DRS Session Agenda

#	Topic	ORGANISATION	PRESENTER
01	DRS01	WaryMe	Boris Berger
02	DRS01	Kadir Has University (KHAS)	Salih Bicakci
03	DRS01	Succubus Interactive	Marco Luccini
04	DRS01	Trinity College	Derek Ross
05	DRS02	Intrasoft	Alex Bensenousi
06	DRS02	Politecnico di Torino (POLITO)	Gian Paolo Cimellaro
07	DRS02	Abmerit Ltd.	Eva Fojcikova
08	DRS02	Fraunhofer EMI	Corinna Köpke
09	DRS02	Y.L Systems Analysis Ltd	Nadav Luninsky
10	DRS02	Havelsan	Tolga Sönmez
11	DRS02	CEA LIST	Christine Megard
12	DRS02	CERTH	Anastasios Karakostas
13	DRS02	TH Köln	Chris Munschauer
14	DRS02	Laurea	Harri Ruoslahti
15	DRS02	Tree Technology	Marcos Sacristán
16	DRS02	CEA LIST	Guillaume Sannie
17	DRS02	Acil Afet Ambulans Hekimleri Dernegi	Turhan Sofuoglu
18	DRS02	ITTI Sp. z o.o.	Piotr Tyczka
19	DRS03	Fraunhofer EMI	Joerg Finger

SU-DRS 01
Human factors and social, societal and organisational aspects for disaster-resilient societies

PRESENTER	ORGANISATION	Contact e-mail
Boris Berger	WaryMe	boris.berger@waryme.com

A Crisis Management Mobile App Shared With Public Safety Authorities

- *Boris BERGER*
- *boris.berger@waryme.com*
- *WaryMe*
- Role: *WP leader & S/T provider*

- Proposal activity: *SU-DRS01*
  (Disaster Resilient Societies – Human Factors)

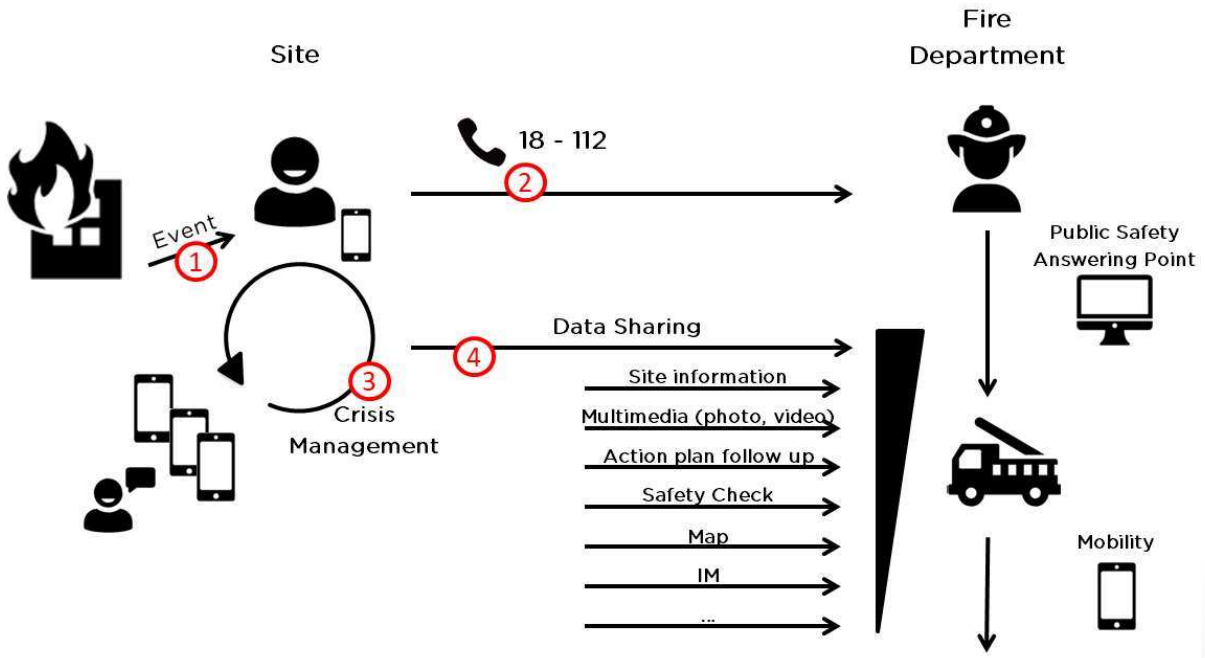
Proposal idea/content

- *Context of the project :*

  A mobile App dedicated to crisis management deployed on site as the digital support for all risks and crisis management scenarios

