity.

## Description

**The solution OLIGO.Risk Manager** adresses a mixed pubic and private industry, the main users are mostly information system security officer, risk management officer, cyber-security operational officer.

## Solution

### OLIGO.RISK MANAGER

OLIGO.Risk Manager is the new generation tool for strengthening the protection of data and information systems against internal and external vulnerabilities. It simulate identified incidents and/or cyber attacks on critical assets.
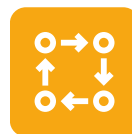
### TRL of the technology

TRL 8

### Commercial strategy

OLIGO.RISK Manager is applicable in any industry, for any type of risk. Potential feared events, along with their level of impact and severity, are clearly measured. A database rich in risk scenarios has been integrated.

### Scenarios

**Scenario 1:** A cyber attack on transport infrastructure, such as a traffic disruption or derailment, can cause physical damage and crowd movements that are difficult to contain. A cyber attack on the energy grid, can cause a large black out impacting a targeted facilities.

### Innovation

The solution includes APIs accessible via Webservices in REST architecture, designed and documented to enable OLIGO.RISK business processes to be controlled from a third-party application

🔗 http://reciproc-it.com         ✉ baya.lonqueux@reciproc-it.com

# REDLAB & NEUROO



📍 Le Petit-Quevilly, France

## About REDLab & neuroo

At REDLab, data-based custom solutions are constructed, leveraging expertise in Machine and Deep Learning, Data Engineering, and Software Engineering.

At Neuroo, video surveillance data is transformed into real-time actionable insights. Seamless integration with top video management software (VMS) allows the detection of imminent hazards.

## Description

SIMS solution is based on visible situations. The solution can detect drones (AI to be developed) and the consequences of the CBRN attack (detection of loss of verticality, Crowd Movement Detection (Face) Crowd movement detection (body) These latest events are already operational.
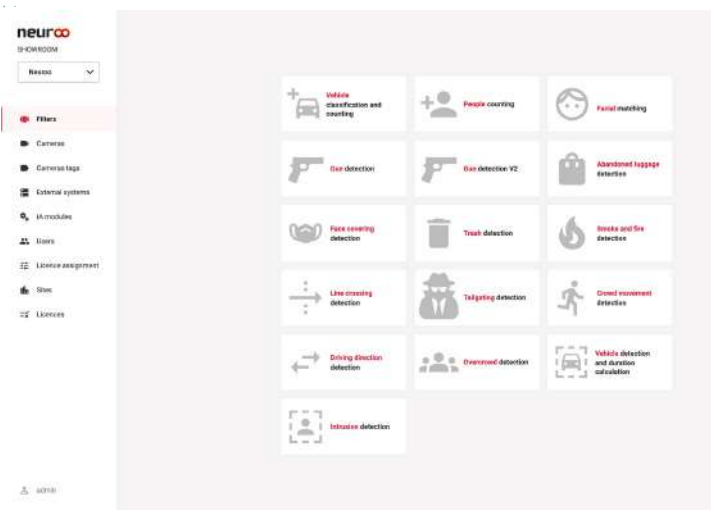


## Solution

### SIMS
Sims is a hardware-agnostic, AI-powered real-time threat detection platform that provide the right information to the right person and at the right time.
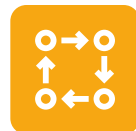
### TRL of the technology
TRL 7

### Commercial strategy
This technology stands out for the layer of hardware abstraction that is carried out. This solution can be implemented in a new system as well as a pre-existing/legacy systems.This solution therefore stands out from the hardware choices.

### Scenarios
**Scenario 1, 3, 4, 5, 6, 7, 8, 9, 10:** Detection of crowd movement on faces, detection of crowd movements on bodies and smoke detection. The software will detect crowd movements based on faces. The software will detect crowd movements based on faces. The software detect crowds or smoke.

### Innovation
The Platform connects either to live cameras or to an existing VMS. It uses the entire available video streams with sufficient quality.

# ROHDE & SCHWARZ

📍 Munich, Germany

## About Rohde & Schwarz

Rohde & Schwarz develops, produces and markets a wide range of electronic capital goods for industry, infrastructure operators and government customers. The independent group is among the technology and market leaders in all of its business fields, including wireless communications and RF test and measurement, broadcast and media, air traffic control and military radiocommunications, physical security solutions, cybersecurity and network technology.

## Description

**QPS Walk500** provides automated high throughput walk-through people screening for weapons and explosives at high footfall locations.

## Solution

**QPS Walk500**

Millimeter wave based security screening of people allows the detection of concealed threat objects of any kind. Formerly exclusive to airports, such technology is now also available for other applications, such as public safety or event security.
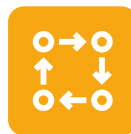
**TRL of the technology**

TRL 6

**Commercial strategy**

The system is intuitive to use and detects items of any kind of material hidden on a person and features ease of operation through a fast, highly convenient, secure and respectful screening process.

