Pitch Presentations

Fighting Crime and Terrorism & Border Management

Police Presidium Mr. Martin Kutra **Smiths Detection** Mr. Glenn Tracy **Smiths Detection** Mr. Glenn Tracy Mr. Daniel Manor **Ubigam Ltd** Ms.Fulya TUNÇER ÇETİN Aselsan Sec-technologies Ms. Ivana Drobanova Ms. Marina Bresciani **BEIA**



Unveiling Criminal Networks through Innovative Drug Analysis Methods



Mr. Martin Kutra *Police Presidium of the Czech Republic*



Police Presidium of the Czech Republic

Unveiling Criminal Networks through Innovative Drug Analysis Methods

Type of company/organisation: Police Presidium of the Czech Republic

Contact Details

Email: martin.kutra@pcr.cz

Telephone/Mobile: +420 603 477 877

Country: CZE

Drug profiling, drug identification, chemical profiling, trafficking, cross-matching





Role in the Proposal: Coordinator

Existing consortium:

- Proposed WP leader: Police Presidium of the Czech Republic
- Partners: LEA method testing and data collection (Germany, Italy, Portugal, Spain, Albania, Croatia); Academics and Industry (SW and AI); SME; other partners EUROPOL/INTERPOL (advisory on drug routes)
- Looking for partners with the following expertise/ technology/ application field: LEAs worldwide, forensic laboratory





List the Destination/s and topic/s that are of your interest:

HORIZON-CL3-2023-FCT-01-02

A harmonized European forensics approach on drugs analysis

What is the problem you seek to address? Comparison of the chemical composition of drugs and cross-matching of seized drugs

Outline your Project Idea: Combat drugs by developing a portable device for field use





Explain the long-term impact of the solution/idea. Criminal network to be identified and dismantled

What is the research/technology/expertise/skills you own to solve the problem. Portable device development, innovative and patented methods & techniques

Drug profiling, drug identification, chemical profiling, trafficking, cross-matching





Explain the Expertise of your company/organisation and outline any experience in EU R&I projects or other.

The Czech Republic Police has extensive experience in **project management** and cooperation with EUROPOL/INTERPOL. Among our greatest successes is the creation of the **global collection of drugs seizures** called RELIEF Database.

Drug profiling, drug identification, chemical profiling, trafficking, cross-matching



CONCLUSION

Comparison of chemical composition of drugs is one of the biggest challenges for LEAs worldwide

Available methods for LEAs are insufficient and impractical due to their inaccuracy, complexity, length, and high financial costs, making their efficient use extremely difficult

The application of innovative methods and techniques in LEAs has shown significant potential in combating organized crime globally





inexpensive

Application of affordable methods, techniques and devices with utmost LEAs use potential worldwide



real-time result

Development of portable and affordable drug analysis kits that can provide on-site results



straightforward

Utilization of AI to simplify the analysis process and ensure accuracy and consistency of results



analytical & field use

Rapidly test the composition of drugs, providing crucial data for both analytical reports and on-the-spot decision-making



excellence guaranteed

Advanced patented techniques to guarantee the highest level of accuracy and efficiency in supporting LEAs activities









Making the world a safer place



Mr. Glenn Tracey Smiths Detection



Making the world a safer place

Type of company/organisation: Private company (LSE: SMIN)

Contact Details

Email: glenn.tracey@smithsdetection.com

Telephone/Mobile: +44 (0) 7818 211 353

Country: UK, DE, FR

Global leaders in threat detection and screening technologies





Making the world a safer place

Role in the Proposal:

Commercial partner for in-field portable and real-time drug detection, Police & Customs enforcement

Skills and capabilities

- Border management and customs screening Defence and Urban Security CBRNe, drug detection, X-Ray (aviation, ports and borders)
- Image recognition, spectral processing; AI & ML
- Digital Analytics, Digital Twin, Block Chain, connected devices, edge connectivity, situational awareness



Drughunter.eu





Making the world a safer place

Destination topic of interest

HORIZON-CL3-2023-FCT-01-02 A harmonized European forensics approach on drugs analysis

What it is the problem you seek to address?

Fast, non-invasive drug abuse determination and quantification *Project Idea*:

- Non-invasive identification and quantification of multi-drugs of abuse, in one run
- Roadside drug testing in a car, mobile laboratories, police departments or laboratories.



Drughunter.eu



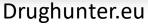


Making the world a safer place

Long-term impact of the solution/idea.

- Improvement on immunoassay false positives
- Immediate quantitative results, speeds progress to confirmation
- Reduction of false positives and suspect processing What is the research/technology/expertise/skills you own to solve the problem.
- Detection product development, scale-up and manufacturing
- Chemical detection, trace and bulk expertise







smiths detection

Making the world a safer place

40+ years in border management, customs screening and

detection in CBRNe, trace detection, digital

Outline any experience in EU R&I projects or other.

Successful participation in 13 EU projects (FP7, H2020,

HE) including two 2022 Cluster 3 calls.

Current partners

Smiths Detection – commercial partner

Drughunder.eu – technology provider

LOOKING FOR:

Project co-ordinator

Police and customs end-users

Forensic Science institutes, toxicology





Making the world a safer place

Additional call interest areas

HORIZON-CL3-2023-FCT-01-01 -

HORIZON-CL3-2023-FCT-01-04 -

HORIZON-CL3-2023-BM-01-01-

HORIZON-CL3-2023-BM-01-03-

HORIZON-CL3-2023-BM-01-04-

HORIZON-CL3-2023-DRS-01-03-

Smiths Expertise

Big data sets, intelligence and analytics

Image integration and interoperability between customs

IoT & Mesh, distributed sensor networks, AI

Biometrics and at-risk integration with aviation & border security

CBRNe detection, networked sensing

Remote/standoff biodetection, CBRNe







Making the world a safer place



Mr. Glenn Tracey Smiths Detection



Making the world a safer place

Type of company/organisation: Private company (LSE: SMIN)

Contact Details

Email: glenn.tracey@smithsdetection.com

Telephone/Mobile: +44 (0) 7818 211 353

Country: UK, DE, FR

Global leaders in threat detection and screening technologies





Making the world a safer place

Role in the Proposal:

Commercial partner for stand-off UXO detection

Skills and capabilities

- Border management and customs screening Defence and Urban Security CBRNe, drug detection, X-Ray (aviation, ports and borders)
- Image recognition, spectral processing; AI & ML
- Digital Analytics, Digital Twin, Block Chain, connected devices, edge connectivity, situational awareness





Making the world a safer place

Destination topic of interest

HORIZON-CL3-2023-BM-01-02 Identify, inspect, neutralise Unexploded Ordnance (UXO) at sea What it is the problem you seek to address?

Stand-off underwater explosives detection (in shallow or deep waters)

Project Idea:

- Stand-off UXO detection capability in deep or shallow waters
- Potential for through-shield chemical differentiation of unexploded ordnance
- Potential for underwater communications feasible with same technology





Making the world a safer place

Long-term impact of the solution/idea.

- Increased capabilities to detect, classify, inspect, assess and neutralise UXO at sea
- Detect UXO on and below the marine sediment/seabed, in order to detect also buried objects
- Significant differentiation with acoustic and backscatter methods

What is the research/technology/expertise/skills you own to solve the problem.

- Detection product development, scale-up and manufacturing
- Chemical detection, trace and bulk expertise



40+ years in border management, customs screening and detection in CBRNe, trace detection, digital

Outline any experience in EU R&I projects or other.

Successful participation in 13 EU projects (FP7, H2020,

HE) including two 2022 Cluster 3 calls.