- *Objectives :*

  Share structured and qualified information all along the event with the public safety authorities to optimize rescue operations



Boris Berger – boris.berger@waryme.com

Project participants

- Proposed coordinator: *To be found*
- Partners / Other participants:
  - *Research center : University (France), studies in risk and crisis management, territories vulnerability*
  - *End Users - Field of experimentation (France) : University campus and SEVESO classified site*
  - *End Users - Public Safety : Fire Department (France)*
- Looking for partners with the following expertise/ technology/ application field:
  - *Project Coordinator*
  - *Other Public Safety Authorities (Police & Fire departments) and fields of experimentation*

Boris Berger – boris.berger@waryme.com

SU-DRS 01
Human factors and social, societal and organisational aspects for disaster-resilient societies

PRESENTER	ORGANISATION	Contact e-mail
Salih Bicakci	**Kadir Has University (KHAS)**	**asbicakci@khas.edu.tr**

Building multi actor/ threat based cyber security scenarios

Dr. Salih BICAKCI

asbicakci@khas.edu.tr

Kadir Has University (KHAS)

ISTANBUL

Role: *WP leader, S/T provider*

Proposal activity: ***SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies.***

Proposal idea/content

- **Background Problematic**: There are several cyber security scenarios on the market but not enough to build up a cyber security culture.
  - Board, C-level, Mid-level administrators, Practitioners, Technicians, Workers have different decision priorities
  - Red Team- Excitement – Blue Team- ???
  - Some scenarios – Threat analysis – other impact analysis
  - Visibility, Objective, Outcomes
  - Leap of technology
  - Generational gap
- **Our project objective:** Through building up attack and attacker tree, form cyber scenarios platforms in which to output several realistic plots with various components and analytical approaches to strengthen the exercise capabilities of sectors from SMEs to MNCs. The project also aims to construct a matrix that help designers to calculate the differences of the scenarios.
- **Project team** includes various domains such as, **cyber security; psychology, gamification experts, video games expertise** to build up a cyber security scenarios platform and produce them for future use.

CCIP
CENTER FOR CYBERSECURITY & CRITICAL INFRASTRUCTURE PROTECTION

Project participants

- Proposed coordinator: *Looking for joining to a consortium.*
- Partners / Other participants:
  - Kadir Has University (KHAS) – Center for Cyber Security and Critical Infrastructure Protection and Implementation (CCIP)
  - Coventry University (UK) – Systems Security, Centre for Transport and Mobility Research.

- Looking for partners with the following expertise/ technology/ application field:
  - Ability to understand hostile/non-hostile threats and tree of threats,
  - Strong grasp on Threat Actor Library and skills to build one,
  - Ability to create scenarios and form possible implementation on games,
  - To cooperate with scenario writers to build its matrix for scientific use,
  - Advanced understanding of new technologies and sectors in the cyber security field.

SU-DRS 01
Human factors and social, societal and organisational aspects for disaster-resilient societies

PRESENTER	ORGANISATION	Contact e-mail
Marco Luccini	**Succubus Interactive**	**marco.luccini@succubus.fr**

SU-DRS01-2020_LUCCINI

- *Angelo Marco LUCCINI*
- *marco.luccini@succubus.fr*
- *SUCCUBUS INTERACTIVE*
- *WP leader, S/T provider*

- Proposal activity: **SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies**

Proposal idea/content

- *Development of implementable **models** and **tools** to foster citizenship's **resilience** while facing occurring threats and to prepare people to have the good reflexes with or without the help of LEA, first responders and civil society organisations. Such models would require the injection of*
  - *risk management analysis + security threats analysis and treatment expertise*
  - *Business impact analysis,*
  - *Predictive algorithms*