**Scenarios**

**Scenario 1:** the QPS Walk500 can screen people for concealed IEDs at subway entrances.

**Scenario 7:** Walk500 can screen people for concealed weapons at any entrances.

**Scenario 8**: the QPS Walk500 can screen people for concealed bombs at any entrances.

**Innovation**

The solution provides outstanding performance, when secure, automatic detection of threat objects is required.

# POZNAN UNIVERSITY OF ECONOMICS AND BUSINESS KNOWLEDGE TRANSFER COMPANY (SCUEP)

**SCUEP**

Poznan, Poland

## About SCUEP

University-owned, self-funding, limited liability company (SPV) that aims to implement market solutions based on scientific research results, offers consulting services for external entities and conducts commissioned research to solve specific market, tech & management problems.

## Description

**Praetorian III Mobile Modules System (MMS**) is a concept of a module docking platform for a pickup truck and 7 mobile modules resulting from the operational needs of the Police (Lighting Mobile, Broadcaster Mobile, Observation Mobile, Sanitary Mobile, Catering Mobile, Medical Mobile, Transport Mobile Module.s.) The proposed modules fill the gaps in the tactical equipment of the Police and allow for the interchangeability of functions of pickup vehicles, commonly used by uniformed services responsible for the safety of citizens. MMS will enable more efficient work of crowd management services.

The solution ensures the multi-tasking of the uniformed services pickup trucks and interoperability of services in crisis situations.

## Solution

**Praetorian III Mobile Modules System**

A system for the Police Riot Police Units, Border Guard, Fire Service, and Territorial Defense Force.
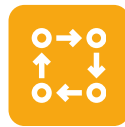
**TRL**

TRL 4

**Commercial Strategy**

MMS is designed to be system independent for all pickup truck types. MMS can be successfully used by all uniformed services using pickup vehicles (according to own research by at least 10 EU countries).

**Scenarios**

**Scenario 1:** Security management during mass events (crowd management, crisis management).
**Scenario 8:** Bomb threat in a shopping mall with the evacuation of customers
**Scenario 10:** Protection of public gatherings of LGBTQ+ communities against counter-demonstrations.

**Innovation**

No similar solution in the EU Police forces. - the system can be used by various services - interchangeably, which significantly increases the effectiveness of operations.

Holtzheim, France

## About Sensivic - SIALERT

SENSIVIC is one of the pionnering company specialised in smart audio detection for security. The in-house artificial intelligence system can detect in real-time any unexpected acoustic threat like explosions, gunshots, screams of panic, and any other immediate risk. SIAlert has recently been created by the french group Quonex-Alsatel to integrate SENSIVIC. Every SENSIVIC employee is now holding shares in SIALERT to insure a seamless continuity.

## Description

Sensivic smart audio detection permits - Acoustic detection processed by an in house Artifical intelligence:
- Continuously adapts to any kind of sound environment.
- Automatic detection of unexpected and anomalous sound events characterising a potential threat.
- Real-time alert

## Solution

### Sensivic smart audio detection

Sensivic smart audio permits a real-time alert of the security system when an unexpected sound is detected in the monitored area as a potential threat : detonation, explosion, panic screams, verbal violence.
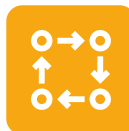
### TRL of the technology
TRL 9

### Commercial strategy

One of the few smart audio detection systems in the market suitable for indoor and/or outdoor use. Developed and manufactured entirely in France, fully GDPR-compliant. Operates at the system's edge, requiring only continuous 12V power.

### Scenarios

**Scenario 1:** SOKORO detects gunshots

**Scenario 2:** PHOBOS detects panic cries, triggering real-time alerts

**Scenario 3:** KIETO detects verbal aggression, signaling potential violence.

**Scenario 4:** QilPi mobile app detects verbal aggression in the device's vicinity.

### Innovation

Acoustic detection processed by an in house Artifical intelligence. Continuously adapts to any kind of sound environment. Automatic detection of unexpected.

# SEMPER INVICTA

📍 Cherbourg en Cotentin, France

## SEMPER INVICTA
**ANTI-AGGRESSION EQUIPMENT**

## About SEMPER INVICTA

Offers a range of light clothes and accessories that are knife resistant and bulletproof (NIJ 3A), codeveloped with french companies with which we value high quality equipment and made in France products.