Current partners

Smiths Detection – commercial partner UK University – technology provider

LOOKING FOR:

Project co-ordinator

End-users

Systems integrators



Making the world a safer place



Making the world a safer place

Additional call interest areas

HORIZON-CL3-2023-FCT-01-01 -

HORIZON-CL3-2023-FCT-01-04 -

HORIZON-CL3-2023-BM-01-01-

HORIZON-CL3-2023-BM-01-03-

HORIZON-CL3-2023-BM-01-04-

HORIZON-CL3-2023-DRS-01-03-

Smiths Expertise

Big data sets, intelligence and analytics

Image integration and interoperability between customs

IoT & Mesh, distributed sensor networks, AI

Biometrics and at-risk integration with aviation & border security

CBRNe detection, networked sensing

Remote/standoff biodetection, CBRNe







Detecting, Locating and Tracking Cellular Devices for Enhanced Boarder Surveillance Capabilities

HORIZON-CL3-2023-BM-01-01

Mr. Daniel Manor Ubiqam Ltd.





Type of company/organisation: Small Medium Enterprise / R&I Focus

Contact Details

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Telephone/Mobile: +972 544 70 10 29

Country: Israel

Wireless Detection, Direction Finding, Spectral Immunity, Signal Classification, Interference Mitigation, Anti-Jamming, Intrusion Detection





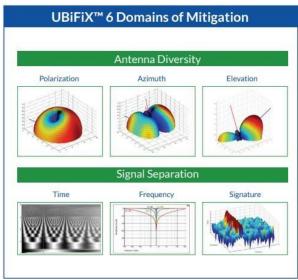


Role in the Proposal: Technical Lead / WP Lead Capabilities:

Technology: Wireless/cellular devices detection, classification and location finding, spectrum protection, anti-jamming **Team:** Technology / R&I team with wireless algorithms, smart antenna, signal classification, SW and HW expertise

Complementary Capabilities Sought:

- System integrator
- Data analysis, fusion and extraction (machine learning / AI)
- Other sensors (e.g. radars, vision, thermal)
- Sensor deployment (UAV, UMV, UGV, Balloons, etc.)













List the Destination/s and topic/s that are of your interest: HORIZON-CL3-2023-BM-01-01

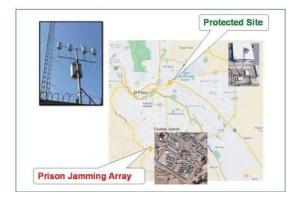
What it is the problem you seek to address?

Identifying border vicinity activity by non-intrusive tracking of cellular (4G/5G) devices presence and movements

Outline your Project Idea:

Enhance multi-sensor border surveillance by identifying, location finding and analyzing of mobile devices movement tracking











Solution's long-term impact

- Cost efficient, high-performing border surveillance enhanced capability
- Tracking of cellular activity movement will support fight against illegal activities and enhance the security of people and operators in border areas
- Solution can be rapidly deployed and relocated for monitoring irregular border crossing

What is the research/technology/expertise/skills you own to solve the problem

- Cellular signals identification and classification
- Direction finding using antenna array
- Development and integration of wireless systems, HW and SW







Expertise

- Antenna array processing for direction finding and spectral immunity
- Wireless technologies classification
- Solutions are commercially deployed in tier-1 networks

Previous R&I Projects

- REWIND FP7 Project –Technical lead, 2 WP lead
- 4 bi-national and 4 national R&I projects

R&I Team

- Over 150 accumulated years, experience in communication algorithms, DSP, system, RF, HW and SW design
- 10 awarded patents

















Enhanced Boarder Surveillance Capabilities

by

Detecting, Locating and Tracking Cellular Devices

using

previously untapped data gathered

in

a non-intrusive and cost-efficient manner

Thank you



ASELSAN SECURITY SYSTEMS PROGRAMME



Ms. Fulya TUNÇER ÇETİN Chief Team Lead Project Manager/ASELSAN



Type of company/organisation: defense company by Turkish Armed Forces Foundation the largest defense electronics company of Turkey

whose capability/product portfolio comprises

- Security
- radar and electronic warfare
- electro-optics,
- avionics, land, naval and weapon systems
- unmanned systems

Business Line: Security (ASELSAN- UGES)

Contact Details

Email: ftuncer@aselsan.com.tr

Telephone/Mobile: +905303220859

Country: TURKEY

- air defence and missile systems
- command and control systems
- Transportation
- Communication and information technologies
- traffic, automation and medical systems





ASELSAN – a partner candidate

Expertise

- Active projects in FIGHTING CRIME AND TERRORISM, BORDER MANAGEMENT and RESILIENT INFRASTRUCTURE
- Close colaboration with end users, which can join consortium
- Expertise in European Commission Project Management
- Biggest electronics integrator in Turkey
- Distributed and wide area deployment projects
- Allocates 7% of its annual income for self-financed research and development activities





Area of our interest:

FIGHTING CRIME AND TERRORISM

HORIZON-CL3-2023-FCT-01-03: New methods and technologies in service of community policing and transferable best practices

• Smart Traffic Checkpoint Projects with Face Recognition through Windshield

BORDER MANAGEMENT

HORIZON-CL3-2023-BM-01-01, HORIZON-CL3-2023-BM-01-03, HORIZON-CL3-2023-BM-01-04

Border managemet system over 1000 km Turkey border

RESILIENT INFRASTRUCTURE

HORIZON-CL3-2023-INFRA-01-02: Supporting operators against cyber and non-cyber threats reinforce the resilience of critical infrastructures

 Secuirty managemet systems project for Turkish Armed Forces Centers, Turkish Finance Center etc.





Cutting edge solutions on

- End to end solutions comprising of sensor systems, response systems, management centers
- Integrated sensor management specialized to security solutions (radars, eo, lprs, biometric access control system etc.)
- Physical Security Management System providing situational awareness on 3D digital map with decision support feature
- Imaging sensors (4K smart cameras, integrated face recognition modules, plate recognition sensors)
- Image processing technologies
- Network Video/Image Recording Systems
- Video Analytic Solutions
- Fiber Optic Acoustic Sensor Systems





Expertise of ASELSAN in EU R&I projects

- Active in H2020, FP7, EUREKA ITEA2 ve EUREKA ARTEMIS
 - EC FP7-SEC; 607821; SECTOR Secure European common information space for the interoperability of first responders and police authorities
 - > EUREKA ITEA2: APPS- Advancing Plug & Play Smart Surveillance Project
 - EUREKA ARTEMIS: ALMARVI (Algorithms, Design Methods, and Many-Core Execution Platform for Low Massive Data-rate Video and Image Processing)
 - ➤ EUREKA ITEA2 RECONSURVE (A Reconfigurable Surveillance System with Smart Sensors and Communication)
 - > EUREKA ARTEMIS: COPCAMS (COgnitive & Perceptive CAMeraS) Project
 - EC FP7 SUBCOP (Suicide Bomber Counteraction and Preventation Project)
 - EC FP7 Hyperion (Hypersecteral Imaging IED and explosives reconnaissance system Project)





aselsan

Feel free to contact, if you are interested to collaborated!

Fulya, ftuncer@aselsan.com.tr

Thank You!!