  And the integration of a hosting platform

  Tools would require actual settings of implementation
  - *e.g. Municipalities, first responders, LEA, civil society organisations, Tech providers (Security, IoT)*
- *(SUCCUBUS INTERACTIVE – WPs Leader) Supporting good practices sharing for **prevention** and **preparedness** through the co-design and development of a **serious game** able to 1) **raise awareness** about current threats for citizenship, 2) **train citizens** to prevent, identify and respond to occurring threats both in coordination with LEA, first responders and civil society organisations, and autonomously in case of isolation in danger, as well as 3) for **training purposes of LEA, first responders and civil society organisations**.*

Angelo Marco LUCCINI, marco.luccini@succubus.fr

Project participants

- Proposed coordinator: *municipality / Civil society organisations / Academic Institution*
- Partners / Other participants:
  - *Serious Games (FR)*
  - *Intelligence & (Cyber) Security Experts (IT)*

- Looking for partners with the following expertise/ technology/ application field:
  - *Municipalities*
  - *Civil society organisations*
  - *Education institutions*
  - *Sensitive infrastructure(s) and services (e.g. airport, hospitals, power supplies, public transport)*
  - *Law and enforcement agencies*
  - *First responders*
  - *Academic Institution(s)*
    - *Risk management, Business Impact, AI / predictive analytics*
  - *Security Tech providers, IoT providers*
  - *Partnership with at least a project funded by the EDA programmes*

Angelo Marco LUCCINI, marco.luccini@succubus.fr

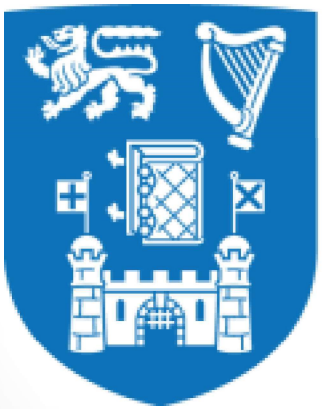
SU-DRS 01
Human factors and social, societal and organisational aspects for disaster-resilient societies

PRESENTER	ORGANISATION	Contact e-mail
Derek Ross	Trinity College	derek.ross@tcd.ie

Human & Organisational Management of Emergencies (HOME)

- *Derek Ross*
- *derek.ross@tcd.ie*
- *Centre for Innovative Human Systems, Trinity College Dublin*
- Role: *Proposal coordinator, WP leader*

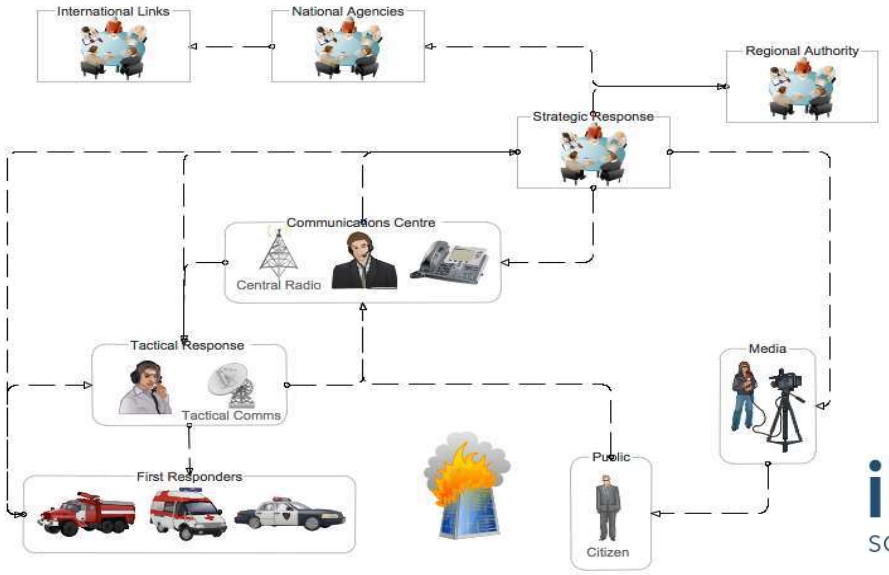
- Proposal activity: *SU-DRS01-2020*



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

HOME proposal idea/content

- *Human, operational and organisational recommendations for enhanced responder, citizen and societal resilience framework*
- *Socio-Technical Systems Analysis*
  - *Relational; Organising; Structures; Software*