## Description

The **bulletproof umbrella** is better than other close protection solutions thanks to its light weight, multi-functionality, large wingspan, discretion and ballistic protection, all these features are not found in a classic shield. With its weight of only 3.2 kilograms, the bulletproof ParaPactum is easily carried by bodyguards and the opening system allows a quick opening for instant protection. The large coverage area can protects up to 2 or 3 people and lets the bodyguard responds with their handgun while being protected. Used closed, the umbrella can be used as a "stick" to hit the aggressor or as a barrier to maintain them away.

## Solution

### Bulletproof ParaPactum

This bulletproof umbrella is designed to protect VIPs against knife and firearm coordinated attacks. As a multifunctional tool, it is also a shield against thrown objects, crowds, paparazzis, dog attacks, etc.
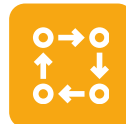
### TRL of the technology

TRL 8

### Commercial strategy

Personal Equipment/Maintenance Of Order.

### Scenarios

**Scenario 1:** A VIP is the target of a handgun attack
**Scenario 2:** The VIP is the target of thrown objects in the middle of a crowd movement.
**Scenario 3:** The VIP is the target of a person attacking them with a knife.

### Innovation

Technology features: NIJ IIA protection, 3.2 kg weight, Titanium grade 5, composite materials, 1m height, 1m wingspan. Unique fabric, water-repellent treatment, tear-proof seams, triple hem, safety velcro. Innovation: ParaPactum, world's first bulletproof umbrella, defends against various threats.

# SENTINEX ROBOTICS

📍 Lübeck, Germany

## About Sentinex Robotics

Sentinex Robotics GmbH develops, designs and produces robotic systems, in particular for UAV defence. The technological focus is on camera-based solutions, including software for image recognition and object detection using cutting-edge Artificial Intelligence (AI) algorithms. .

## Description

The company is a spin-off of the University of Lübeck. The first product is an automatic drone detection and identification system, which has already been sold to multiple German authorities responsible for drone security. The solution developped is **a Module for camera-based drone detection and identification.**



## Solution

**SENTINEX DRONE DETECTOR**
Module for camera-based drone detection and identification.

**TRL of the technology**

TRL 8

**Commercial strategy**
Inexpensive, mobile, plug-and-play drone defense solution for diverse scenarios, offering 90% detection accuracy up to 1,000m. Additionally, the camera surpasses radar in visual identification, threat assessment, and digital forensics capabilities.
Detection of objects in RGB video stream, identification of drones, automatic object tracking
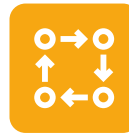
**Scenarios**
**Scenario 2:** The optical drone detection module is able to detect and track drones using a controllable camera.

**Innovation**
The compact drone detection module uses image recognition software for raw video input, providing annotated output with object identification and tracking capabilities .The product's key innovation lies in AI-driven software with unique features, adaptable to legacy or custom cameras. Integrates into comprehensive drone defense systems with radar, jammers, and anti-drone weaponry.

# STAM & D-VISOR

📍 Genoa, Italy
Schinnen, Netherlands

## About Stam & D-Visor

Stam supports clients in tackling new business and tech challenges. They offer simulation-based solutions for large crowds, infrastructures, and crisis scenarios. Their expertise extends to immersive serious gaming, event planning support, and virtual security strategy assessments. Notable projects include Madrid Chamartin station and Corvin Plaza mall.

D-Visor specialises in AI-powered tools for securing public spaces and events. They use deep learning, blockchain, and cloud technology to provide effective solutions for municipalities, festivals, and security agencies. Their notable clients include Paaspop Festival, DISSS, AstraKode, and the Dutch Ministry of Social Affairs.

## Description

**SPECTRAVR PRO** is a Simulation Platform for Events and crowded spaces, Collaborative TRaining and preparedness, in Augmented Virtual Reality threat scenarios.

## Solution

### SPECTRAVR PRO

SPECTRAVR PRO is an innovative serious gaming platform providing immersive simulation and training for security stakeholders, enhancing preparedness to address complex and simple threats in large public events and crowded spaces.
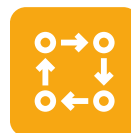
### TRL of the technology

TRL 6

### Commercial strategy

SPECTRAVR PRO provides a customizable and reusable platform. This adaptability significantly reduces the costs associated with event security while increasing the preparedness of security personnel.

### Scenarios

**Scenarios 2, 3, 4, 6, 7, 8, 10:** Simulation Platform for Events and crowded spaces, Collaborative TRaining and preparedness, in Augmented Virtual Reality threat scenarios. Accurate specializes in consulting, excelling in visitor flows, crowd simulation, and tailoring customized solutions for clients.

### Innovation

The platform introduces a groundbreaking level of innovation to the market by seamlessly integrating digital twins, crowd simulation, serious gaming, and immersive VR technologies.

# TAUR

📍 Ternay, France

## About TAUR

As a manufacturer of robotic platforms, we want to develop a range of law enforcement solutions. From barrier robots to firefighting robots..