SEC Technologies, small SME SLOVAKIA Ms. IVANA DROBANOVA id@sec-technologies.com



Info

- Partner in consortium We are ready to help with bring on a partners
- CALLS WE ARE INTERESTED IN:
- HORIZON-CL3-2023-BM-01-01: Capabilities for border surveillance and situational awareness
- HORIZON-CL3-2023-DRS-01-05: Robotics: Autonomous or semi-autonomous UGV systems to supplement skills for use in hazardous environments
- HORIZON-CL3-2023-DRS-01-06: Increased technology solutions, institutional coordination and decision-support systems for first responders of last-kilometer emergency service delivery
- NATO Certified Company
- Member of 2 Captech groups CBRN and Human Factors, <u>CapTech Electro Optical Sensors Technologies</u>
- We wrote long proposal in EIC
- Part of two Horizon projects last year





Expertise

- Only active detection system in a world
- CO2 pulsed lasers (no need for delta t)
- Detection up to 6 km, 99% humidity
- Defence sector
- R&D expertise to make our customers







Ideas for usage

- Integration on vehicle (UAV), helicopter
- Ideas for integration on boat or drone
- Firstresponders (after industrial catastrophes, during fires)
- Police (detection of drug labs)
- Maritime surveillence











Thank you for your attention Ivana Drobanova

id@sec-technologies.com

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Marina Bresciani BEIA (SME)







- BEIA (SME) founded in 1991
 - Offices in: Austria, Belgium, Romania www.beia.eu
 - One of the leading providers of ICT solutions and services in Balkan/Danube region for cloud communications and IoT telemetry
 - O Team of **90 people** with experience in over **100 R&D and Innovation** projects in various programme Eureka/Eurostars, ITEA, Celtic, Eurostars, ERA-Net, Horizon/Digital-Europe, LIFE+, CEF, EDF, ESA/ROSA, etc.





- Capabilities for border surveillance and situational awareness -HORIZON-CL3-2023-BM-01-01
- Beyond the state-of-the-art "biometrics on the move" for border checks -HORIZON-CL3-2023-BM-01-03
- Interoperability of systems and equipment at tactical level; between equipment and databases; and/or between databases of threats and materials
 HORIZON-CL3-2023-BM-01-04

HERMES4ALL (Portable KIT for advanced detection of threats and illicit goods at customs check sites) aims to aid the implementation of the new EU Customs Union action plan to strengthen customs risk management and effective controls. Threat detection in postal flows; automated controls and detection that reduce the need to open or stop containers, packages, baggage, or cargo; decision support; portability of control solutions; and technologies to track cross-border illicit trade are among the capabilities."





Impact points:

- Enhanced protection of marine environments, facilities, and activities, as well as EU land, air, and sea borders, against accidents, natural disasters, and security threats such illegal trafficking, piracy, and potential terrorist attacks, as well as cyber and hybrid threats;
- An enhanced border crossing experience for visitors and border officials staff, while upholding security and monitoring of movements across air, land, and sea external borders of the EU, supporting the Schengen area, reducing unauthorized movements of people and goods across those borders, and defending visitors' fundamental rights;
- Lessening disturbance to trade flows through improved prevention, detection, deterrent, and battle against unlawful activities involving movements of goods over EU external border crossing points and across the supply chain.





Key Innovations:

- (1) development of a time-sensitive IoT system for measuring specific biometrics detection parameters
- (2) early warning network utilizing wireless sensor network communication infrastructure
- (3) processing the data obtained and obtaining real time alerts using ML/FL algorithms

Keywords: hardware (sensors, actuators, IoT), service innovation (AI, blockchain, cloud, big data, quantum security), information technologies (data analytics, back end, interfaces, front end), integration (software/hardware)







Seeking for partners such as:

- Border Authorities
- Airline Companies
- Police
- Customs
- **❖** Innovative SMEs
- Research Institutions





Contact details

- Contacts George Suciu, R&D and Innovation Manager, george@beia.eu
- Marina Bresciani, Project Manager, <u>marina.bresciani@beia.eu</u>
- BEIA (SME) Austria, Belgium, Romania www.beia.eu

Thank You!!



Network Break (10mins)



Resilient Infrastructure

Ubiqam Ltd DLR

Bosonit: Nworld group

Mr. Rami Hasarchi Dr. Arto Niemi Ms. Sabine Delaitre





Supporting operators against cyber and non cyber threats to reinforce the resilience of critical infrastructure using spectral wireless communication immunity and anti-jamming technology.

Horizon -CL3 -2023 -INFRA -01-02

Mr. Rami Hasarchi Ubiqam Ltd





Type of company/organisation: Small Medium Enterprise / R&I Focus

Contact Details

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Telephone/Mobile:+972525617501

Country: Israel

KEYWORDS

Resilient critical wireless communication and infrastructure intrusions detection, interference mitigation, anti-jamming, spectral immunity



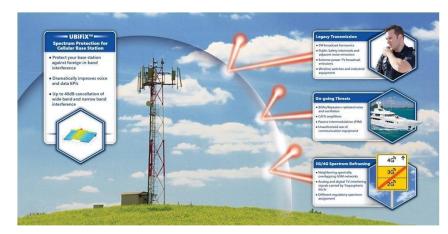




Role in the Proposal: Coordinator / WP leader Existing partnerships: S/W company with cyber protection capabilities, spectrum immunity solution provider, mission critical wireless communication provider.

Complementary Capabilities Sought:

- Critical infrastructure operators (communication, energy, transportation, healthcare)
- Software and AI for cyber security
- Critical sensors with wireless connectivity
- Telecommunication researchers in the field of spectral and interferences analysis







List the Destination/s and topic/s that are of your interest: Horizon—CL3 - 2023 - INFRA 401-022

Supporting operators of infrastructures, such as airports, power plants, transportation, data centres etc, relying/depending on critical communication against wireless threats, in order to reinforce the resilience of these critical infrastructures.

What it is the problem you seek to address? How to identify wireless threats to mission critical communication? How to mitigate hostile threats such as Jammers, Intruders, Interferences?

Outline your Project Idea: Enhance critical infrastructure resilience by:

- Identify in real time any radio threat that disrupts the infrastructure operation.
- Block or mitigate any such interference intrusion.
- Enable end-to-end immunity: Both to the network and to the wireless devices.





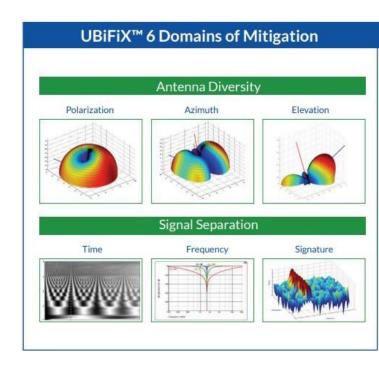


Explain the long-term impact of the solution/idea.

- Achieve resilient reliable mission critical communication.
- Achieve significant reduction of risks and exposures to wireless threats of the dependant infrastructures.
- Improve the reliability and flow of situation awareness data related to critical infrastructures

What is the research/technology/expertise/skills you own to solve the problem.

- Innovative interference mitigation technology, protecting hundreds of tier-1, 4G sites.
- Expertise in 4G/5G technology ,classification, interference mitigation ,DSP.
- Development and integration of wireless systems, HW and SW
- A big database of various interferences and spectral anomalies
- Antenna array processing for direction finding and spectral immunity









Previous R&I Projects

- REWIND FP7 Project –Technical lead, 2 WP lead
- 4 bi-national and 4 national R&I projects



R&I Team

- Over 150 accumulated years, experience in Communication Algorithms,
 DSP System, RF, HW and SW design
- 10 awarded patents















Conclusion and Key Take Away Messages

- Critical infrastructures depend heavily on resilient critical communication.
- Hence there is strong need to identify in real time any threats to this mission critical communication.
- And a strong need to mitigate those interferences .
- Bear in mind that the cyber world is closely coupled to the mission critical 4G/5G networks

Keywords

Resilient critical wireless communication and infrastructure intrusions detection, interference mitigation, anti-jamming, spectral immunity



Thank You!!

SEREN5
Pitch Presentation: REUNION
Resilient EUropeaN Infrastructure for
Offshore eNergy



Dr. Arto Niemi German Aerospace Center (DLR-MI)





Type of company/organisation: Research Institution

Contact Details

Email: arto.niemi@dlr.de

Telephone/Mobile: +49 471 92419913

Country: Germany

Introduction: Keeping watch

Keywords: Maritime Infrastructures, Risk and Resilience Assessment, Operational Modeling, Situation Awareness







Role in the Proposal: **WP leader or Partner**, contacts to German public stakeholders, in federal and state levels; industry partners, including infrastructure operators and security technologies providers; and a network of other DLR Institutes.