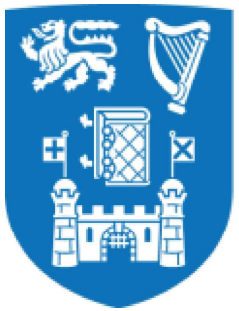
ORION

iProcure Security
SOLUTIONS FOR EMERGENCY MEDICAL SERVICES

Derek Ross derek.ross@tcd.ie

Project participants

- Proposed coordinator: *CIHS, Trinity College Dublin*
- Partners / Other participants:
  - End-user network (Fire Brigades, Health Services, Civil Protection, Utilities, etc.) Irish, European & USA
  - *Academic; NGO; SME*
- Looking for partners with the following expertise/ technology/ application field:
  - *Technological capabilities*
  - *Social Sciences*
  - *End-users*



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Derek Ross derek.ross@tcd.ie

SU-DRS 03
Pre-normative research and demonstration for disaster-resilient societies

PRESENTER	ORGANISATION	Contact e-mail
Joerg Finger	Fraunhofer EMI	Florian.Luettner@emi.fraunhofer.de

First aids vehicles deployment, training, maintenance, logistic and remote centralized coordination means

- *Florian Lüttner, Jörg Finger*
- *Florian.Luettner@emi.fraunhofer.de*
- *Fraunhofer Institute for High-Speed Dynamics, Ernst-Mach-Institut, EMI*

- Role: *WP leader*

- Proposal activity:
  - *SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies*
    - *Sub-topic: [2020] First aids vehicles deployment, training, maintenance, logistic and remote centralized coordination means*

Proposal idea/content

Identify resources in investigated area

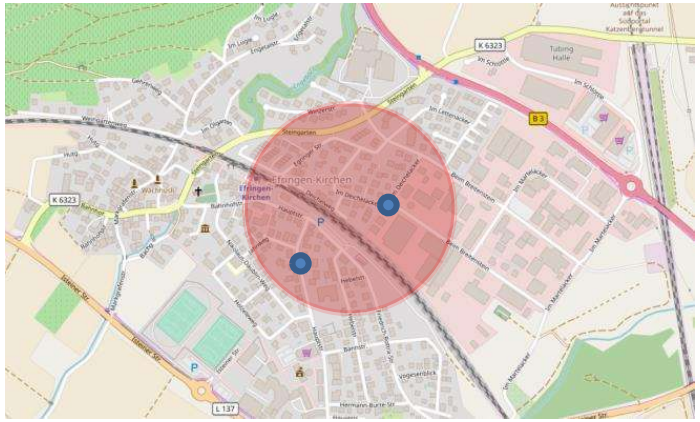
Data about what in past events/disasters happened

Experts/End users

Input parameters

Experts/End users

Agent based simulation/ Spatial computation



Optimize iteratively

Output parameters

Data how past disasters were managed

Optimized output to find standards for deploying resources in case of disasters

Compare

Final positioning of forces

Distribution of resources

Selected routes

Responsibilities of forces

Durations

Experiences, identified challenges and needed partners

- ***Lessons-learnt from past projects:***

  Experiences in developing a system for optimizing disaster management (national project – 3 years) showed the importance of

  → *having end-user partners*

  → *using resources as efficient as possible*

  → *gathering data from past disasters*

- ***Identified Challenges***

  → *No efficient simulation models/operation support systems for disaster management which are based on past events to be as flexible as possible - especially for deploying resources in case of major disasters*

  → *No general setup of such a system which is possible to adapt to different national/international structures in disaster deployment*

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

  - *First responder organizations*
  - *First aid organization*
  - *Medical emergency services*
  - *Public health authorities*
  - *Law enforcement team*
  - *Civil protection professionals*