## Description

At events where there is a risk of vehicle or shop fires, the police can be accompanied by robotic devices to reduce the risk of fire..



## Solution

### Robot Pompier

A shield robot to provide mobile protection for the police and the general public A robot to evacuate injured people.

### TRL of the technology

TRL 3

### Commercial strategy

Autonomous robot with remote-controlled water tank.
- Firefighters at industrial sites (atex and nuclear)
- Hazardous materials storage sites
- Law enforcement agencies for prevention or deterrence purposes
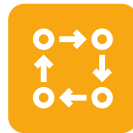
### Scenarios

**Scenario 4:** A drone-carrying robot with a camera to identify areas at risk A rescue robot with a defibrillator, blood bag and first aid kit.

### Innovation

The innovation is to make the remote extinguishing control functions autonomous, with an on-board water reserve to prevent fires starting without human intervention..

# TEB - PRYNTEC

**PRYNTEC**
INTELLIGENT VIDEO SYSTEMS

📍 Corpeau, France

## About TEB - PRYNTEC

TEB Group is a family-owned independent company with +40 years of know-how, hosts the all Made in France brand PRYNTEC. Specializing in security and flow analysis solutions, PRYNTEC, as a Manufacturer and Publisher, aims to generate peace of mind and optimize operational efficiency.

## Description

The solution of image analysis, **GO'IA**, is based on AI and uses the deep learning method. It uses live video feeds from existing cameras, from cameras installed specially for an event, or from cameras mounted on drones. The software suite offers the functionalities of a standard video protection recorder, advanced features such as image processing, AI image analysis, event management, etc.).
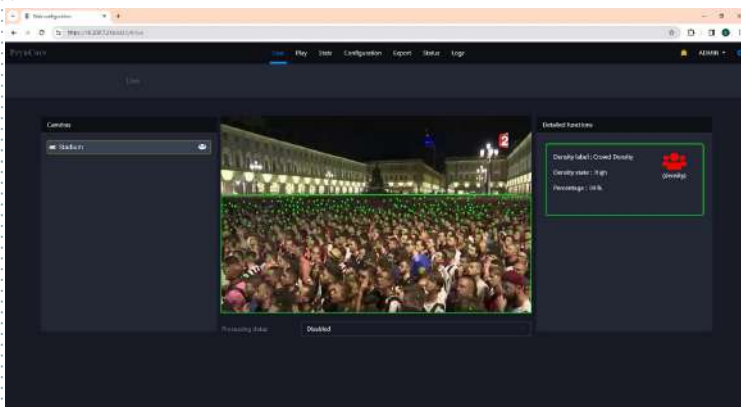


## Solution

### GO'IA
The AI image analysis of live video streams employed by our GO' IA software is used to detect the presence of individuals in a crowd and ascertain their characteristics, such as density and movement.

### TRL of the technology
TRL 7

### Commercial strategy
The GO'IA software suite offers the functionalities of a standard video protection recorder, plus advanced features such as image processing, AI image analysis, event management, etc.). Artificial intelligence-based processing is at the heart of the GO'AI system, and has been designed to adapt to all possible use cases. GO'IA software analyzes video streams from different video sources in real time.

### Scenarios
**Scenarios 1, 2, 3, 4, 5, 7, 8, 9, 10:** It uses live video feeds from existing cameras, from cameras installed specially for an event, or from cameras mounted on drones.

### Innovation
In the case of a service, maintenance is included in the price of the solution. In both cases, the solution includes software updates, remote support and remote control where possible. The solution can also be deployed on premise or in cloud mode.

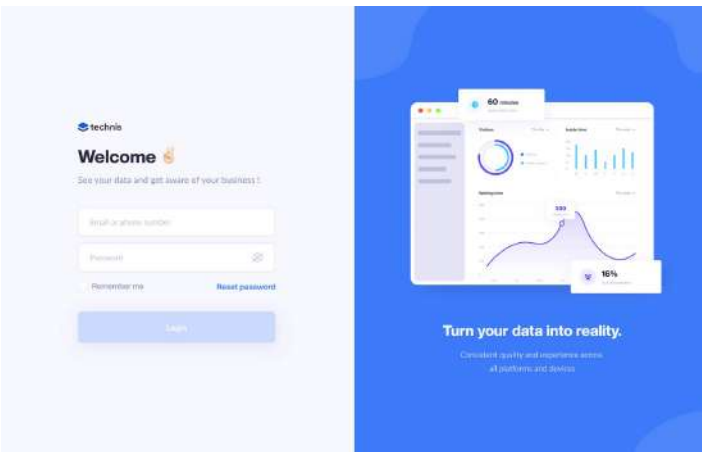# TECHNIS

📍 Paris, France

**technis**

## About Technis

Technis' platform digitalize physical retail stores and buildings to collect real-time data on foot traffic, customer behavior, energy and environmental quality.