Competencies as a Partner, ongoing projects regarding maritime infrastructure resilience (offshore windfarms, ports, and hydrogen production) and situation awareness (research platforms: cameras and acoustic sensors, situation awareness rooms).







Large scale research platforms to solve the problem:



Situational Awareness



Mobile surveillance platform



Underwater Instrument Platforms (AUV, ROV)







List the Destination/s and topic/s that are of your interest: Ensuring supply of essential services - HORIZON-CL3-2023-INFRA-01-01 Supporting operators against threats - HORIZON-CL3-2023-INFRA-01-02 (Unexploded Ordnance UxO at sea - HORIZON-CL3-2023-BM-01-02)

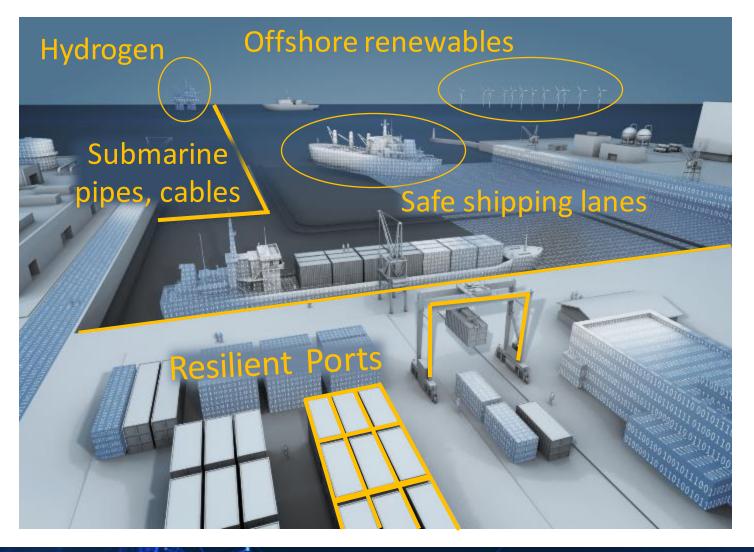
What it is the problem you seek to address?

How CER directive can be applied to protect maritime infrastructure,

How increasing reliance on offshore renewables will affect the energy security







Take-home message:

DLR-MI is your partner for maritime infrastructure resilience

Email: <u>arto.niemi@dlr.de</u>

Intro: Keeping watch

Website: https://www.dlr.de/mi



InfoDay – Cluster 3 – 28 June Pitch Presentation





Ms. Sabine Delaitre
The Wick: innovation unit
of BOSONIT-Nworld group

Presentation and Overview of our R&D projects

Type of company: for-profit – SME with the support of LARGE - BOSONIT

Country: Spain with an International Market presence

<u>Contact Details:</u> e-mail <u>sabine.delaitre@bosonit.com</u>

DocExploit, cybersecurity team: R&D projects, paper submitted to SecIndustry 2023 (workshop in ARES conference), and SecurIT finalist (with ELLiot Cloud as partner and with SION: secure IoT network as the project to secure critical infrastructure)

BOSONIT, Tech & Data – PIC 917525620: 12 ongoing R&D projects (national and European) in Industry4.0; Agriculture4.0; and data and advanced analytics + own innovative projects (such as Living lab for data management)

ELLioT Cloud (IoT, Edge, Cloud) – PIC 892670243: various R&D projects and 2 EU projects; IIoT; smart cities, smart energy, smart water, smart building and the new EU Project – Digital Europe Programme: DOME A Distributed Open Marketplace for Europe Cloud and Edge Services

What we are looking for

Synergies for building new projects

Our role:

- Technical provider: cybersecurity, vulnerability detection, development health assessment, data risk management
- Pilot deployment and management, Integration of new sensors and heterogeneous data sources
- Delivery of demonstrators in public and private sectors

Beneficiary as partner or third-party

- + We can participate in the proposal preparation, support consortium building
- + Team with large experience in European projects including coordinator role or WPL

Interest in the following topics (not exclusive)

HORIZON-CL3-2023-INFRA-01-02: Supporting operators against cyber and non-cyber threats to reinforce the resilience of critical infrastructures

HORIZON-CL3-2023-CS-01-01: Secure Computing Continuum (IoT, Edge, Cloud, Dataspaces)

HORIZON-CL3-2023-DRS-01-01: Improving social and societal preparedness for disaster response and health emergencies

HORIZON-CL3-2024-CS-01-01: Approaches and tools for security in software and hardware development and assessment





Our digital transformation offer

DocExploit – **cybersecurity** focus

- Cybersecurity suite
 (DocSpot, DocDocker,
 SirDocker),
 vulnerabilities
 detection in code and
 container, Security
 automation
 /DevSecOps
- Accurate solution by using graph structure (reduce false positive), CVE/CWE, MITRE database
- Preventive Security system



Graphenus –Data and Advanced Analytics focus

- Transparency, white box
- Data governance
- ML / FL, Big data pipeline, batch and streaming
- Data visualization,
 Business intelligence
- Real-time forecasting systems

AppoLow – Software Engineering, Low Code focus

- Software development platform
- Front/back end, UI/UX design, business process automation
- Faster development (1 week vs 1 month), modularity, flexibility



ELlioT

- IoT platform, cloud services for smart cities, smart farming, smart mobility, cloud computing continuum
- FIWARE open-source standards
- Pilots and projects in public and private sectors
- Business development team





More information in https://bosonit.com/en/ see Knowledge for the technical details, and see Innovation for the links to the team and products.

Oraphenus



Example of our internal collaboration for demonstrator capacity

DOC(66) EXPLOIT

Experts and developers in cybersecurity and application quality (DevSecOps)

ЕЩоТ_

Experts in implementing IoT solutions in an operational environment

Strong business development team with International market presence in Europe and Latin America

Vulnerabilities detection, Secure IoT solution (SW) IoT platform with integrated data management module (incl. Data governance)

Augmented IoT platform (here, from the security perspective)

Demonstrator – TRL 6/7

Critical Infrastructure surveillance using IoT cameras Site: Rota water treatment plant, Spain



Tools and technologies in which we have experience



Development



Airtable

invision

Data



Security



Architecture















































our clients





Thank You!



We are ready to collaborate with you, please contact sabine.delaitre@bosonit.com





Network Break (10mins)



Increased Cybersecurity

DeepKeep
Sintef
University of Stavanger

F-Secure

Mr. Guy Sheena Dr. Gencer Erdogan Dr. F. Ozgur Catak

Dr. Marko Komssi & Ms. Sini Olkanen

SEREN5 Security of robust Al systems



Mr. Guy Sheena DeepKeep



Deepkeep

ML SECURITY

DeepKeep ML Security

Type of company: Private

Contact Details

Email: guy@deepkeep.ai

Mobile: +972-52-6167888

Country: Israel

Security and trustworthiness of Al







Role in the Proposal: coordinator or WP Leader

Existing consortium:

- 2 SMEs
- 2 Universities







Proposal activity:

HORIZON-CL3-2023-CS-01-03

What it is the problem you seek to address?

Security of robust AI systems

Outline your Project Idea:

Develop an advanced software platform that automates multiple layers of AI security, encompassing risk analysis, prevention measures, and real-time detection with immediate mitigation of adversarial and cyber attacks on AI systems.





Deepkeep

- Penetration testing
- Vulnerability assessment
- Protection recommendation

- Real-time alert triggering
- Dynamic protection
- Operation center and response



- Pre & post-processing
- Robust component injection
- Model reparation

- Stateful/Stateless detection
- Anomaly detection
- Explainability-based detectors

Tags: AI, ML Security, Adversarial AI, trusted AI, AI act













Explain the Expertise of your company:

Adversarial AI detection and protection

Cyber attacks on Al

Cyber security

Discuss the Team, any key player that will be working on the project

Use cases: Large Enterprises from the BFSI/Automotive/ Government sectors

R&D: Enterprises and Academic institutions with expertise in:

Adversarial AI (Evasion, Stealing, poisoning, etc.)