Florian Lüttner, Florian.Luettner@emi.fraunhofer.de

DRS04 Luninski (1).pdf

Lewandowski_SU-DRS02 (1) (1).pdf

smi2g_2020_DRS01_Woitsch (1).pdf

smi2g-DRS_INFRA_presentation-Rashel Talukder (1).pdf

SMiG2-presentation-SU-DRS02-2020_VRAI (3) (1).pdf

SU-DRS01_THANOS (1).pdf

SU-DRS02_FOJCIKOVA (2) (1).pdf

SU-DRS03_THANOS (1).pdf

SU-DRS04-2019-2020_FDRUILLOLE (1) (1).pdf

SU-DRS04-2019-2020_FDRUILLOLE.pdf

SU-DRS04-2020_VASSALLO_Z&P (1) (1).pdf

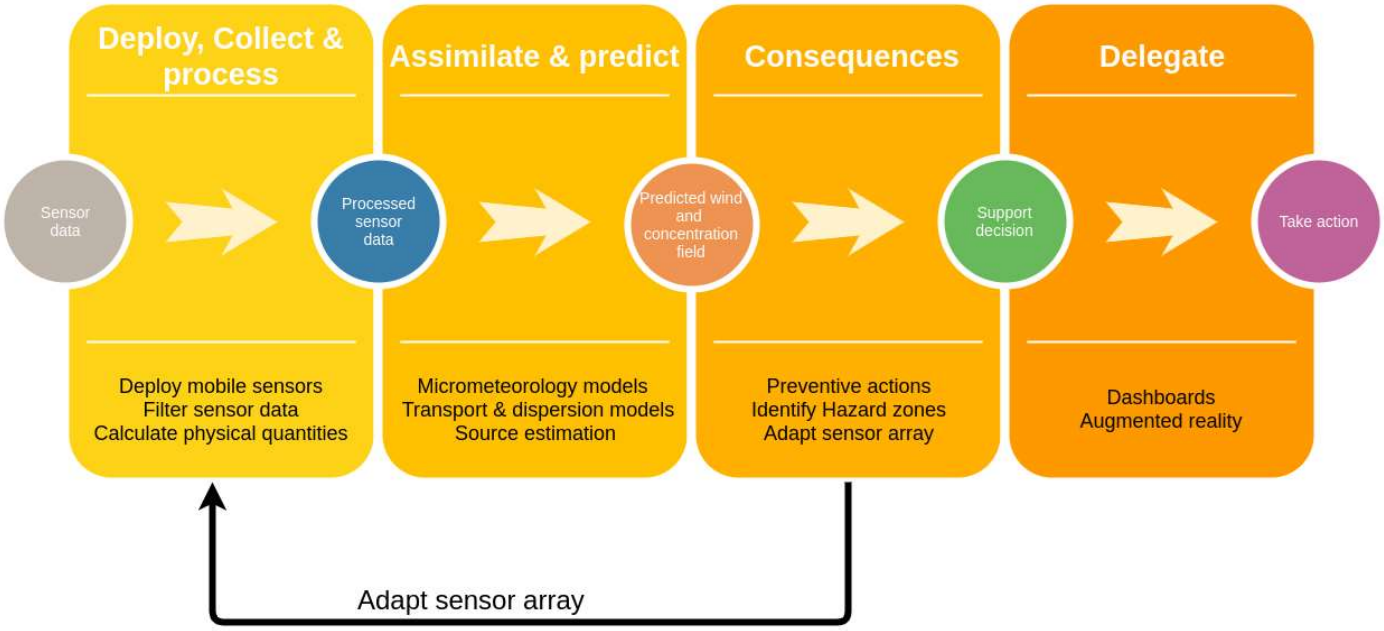
DAVS

- *Nadav Luninski, B.A,LL.B,LL.M.,Adv.*
- *nadav@yl-systems.com*
- *Y.L Systems Analysis Ltd.*
- *Proposal coordinator*

- Proposal activity: *< SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster*

Proposal idea

- **Project mission:** Developing a System for early detection and real time risk assessment of CBRN threat, providing first responders with an accurate image of the scene.
- Feedback between models and airborne and ground sensors deployment.
- Novel AT&D models, source estimation, Decision support
- Cutting edge image of the scene by Augmented reality display.
- OpenSource



Nadav Luninski (nadav@yl-systems.com)

Project participants

- Proposed coordinator: *Y.L Systems Analysis Ltd., System Integrator, command and control system development, expertise in Hazmat and CBRN.*
- Partners / Other participants:

  5 partners, Israel (3) , Spain (1) , Luxembourg (1)
  2 SMEs, 2 Research & Development Institute, 1 Government

- Looking for partners with the following expertise/ technology/ application field:
  - *Chemical sensors*
  - *Meteorology sensors and integration*

Nadav Luninsk i(nadav@yl-systems.com)