## Description

The solution **Technis Flow** introduces a cutting-edge approach to real-time insights with its Map View feature, offering a comprehensive and intuitive map for monitoring visitor traffic across different zones, floors, and passages. This functionality allows users to stay abreast of activities within their facilities at a glance. The system's ability to understand seasonality empowers businesses to optimize staffing and maintenance by analyzing accurate visitor analytics. Identifying peak hours and traffic patterns enables informed decision-making for resource allocation.

## Solution

### Technis flow

Real-time visitor counting solution that enables measuring, understanding, and acting upon the movements of individuals within a given physical space.
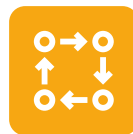
### TRL of the technology

TRL 9

### Commercial strategy

Technis Flow revolutionizes real-time insights with Map View, optimizing resource allocation through accurate visitor analytics and seasonality understanding.

### Scenarios

**Scenarios 1, 2, 3:** Data from dedicated sensors is systematically gathered and scrutinized, with a strong emphasis on security aspects across various building/places zones

### Innovation

Technis Flow innovates centralized data storage, processing, and seamless integration with business applications for universal, customizable, and scalable solutions.

# TENEXIUM

**✕ Tenexium**

## About Tenexium

Tenexium is specialized in ballistic protection solution. Is able to supply ballistic panels of 3sqm able to be directly applied on walls, partitions and doors.

## Description

These panels, named **T-SAFE**, are covered with High Pressure Laminated that could be selected in a large range of decoratives. Size of pânels is about 3sqm: 1200x2400mm. TENEXIUM is the unique company to propose such panels, able to be fixed in a very fast time and protect public areas, indoor or outdoor.

The panels are able to be fit temporary or definitely in public areas.

## Solution

**T-SAFE**

T-SAFE is a product made in patented Tenexium composite. Products are certified to be used indoor, A+, not sensible to water, humidity, high temperature, VOC and CMR free, and TENEXIUM is implementing the recyclability of our products.
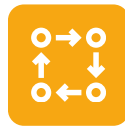
**TRL of the technology**

TRL 8

**Commercial strategy**

Tenexium is the sole manufacturer and supplier of decorative panels made in ballistic composite solution.

**Scenarios**

**Scenario 1:** All Indoor our outdoor areas that need a ballistic protection against ammunitions and explosives threats.

**Innovation**

Panels with ballistic protection against ammunition and explosive theats, that can be installed in indoor our outdoor areas without any ballistic indentification. Only a light structure is required. Or to fix the panels on existing walls.

**THALES**
Building a future we can all trust

Velizy, France

# About Thales GTS

Thales GTS is expert in signaling, communications, supervisions, ticketing, cyber security, and complex project and complex project management. Thales GTS supports the rail industry's digital transition.

# Description

The THALES proposed solution, **High Power Microwave effector** can address the scenario 2, Scenario related to UAV / UGV and CBRN in crowded environment.

# Solution

### High Power Microwave effector

The THALES proposed solution is an High Power Microwave effector (HPM) adapted to anti-drone operations called Etrap (ElectroMagnetic Trap).
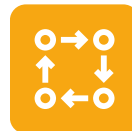
### TRL of the technology

TRL 5

### Commercial strategy

This technology can be used for military or civil use case. The system can be deployed to protect sensitive infrastructures, stadium, airports, etc.

### Scenarios

**Scenario 2:** The THALES proposed system is able to neutralize small UAVs regardless of their payload (sensor, NRBC load…). It needs target designation objective and then it can neutralize drones by optimizing the electromagnetic emission according to the attack scenario.

### Innovation

The technology is a non-kinetic technology that can neutralize drones swarm. The HPM has very low operation costs: no ammunition and low power consumption It generates no collateral effects.

# VAELSYS FORMACION Y DESARROLLO

📍 Madrid, Spain

## About VAELSYS

Vaelsys is specialized in Computer Vision solutions. The technologies process more than 100.000 cameras everyday, providing piece of mind to people. Vaelsys is pioneer in flying object detection, developed the first image-based bird detector in 2007, now utilized for bird protection in numerous Eolic Plants. The technology is extended to detect drones, with added capability to recognize flying objects using Deep Learning.

## Description

VAELSYS uses cameras to detect Drones Features of the technology: Detection of moving flying objects and Recognition of Drones. Vaelsys developed the first imaged based bird detector that is used to protect birds in hundreds of Eolic Plants. We are using this same technology to detect Drones. Now we are also able to recognize the flying object, leveraging Deep Learning capabilities.