Trustworthy AI (weak spots, OOD, XAI, confidence, etc.)

AI ethics and regulation (AI ACT)

ML context awareness

Tags: AI, ML Security, Adversarial AI, trusted AI, AI act







Join us in our mission to create AI that is certified, highly effective, completely safe, and unequivocally trusted

Tags: AI, ML Security, Adversarial AI, trusted AI, AI act

Thank You!!



ARISE Advanced Risk-Based Secure Computing Continuum



Dr. Gencer Erdogan SINTEF





Type of organisation: Research Institution

Contact Details

Email: gencer.erdogan@sintef.no

Telephone/Mobile: +47 959 04 115

Country: Norway

Keywords: Cybersecurity, Cyber-risk assessment, Privacy, Modelling, Internet of Things, Critical infrastructure, Artificial Intelligence (ML), Dependencies







Role in the Proposal: Coordinator

We are looking for:

- Smart city operators (e.g., public entities or companies)
- Critical infrastructure operators
- Al experts
- Data centres
- Supply chain companies
- Monitoring and testing expertise







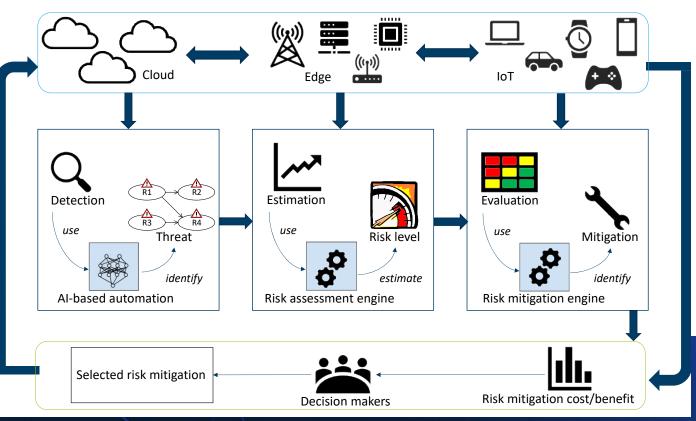
Increased Cybersecurity - HORIZON-CL3-2024-CS-01-01

• How do we detect, assess, and mitigate cybersecurity threats in the Cloud-

Edge-IoT continuum, proactively and automatically, considering also

dependencies?

Project Idea:









Long-term impact of the solution/idea.

- Strengthened EU cybersecurity capacities and European Union sovereignty in digital technologies
- More resilient digital infrastructures, systems and processes
- Increased software, hardware and supply chain security
- Reinforced awareness and a common cyber security management and culture.

Research/technology/expertise/skills we own to solve the problem.

• Risk management framework developed over two decades (freely available tools and published books)







Expertise of our organisation:

• We do multidisciplinary applied research within technology, resilience, security, social sciences and knowledge management.

Experience in EU R&I projects:

- In FP7, SINTEF received more funding for security projects than any other research organization in Europe.
- In H2020 SINTEF participated in 440 projects, coordinating 71 of them.







Thank You!!



Trustworthy AI

Adversarial ML, Privacy, Cryptography



GitHub https://github.com/ocatak



KEYWORDS: Trustworthy AI, Adversarial ML and Mitigations, 5G/6G Wireless Networks

Dr. F. Ozgur Catak Assoc. Professor University of Stavanger, Norway





University of Stavanger, Norway

- •Expertise: Trustworthy AI research and applications with focus on Adversarial ML, Homomorphic Encryption, and Federated Learning.
- •Focus Areas: Adversarial ML, Homomorphic Encryption, Federated Learning
- •Application Domains:
 - 5G and 6G: Beamforming, Spectrum Sensing, Channel Estimation
 - Healthcare: Secure Data Analysis, Privacy-Preserving Solutions
- •Goal: Ensure reliability, transparency, and ethical use of AI
- •Ready to discuss further and answer questions !!!







University of Stavanger, Norway

Role in the Proposal: Partner

We are actively working on development of Trustworthy AI applications

- Adversarial ML
- Homomorphic Encryption based crypto protocol development
- Federated Learning based Privacy Preserving AI Development
- Uncertainty and model testing in AI
- Blockchain based Digital IDs and Smart Contracts

Our application areas

- 5G/6G applications (Beamforming, IRS, Channel Estimation, Spectrum Sensing)
- Healthcare







Funded by the European Union

University of Stavanger, Norway

List the Destination/s and topic/s that are of your interest:

- HORIZON-CL3-2023-CS-01-01: Secure Computing Continuum (IoT, Edge, Cloud, Dataspaces)
- HORIZON-CL3-2023-CS-01-02: Privacy-preserving and identity management technologies
- HORIZON-CL3-2023-CS-01-03: Security of robust AI systems

What it is the problem you seek to address?

- Security-by-design concept and resilience to adversarial attacks;
- Improving privacy-preserving technologies for cyber threat intelligence and data sharing solutions;
- AI-based automation tools for cyber threat intelligence;
- Research and development of self-sovereign identity management technologies and solutions;
- Improved scalable and reliable privacy-preserving and identity management technologies for federated and secure sharing and for processing of personal and industrial data and their integration in real-world systems;





University of Stavanger, Norway

- Expertise: Our company/organization specializes in Trustworthy AI and has extensive experience in the field.
- Activities and Expertise Keywords: Adversarial ML, Homomorphic Encryption, Federated Learning, 5G, 6G, Healthcare.
- **EU R&I Projects**: We have actively participated in several EU-funded Research and Innovation (R&I) projects related to Trustworthy AI.
- **Key Players**: Our team consists of highly skilled professionals with expertise in AI, telecommunications, and healthcare.
- Collaboration: We have collaborated with renowned experts, academic institutions, and industry leaders to drive innovation in Trustworthy AI.







University of Stavanger, Norway

Thank you

F. Ozgur Catak f.ozgur.catak@uis.no







F-Secure.

Marko Komssi & Sini Olkanen Research collaboration

F-Secure: top-tier European cybersecurity company

We exist to make every digital moment more secure, for everyone.



Comprehensive, awardwinning consumer security solutions



Market leader position in Communication Service Provider channel



Exceptional partner platform providing proven business outcomes



Direct business creates best practices for partner success

+30
years of awardwinning cyber
security

MEUR Revenue +4,5% growth

111

~180
Service Provider
Partners

Partners
Telecom operators,
banks, insurance,
retail

~16 M End users

>100 countries with sales



Extensive opportunities for use cases & exploitation

Holistic consumer solution offering



World-class technology and partners

Backbone



Cyber threat intelligence & AI technology

Security building blocks



















Consumer Services

F-Secure Total

Key partners from telecom, finance, insurance and energy industry



Strengthening Partners' offering through our products

F-Secure Embedded







SDKs, APIs, and services for partners

Experienced research partner & work package leader

Project portfolio*, some examples

Ongoing

- SIFIS-Home Secure Interoperable Full-Stack Internet of Things for Smart Home (Horizon 2020)
- InSecTT Intelligent Secure Trustable Things (KDT JU)

Previous

- SOCCRATES SOC & CSIRT Response to Attacks & Threats (Horizon 2020)
- CC-DRIVER Understanding the drivers of cybercriminality, and new methods to prevent, investigate and mitigate cybercriminal behaviour (Horizon 2020)
- Transact Towards safe and secure distributed cyber-physical systems (KDT JU)
- SCOTT Secure Connected Trustable Things (ECSEL JU)
- IVVES Industrial-grade Verification and Validation of Evolving Systems (ITEA4)
- **SOC4CI** Security operations centre for critical infrastructures (EIT Digital)