## Solution

**DTDrone**
Detection of moving flying objects and Recognition of Drones Innovation of the technology.
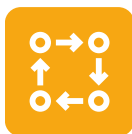
**TRL of the technology**
TRL 6

**Commercial strategy**
The mixed public-private sector is of interest. The public sector may consider acquiring the solution for safeguarding stadiums or city centers. Private companies might utilize the products for providing crowd protection services at events.
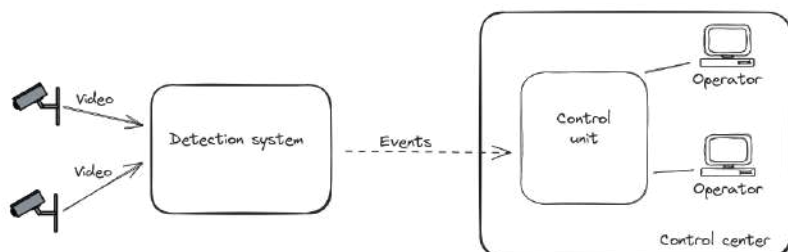
**Scenarios**
**Scenario 2:** detector that is used to protect birds in hundreds of Eolic Plants.

**Innovation**
The drone detection system integrates radars and cameras, streamlining alarm verification; it offers efficient video verification. The versatile solution, available as a standalone machine or integrated camera with embedded software, targets security companies for widespread market penetration.

# FUNDACION CENTRO DE TECNOLOGIAS DE INTERACCION VISUAL Y COMUNICACIONES VICOMTECH

📍 Donostia, Spain

**vicomtech**

MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

## About VicomTech

Vicomtech is an Applied Research Technological Centre specialised in Artificial Intelligence, Visual Computing & Interaction technologies. Our mission as a Non-for profit foundation is to foster the generation of knowledge and the transfer of our technologies, developing prototypes of new products, thus enabling new business linesin cooperation with industry, supported by original Intellectual Property.

## Description

**Viulib** permits AI-based video analytics software kits for real-time monitoring and situational awareness in public spaces.



## Solution 1

### Viulib

Viulib Surveillance works as a back-end service in which multiple advanced algorithms analyse video feeds in real-time enhancing safety and security measures in various settings, from public spaces and events to private facilities.

### TRL of the technology

TRL 7

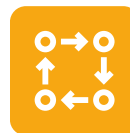### Commercial strategy

This particular software toolkit is designed to facilitate seamless communication with a range of other systems by incorporating the use of either a REST API or a message broker, depending on the specific requirements at hand.

### Scenarios

**Scenarios 3, 4, 5, 6, 7, 8, 9, 10:** AI-based video analytics software kits for real-time monitoring and situational awareness in public spaces available.

### Innovation

Viulib Surveillance by VICOMTECH allies in PCP projects, transferring AI video surveillance knowledge to startups, targeting regional and EU markets.

# VICOMTECH-FUNDACION CENTRO DE TECNOLOGIAS DE INTERACCION VISUAL Y COMUNICACIONES

vicomtech

**MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE**

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## Description

**B-Have analytics** consists of two parts: the clustering part and the anomaly detection part. In the first one, entity aggrupation modules    can be found based on different techniques, such as spectral ones.    In the second,    anomaly detection modules are contained, where statistical or immune techniques are found    . Input data follows a generic structure for all detection algorithms, for the easing of the user when analyzing data.
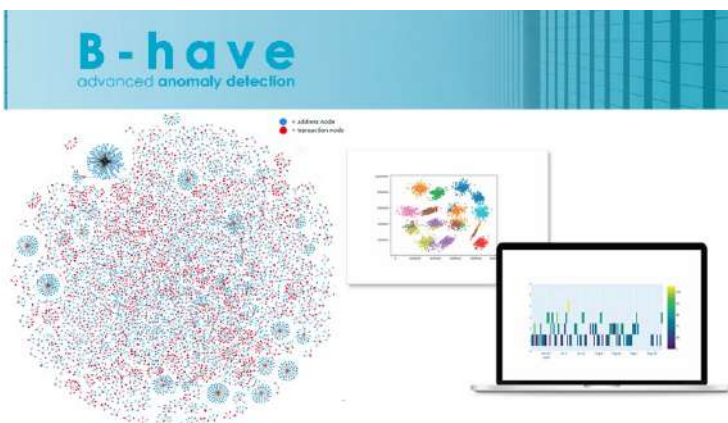


## Solution 2

### B-Have analytics
Software library with advanced Machine Learning algorithms for the detection of patterns and behaviours.
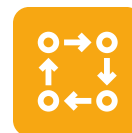
### TRL of the technology
TRL 6

### Commercial strategy
For VICOMTECH, in the case of B-Have, the immediate next level connection in the value chain are companies developing AI-based data analytics solutions or IT companies developing wireless surveillance systems .

### Scenarios
**Scenario 1, 3, 4, 5, 9:** B-Have is a library oriented to the processing and analysis of data patterns using Machine Learning algorithms. Anomaly Detection: Statistical Anomaly Detection.

### Innovation
B-Have's ground-breaking innovation is primarily focused on the advanced application of state-of-the-art Artificial Intelligence (AI) techniques. The variety of techniques found in Bhave lead to the solution of a wide range of problems, providing both lightweight and fast AI-based solutions for resource-poor environments, as well as precise and powerful AI-based solutions for resource-constrained environments.

# VIDETICS

📍 Sophia Antipolis, France

**Videtics**
Smart Vision for Life

## About VIDETICS

Videtics is a French publisher of Intelligent Video Analytics software specializing in Deep Learning. Videtics' core business is the development of video analytics tools using Artificial Intelligence, through software solutions specific to the world of security and safety, designed to provide humans with the most relevant elements for decision-making.

## Description

Revolutionize public safety with **Videtics Perception:** an AI-driven video analytics that enhances existing CCTV systems, ensuring next-level crowd management and unprecedented security at large-scale events and manifestations.



## Solution

### Videtics Perception
The main objectif of Videtics Perception is to design a transparent, trustworthy and robust AI addressing crowd managment.
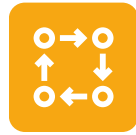
### TRL of the technology
TRL 8

### Commercial strategy
Videtics Perception is an advanced AI-driven video analytics solution designed to integrate seamlessly with existing CCTV systems. This technology leverages the power of artificial intelligence.

### Scenarios
**Scenario 3:** Managing crowd dynamics and potential panic situations during large-scale events.
**Scenario 4, 5, 9, 10:** Overcrowded Area Threats: Monitoring and controlling overcrowded areas, particularly in scenarios like sports events.

### Innovation
During large-scale events like the Olympics or Champions League matches, Videtics Perception can monitor crowd movements and densities. Its AI algorithms can detect unusual patterns or behaviors indicative of potential panic situations, allowing for quick response to prevent stampedes or manage evacuations efficiently.

# WALLIX



CYBERSECURITY SIMPLIFIED

📍 Paris, France

## About WALLIX

WALLIX is the European leader of digital identity and access management solutions to secure the digital assets and industrial networks.

## Description

PAM4ALL permits to manage a third party access to digital and industrial environments Identify and stop the risks of cyberattacks in high end environment Embed a privileged access management component into sensitive connected devices.



## Solution

**WALLIX PAM4ALL**

The PAM and IAM components could be embedded in connected devices, IT and OT environments to manage the critical access, autonomate these access, monitor and replay the connections in case of incidents.
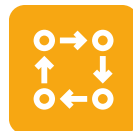
**TRL of the technology**

TRL 9

**Commercial strategy**

THe WALLIX technology in the IAM & PAM sectors is the most ready to integrate solution, less impactfull in the legacy or complex IT and OT environments, and agentless. WALLIX allow a continuous process of monitoring and audit.

**Scenarios**

**Scenario 1**: Manage the third party access to digital and industrial environments. Identify and stop the risks of cyberattacks in high end environment

**Innovation**

WALLIX is the European specialist of the PAM. It differenciates from the others by being certified in France (soon in Germany and Spain), by its easyness to integrate and use, its TCO compared to any others and its adequation with industrial systems and networks constraints.

# WARYME



📍 Cesson Sevigne, France

## About WARYME

WaryMe is a software company specializing in mobile solutions dedicated to people safety and crisis management. We provide the first all-in-one mobile app, integrating alerting, crisis plans and mass notification features to improve security in public places, schools, transports, companies and tomorrow the whole smart city.

## Description

**WaryMe** provides a powerful mobile application to report an incident or an emergency alert, mobilize and collaborate in the resolution of a crisis scenario, broadcast security instructions and collect the status on the field.



## Solution



### WaryMe

The WaryMe application is able to address all the scenarios of the challenge, by involving an unlimited number of people through their smartphone and the public mobiles networks.
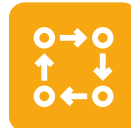
### TRL of the technology

TRL 9

### Commercial strategy

The solution is based on a mobile app, a SDK (Software Development Kit) for integration in third parties mobile apps, and a Supervision / Dispatching console for event management.

### Scenarios

**Scenarios 1, 3, 4, 5, 9**: Mass users are able to report an incident or to trigger an alert in case of an emergency situation or threat. Security authorities are able to activate a crisis scenario.