^{*}Due to company demerger in 2022, past projects are under the name WithSecure Oyj



Top 5 calls of interest & contribution areas

Seek to address: "Strengthened EU sovereignty in digital technologies" and "Reinforced awareness and a common cyber security management and culture"



CS-01-01 **Secure Computing Continuum:** "user-centric privacy", "regulatory aspects and barriers", "proactive and automated detection, analysis, and mitigation of cybersecurity", "cybersecurity resilience, preparedness, awareness, and detection", "Reinforced awareness and a common cyber security management and culture"



CS-01-02 **Privacy-preserving and identity management technologies:** "scalable and reliable privacy-preserving technologies", "integration and piloting in real-world systems", "privacy-preserving technologies for cyber threat intelligence", "differential privacy", "usability"



CS-01-03 **Security of robust Al systems:** "security-by-design concept and resilience to adversarial attacks", "context awareness in machine learning", "regulatory aspects and barriers"

Seek to address: "More secure cyberspace for citizens, especially children, through a robust prevention, detection, and protection from cybercriminal activities"



FCT-01-05 **Crime as a service:** "methodology for identification of the means of advertising, communication, marketing and money flows used for offering criminal services on the underground market", "insight to modern organised crime structures and their marketplaces", "preventative measures"



FCT-01-06 Enhancing tools and capabilities to fight advanced forms of cyber threats and cyber-dependent crimes:

"detection of crypto-jacking, compromised registration forms, malware attacks and other cybercrimes perpetrated using cryptocurrencies, "recommendations on public cybercrime awareness actions contributing to early detection and prevention", "remote access trojans, botnets, dark web platforms, crypto-ransomware"





Top 5 calls of interest

HORIZON-CL3-2023-CS-01-01 Secure Computing Continuum (IoT, Edge, Cloud, Dataspaces)

HORIZON-CL3-2023-CS-01-02 Privacy-preserving and identity management technologies

HORIZON-CL3-2023-CS-01-03 Security of robust AI systems

HORIZON-CL3-2023-FCT-01-05 Crime as a service

HORIZON-CL3-2023-FCT-01-06 Enhancing tools and capabilities to fight advanced forms of cyber threats and cyber-dependent crimes

Contact Details

Marko Komssi <u>marko.komssi@f-secure.com</u>, +358 40 532 3753 Sini Olkanen <u>sini.olkanen@f-secure.com</u>, +358 40 194 6663 Tuuli Lindroos <u>tuuli.lindroos@f-secure.com</u>, +358 40 757 8716

Role in the proposal: Partner

- WPleader
- Technology research
- Use case & exploitation

Consumer driven top-tier cybersecurity company from Finland

Network Break (10mins)



Disaster Resilient Society

PhysUp SRL
Gradiant
Denizli Governorship
Resallience
Innova Integra Ltd
Madrid Municipal Police
Sigoria Security Solutions

Mr. Carlos García-Gordillo Mr. Alicia Jiménez González Ms. Redife Aslıhan Uçar Ms. Emilie Edelblutte Mr. Marco Tiemann Ms. Clara Pérez Dr. Sebastian Kawczyński

SEREN5 Pitch Presentation



Mr. CARLOS García-Gordillo PhysUp SRL



Phys

Creating digital health experiences

PhysUp is a private SME

Contact Details

Email: cgarcia.management@cemad.es

Mobile: +34 627080476

Country: Spain

ehealth; research&development; quality management systems; business accelerator







Creating digital health experiences

Role in the Proposal: Coordinator

PhysUp has been involved in several R&D projects at the national and EU level. Its partners have been involved in the healthcare sector for over 40 years.

We are looking for SME's with expertise in ehealth, early warning systems, communications, and in any of the related outcomes of the topic.







Creating digital health experiences

Our topic of interest is:

HORIZON-CL3-2023-DRS-01-01: Improving social and societal preparedness for disaster, response, and health emergencies.

We are seeking to address, in the event of a new health emergency, the needs of the 29.7 M people, 65 and over, living alone in the EU.

Our project idea is to develop a system involving older people living alone, for the prevention, preparedness, response, and recovery to unexpected systemic health events, relying on the primary healthcare network, and aiming at the preservation and reconstruction of their living environment – One Health.







Creating digital health experiences

The annual excess mortality for the EU in 2020 was 11.9 % higher than the 2016-2019 average, increasing in 2021 to 14.0 %. The project's aim is to lower those figures in a future health emergency.

Technology alone is not a solution to a problem that involves human behavior. The problem can only be tackled by changing the way society in general and primary healthcare in particular addresses a future health emergency. PhysUp's partners are specialized in helping the healthcare sector in improving the management of their operations.

ehealth; research&development; quality management systems; business accelerator







Creating digital health experiences

PhysUp is an eHealth company looking to bring the latest ideas in digital technology to the world of healthcare and wellness. We believe in working alongside multiple stakeholders, from healthcare professionals to patients.

Our expertise is based on that of our partners. We have been involved for almost 40 years in research and development programmes, at national and international levels, participating in the European R&D programmes since the Seventh Framework Programme. We are also active as business accelerators helping start-ups to smoothly jump into the next stage of their business path.

ehealth; research&development; quality management systems; business accelerator







Creating digital health experiences

Our aim is to coordinate a consortium for the topic HORIZON-CL3-2023-DRS-01-01. We believe that the first four expected outcomes listed in the work programme are essential: Inequality and ways to communicate with vulnerable groups; Improvement of Health literacy; Challenges for communication; and Citizen at the centre of crisis management.

ehealth; research&development; quality management systems; business accelerator



SEREN5 Gradiant Pitch Presentation For DRS 01-05



Ms. Alicia Jiménez González Gradiant



Type of company/organisation:

Private non profit Research center

Contact Details

Email: ajimenez@gradiant.org

Telephone/Mobile: +34 669 886 952

Country: Spain

Insert any KEYWORDS in relation to your Activities and Expertise:

Connectivity, Intelligence & Security







Role in the Proposal: Coordinator + Technical partner (UGVs communication systems and route planning and monitoring)

Looking for partners with the following expertise/ technology/ application field:

- Law enforcement authorities
- UGV manufacturers, integrators and/or operators
- Sensor manufacturers
- Al experts for decision making
- Legal & ethical partner
- End users experience monitoring and impact







List the Destination/s and topic/s that are of your interest:

HORIZON-CL3-2023-DRS-01-05: Robotics: Autonomous or semi-autonomous UGV systems to supplement skills for use in hazardous environments

What it is the problem you seek to address?

Improve the situational awareness and communications of UGVs as well as the information sharing provided by UGVs

Outline your Project Idea:

Improve the situational Integral platform for remote unmanned vehicle operation and teaming with humans.







Explain the long-term impact of the solution/idea.

What is the research/technology/expertise/skills you own to solve the problem.

- Improved positioning accuracy through the use of GALILEO, sensor fusion and the possibility of integrating high-precision local positioning based on UWB.
- Redundant communication system based on datalink (LoS) and cellular communications (3G, 4G & 5G), possibility of integrating satellite communication
- Image and video processing via AI onboard hardware or via 5G edge computing
- Route planning and replanning in real time ("provides the vehicle with intelligence to make decisions autonomously")

Insert any KEYWORDS in relation to your Activities and Expertise UGV, onboard computer, autonomous, unmanned vehicle







Explain the Expertise of your company/organisation.

ICT technologies focused in three main topics:

- communications
- security
- intelligence

Outline any experience in EU R&I projects or other.

Gradiant has taken part in more than 35 European projects, including communications for unmanned vehicles, payloads integration, data analytics and security measures.







Conclusion and Key Take Aways Messages, if any...

Unmanned vehicles are a key tool in hazardous environments, increasing the situational awareness of the vehicle and the human operator will imply a more efficient use of these tools opening the door to new use cases.

Insert any KEYWORDS in relation to your Activities and Expertise R&D, Unmanned vehicles, UGV, communications

Thank You!!



SEREN5 Pitch Presentation



Redife Aslıhan Uçar (Msc, Msc, PhD) Project Coordinator of the Province Denizli Governorship





Type of company/organisation: Local Government

Contact Details

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denizliab.info@gmail.com

Telephone/Mobile:+905386505909

Country: Türkiye







- Denizli Governorate is the head authority of the general administration of our province Denizli (1 million population).
- It is authorized:
- To ensure the publication, announcement and implementation of laws and other legislation in the province.
- To execute instructions and orders, and to take all necessary measures for the realization of the work.
- As the highest authority, it has a very large organization to distribute the entire budget (from the central government).
- It manages and coordinates the execution of all public services such as security, health, education, energy, economy, culture and social services.

Related Department Establishment in Denizli Governorate; provincial disaster and emergency department, provincial police department, provincial gendarmerie command, provincial health department

As a partner





List the Destination/s and topic/s that are of your interest:

HORIZON-CL3-2023-DRS-01-01:

Improving social and societal preparedness for disaster response and health emergencies

HORIZON-CL3-2023-FCT-01-03:

New methods and technologies in service of community policing and transferable best practices

HORIZON-CL3-2023-DRS-01-02:

Design of crisis prevention and preparedness actions in case of digital breakdown (internet, electricity etc.)

HORIZON-CL3-2023-FCT-01-06

Enhancing tools and capabilities to fight advanced forms of cyber threats and cyber-dependent crimes What it is the problem you seek to address?

- Especially after disaster security plan for cities are essential.
- We need to improve the awareness of the disaster in the social and public areas.
- In addition, cyber security in provinces







- Played a very active role in the search and rescue area of the debris in the earthquake region,
- The coordination for the necessary construction equipment, tool, and equipment support for the removal of the destroyed building parts
- Convoys carrying aid materials were sent to the earthquake area and crews and equipment have been provided
- In provincial governorships with civil airports, ports, and border gates; Necessary traffic and security measures have been taken for the transportation of aid received to our country from abroad via land, air, sea, and railways to aid storage and distribution reception centers.
- The governorship has undertaken important duties in the placement of earthquake victims in public facilities, hotels, and temporary accommodations (such as tents, and containers).
- Collection centers have been established throughout the province for aid collection.
- Offices have been established under the chairmanship of the Deputy Governors for the evaluation of applications from citizens.

Key player that will be working on the project

- provincial police department: 1,366.
- provincial gendarmerie command: 1.116.
- provincial disaster and emergency department

Disaster Coordination, City coordination project, Disaster action plan project







- To improve the knowledge and abilities in disaster, emergency, evacuation response, and evacuation.
- To take the necessary precautions against disaster and emerging risks in the living spaces of individuals and to make them safe.
- To provide necessary infrastructure such as preventing power outages before and after the earthquake.
- To be a participant in demo applications in projects

Disaster Coordination, City coordination project, Disaster action plan project





European Union

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Call	Description	Establishment in Denizli Governorate
HORIZON-CL3-2023- DRS-01-01:	Improving social and societal preparedness for disaster response and health emergencies	provincial disaster and emergency department, provincial police department, provincial gendarmerie command
HORIZON-CL3-2023- FCT-01-03:	New methods and technologies in service of community policing and transferable best practices	provincial police department, provincial gendarmerie command
HORIZON-CL3-2023- DRS-01-02:	Design of crisis prevention and preparedness actions in case of digital breakdown (internet, electricity etc.)	provincial disaster and emergency department, provincial police department, provincial gendarmerie command
HORIZON-CL3-2023- FCT-01-06	Enhancing tools and capabilities to fight advanced forms of cyber threats and cyber-dependent crimes	provincial police department, provincial gendarmerie command
		Funuer





Thank You!!



SEREN5 RESALLIENCE by Sixense

RESALLIENCE



Ms. Emilie Edelblutte RESALLIENCE by Sixense



Resallience is a consultancy firm dedicated to adapting buildings, infrastructures, regions, and countries to climate change

Contact Details

Email: emilie.edelblutte@resallience.com

Telephone/Mobile: + 33 6 22 15 55 16

Country: France

<u>Key Words:</u> Resilience, Infrastructure, Cities, Climate Change Adaptation, Nature-Based Solutions, Earth Observation, Digital Tools, Risk Assessment, Climate models and projections





Role in the Proposal: Partner / leader of WP

Skills and Values:

- Digital decision-support platforms to (i) increase resilience of buildings, infrastructure, people, and natural resources (ii) guide investments options and (iii) assess compliance to UN SDGs and European Green Taxonomy
- Strategy Roadmap on resilience efforts and Enterprise Risk Management
- Actors in co-creating standardization frameworks related to resilience
- Al and Digital twins dedicated to climate change adaptation
- Project coordination
- R&D and Innovation focused firm (Resallience Lab)

Key Words: Corporate strategy, Risk management, Safety, Taxonomy and ESG compliance, GIS and Remote sensing, ecosystems, natural resources





List of Destinations and topics of interest for RESALLIENCE:

Disaster Resilient Societies — HORIZON-CL3-2023-DRS-01-01 / HORIZON-CL3-2024-DRS-01-03 / HORIZON-CL3-2024-DRS-01-04 / HORIZON-CL3-2024-DRS-01-05

Resilient Infrastructures — HORIZON-CL3-2023-INFRA-01-01/HORIZON-CL3-2023-INFRA-01-02

What it is the problem you seek to address?

The problems we seek to address **are related to climate change and its impacts** on buildings, infrastructures and societies.

Outline your Project Idea:

Supports decision-making towards adapting to the present and future impacts of climate change at multiple scale and in any given context through the development of digital solutions adaptable to any context at any spatial scale





Long-term impact of the solution/idea:

- Decrease in functional and socioeconomic vulnerability to climate change
- Provide multi-years investment plan for climate resilience
- Better preparedness to climate hazards
- Better adaptation of societies to climate change

What is the research/technology/expertise/skills you own to solve the problem:

- A unique and tried-and-tested methodology to create decision-support platforms: tailor-made digital tools
- Downscaling methods
- BIM/GIS interface
- Crisis and resilience management
- Earth Observation / Google Earth Engine
- Predictive modelling





Experience in EU projects: Partner and leaders of WPs in 4 current EU projects:

- AgriDataValue: Smart Farm and Agro-environmental Big Data Spaces
- **ProBono**: The Integrator-centric approach for realising innovative energy efficient buildings in connected sustainable green neighbourhoods
- CORE: Science and human factor for Resilient Society
- Atlantis: Improved resilience of critical infrastructures against large scale transnational and systemic risks

Team:

A 25 multidisciplinary team of geographers, engineers, land use planners, climatologists, data and IT scientists, architects, economists – most of them holding PhD







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Emilie Edelblutte
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Head of Innovation
emilie.edelblutte@resallience.com

Please get in touch!
We'll be looking forward to hearing from you



Innova Integra Ltd. Partner Offerings



Mr. Marco Tiemann Innova Integra Ltd.