### Innovation

- A patented alerting protocol for real time emergency alerts containing audio (ambience listening), video, motion, heart rate, ...
- Events are managed from a centralized control room (supervision, dispatching) or in mobility (on a smartphone) the technology can be easily embedded in third parties applications (for example : RTM, the mobile app of the Marseille transport network. 500.000 users).
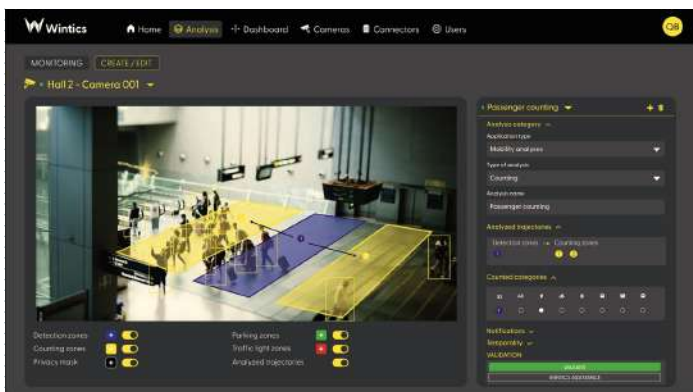
# WINTICS



📍 Paris, France

## About Wintics

Wintics offer a solution - AI video analytics software that analyzes in real time the streams coming from any surveillance camera to produce a wide range of safety alerts and statistics on flows.

## Description

**WINTICS** is an automated surveillance software that analyzes video feeds, providing real-time safety and mobility data. It aids security agents by promptly detecting potential threats, enhancing reaction time, and reducing risks. The platform, endorsed by the French Ministry of Interior, will be tested during the 2024 Paris Olympic Games.



## Solution

### WINTICS

Wintics holds strong competitive advantages in AI deployment for cities and infrastructure. Specialized team, superior accuracy, flexibility, efficiency, and ethical commitment distinguish us. Pioneers with 50 major references.
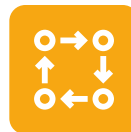
### TRL of the technology

TRL 8

### Commercial strategy

The solution proves invaluable for security teams utilizing surveillance camera networks, catering to diverse sectors such as public, private, and mixed security.

### Scenarios

**Scenario 1:** Recognition of public panic situations in everyday life
**Scenario 3, 4:** Monitoring of urban riots, including fire and smoke detection, and preliminary fight detection
**Scenario 8, 9**: Assessment of overcrowdednes
**Scenario 10:** Detection of unattended items

### Innovation

In achieving 100% benchmark success, it ensures user-friendly, ethical, and scalable AI deployment with key partnerships.
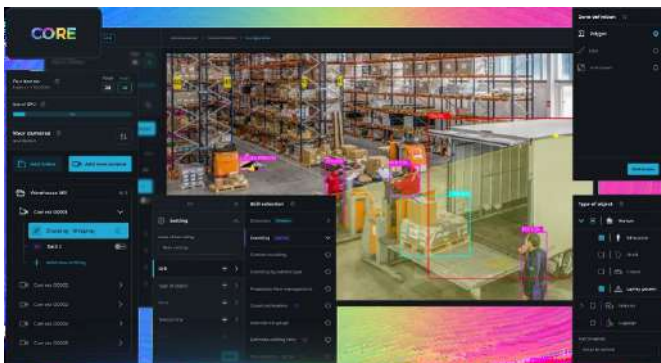
# XXII

📍 Puteaux, France

## About XXII

XXII is the French leader in the field of computer vision software publishing. CORE connects to infrastructure camera networks to perform real-time detection and tracking of a multitude of objects, from people to packages to vehicles. Thus, CORE automates visual perception, offering infinite applications in varied contexts to improve operational efficiency, strengthen security, and analyze its performance.

## Description

The proposed solution, **CORE**, allows the set up of customized use cases through simple steps: after importing your live video feeds, set up the detection or counting, the object to be detected, the rule engine and timeframe. A dashboard also collects the quantitative and statistic data, and our API allows for interconnectivity with other systems for synergy and automatization.



# XXII

## Solution

### CORE

CORE's ability to accurately recognize and track objects in real-time, even in complex and dynamic environments.
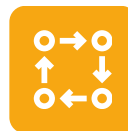
### TRL of the technology

TRL 9

### Commercial strategy

Crowd Management, Detection, Tracking, Re-ID, Counting, Automatization, Real-time alerts.

### Scenarios

**Scenarios 1, 2, 3, 4, 5, 6, 7, 8, 9:** The solution will then send real-time alerts directly to the IMS, so that the operator can be notified in real-time.

### Innovation

Flexibility of CORE's architecture, allowing users to customize and adapt the system to specific industry needs or unique use cases. Modular components that make it easy for users to integrate new features or updates seamlessly.

# SHIELD4CROWD

## SHIELD 4CROWD

𝕏  in

✉ contact@shield4crowd.eu