Type of company/organisation: R&D SME

Contact Details

Email: marco.tiemann@innovaintegra.com

Telephone/Mobile: +44 118 214 0500

Countries: United Kingdom / Republic of Ireland

Expertise: applied AI & machine learning, citizen engagement platforms, security, ethics & privacy monitoring platforms, digital twinning and simulation







Role in the Proposal: Technical Partner, WP Leader

Core Capabilities:

Applied Machine Learning & AI in DRS and FCT
Citizen engagement & user participation platforms
AI-Driven ethics, privacy and security compliance platforms
Integration of cyber- and physical security monitoring
Digital twinning and digital twin-based simulation





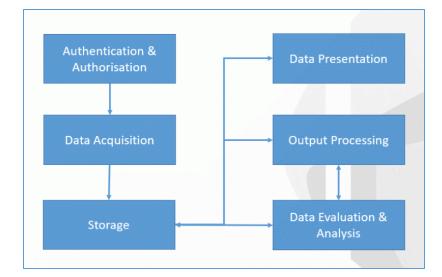


- Development of advanced methods for privacy protection, data anonymisation/pseudonymisation, data access control and data access logging for large and complex data used with big data analytics
- Builds on our existing Innova Compliance Monitoring Platform developed in the SPIRIT H2020 research project on FCT data analytics

• Ontology models directly translating legal requirements and restrictions

into access and monitoring rules

- Advanced analytics to identify and prevent data and system misuse
- Advanced analytics to identify potential analytics algorithm malfunctions
- Tamper-proof logging









- **INNOVA** R&D activities building on our Innova Participation Platform already successfully deployed in multiple H2020 projects
 - Data crowdsourcing, machine learning and language processing analytics and generation of expressive statistics and data visualisations including meaningful geospatial visualisation
 - Multi-stakeholder planning, coordination and evaluation tools in a single system for real-time and asynchronous collaboration
 - Development of easy-to-use and universal digital citizen tools for data gathering and to receive guidance during crisis situations
 - Further research of existing agent-based tools for modelling citizen reactions to crisis situations









List the Destination/s and topic/s that are of your interest:

HORIZON-CL3-2023-DRS-01-01

HORIZON-CL3-2023-DRS-01-06

HORIZON-CL3-2023-CS-01-02

HORIZON-CL3-2023- FCT-01-01

HORIZON-CL3-2023-FCT-01-05







Expertise:

Apply our AI & Machine Learning expertise, bring in our existing technology base on participation platforms, ethics, privacy & security and digital twinning

Experience:

Extensive experience in collaborating in national EU-funded research projects since FP6 with extensive experience in requirements engineering, technical management and WP leadership; output from recent DRS & FCT projects can be used as basis for advancing new projects







Role in the Proposal: Technical Partner, WP Leader

Core Capabilities:

Applied Machine Learning & AI in DRS and FCT
Citizen engagement & user participation platforms
AI-Driven ethics, privacy and security compliance platforms
Integration of cyber- and physical security monitoring
Digital twinning and digital twin-based simulation



SEREN5 Pitch Presentation Template



Ms. Clara Pérez Madrid Police







Madrid Municipal Police

(Public body)
Madrid, Spain
Telf. +34 914801761

dri.pm@madrid.es

First responder, emergency service, community policing, UAV technologies, artificial intelligence (AI), Traffic accidents investigation, domestic and gender-based violence victim support, CCTV technologies, crowd protection, environment protection...









ROLE IN PROPOSAL: Partner, as First responder.

OUR VALUE: Largest local police in Spain, +6000 police officers

distributed in district and specialized units.

Diverse competences in public safety and citizen coexistence in

Madrid (+3.000.000 Inhabitants)

European Projects specialized unit with 12 years experience







TOPICS OF INTEREST

CALL - FIGHTING CRIME AND TERRORISM 2023

- ✓ HORIZON-CL3-2023-FCT-01-03: New methods and technologies in service of community policing and transferable best practices
- ✓ HORIZON-CL3-2023-FCT-01-06: Enhancing tools and capabilities to fight advanced forms of cyber threats

CALL - RESILIENT INFRASTRUCTURE 2023

- √ HORIZON-CL3-2023-INFRA-01-01: Facilitating strategic cooperation to ensure the provision of essential services
- \checkmark HORIZON-CL3-2023-INFRA-01-02: Supporting operators against cyber and non-cyber threats

CALL - INCREASED CYBERSECURITY 2023

- √ HORIZON-CL3-2023-CS-01-02: Privacy-preserving and identity management technologies
- ✓ HORIZON-CL3-2023-CS-01-03: Security of robust AI systems

CALL - DISASTER-RESILIENT SOCIETY 2023

- ✓ HORIZON-CL3-2023-DRS-01-02: Design of crisis prevention and preparedness actions in case of digital breakdown
- ✓ HORIZON-CL3-2023-DRS-01-03: Operability and standardisation in response to biological toxin incidents
- ✓ HORIZON-CL3-2023-DRS-01-04: Internationally coordinated networking of training centres for the validation and testing of CBRN-E tools
- ✓ HORIZON-CL3-2023-DRS-01-05: Robotics: Autonomous or semiautonomous UGV systems in hazardous environments
- ✓ HORIZON-CL3-2023-DRS-01-06: Increased technology solutions for first responders



IMPACT EXPECTED: ENSURING LOCAL POLICE FORCES AS KEY PARTNERS IN SHAPING THE FUTURE OF CITIES, WITH...

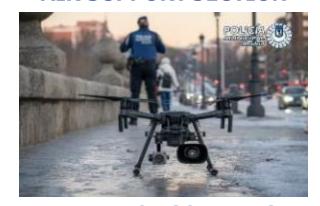
DISTRICT PATROLS



TRAINING CENTER



AIR SUPPORT SECTION



TRAFFIC ACCIDENTS
INVESTIGATION



GENDER & DOMESTIC VIOLENCE



ENVIRONMENT PROTECTION





CENTRAL STATION & CCTV



AMONG OTHERS...























LetsCROWD



MINDb4ACT













PROXIMITY POLICING AGAINST RACISM, XENOPHOBIA AND OTH























READY FOR INNOVATIVE AND USEFUL PROPOSALS IN A WIDE RANGE OF CLUSTER 3 TOPICS!



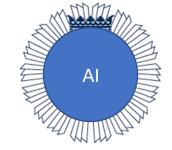














SEREN5 Pitch Presentation Template



Sebastian Kawczyński Phd. MBA Sigoria Security Solutions Ltd.



Sigoria

Type of company/organisation: Private



Email: skawczynski@sigoria.eu

Telephone/Mobile:+48 660 724 261

Country: Poland

Sigoria SECURITY SOLUTIONS

KEYWORDS: AI, Machine Learning, IT solutions, CBRN







Role in the Proposal: Partner

We are experienced in the development of IT solutions to be used by the public sector, including systems concept creation and its requirements. Our scope of interest involves also support systems and procedures for the public bodies. We are able also to find and initiate cooperation with project partners from Poland and Romania (eg. LEA's, Universities, Scientific Institutes, Hospitals).







Topics of our interest:

HORIZON-CL3-2023-FCT-01-01: Processing of large, complex and unstructured datasets resulting from criminal investigations, while reconciling big data analysis and data protection

HORIZON-CL3-2023-BM-01-01: Capabilities for border surveillance and situational awareness

HORIZON-CL3-2023-DRS-01-03: Operability and standardisation in response to biological toxin incidents

HORIZON-CL3-2023-DRS-01-05: Robotics: Autonomous or semi-autonomous UGV systems to supplement skills for use in hazardous environments

HORIZON-CL3-2023-DRS-01-06: Increased technology solutions, institutional coordination and decision-support systems for first responders of last-kilometer emergency service delivery







- Create innovative solutions for security sector applying the AI, Machine Learning and neural networks
- Be part of interesting international projects
- Support systems and procedures for the public bodies







We are experienced in the development and implementation of IT solutions to be used by the public sector, including systems concept creation and its requirements.

We are able also to find and initiate cooperation with project partners from Poland and Romania (eg. LEA's, public security services responsible for public safety issues, Scientific Institutes, Hospitals).

Currently we are the member of international consortium in the project:

HOTHREAT - CBRNe protection measures for hotels and conference centres

(Estimated Project Cost: €3,277,228.10, starts 01.07.2023)





Contact Us:



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