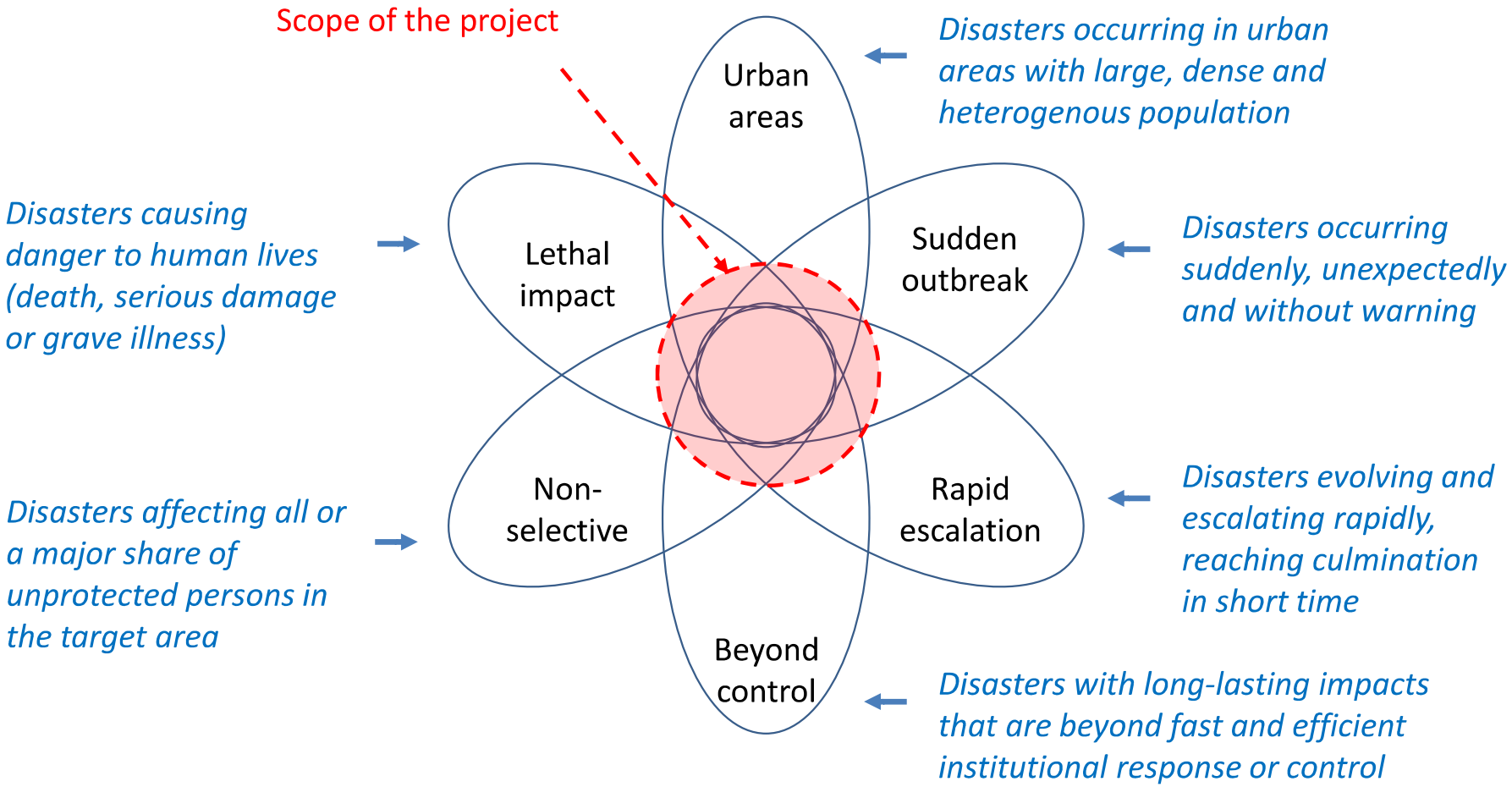
DRS01-2020

- *Pertti Woitsch*
- *pertti@woitsch.com*
- *Temet Oy & Woitsch Consulting Oy*
- *Proposal coordinator*

- Proposal activity: *SU-DRS01-2020*

Scope of the project

The project addresses severe and unexpectedly occurring disasters that threaten the lives of a large number of citizens, such as natural catastrophes, industrial accidents, grave epidemics, major societal disorders or terrorist attacks in urban areas.



Project participants

- Proposed coordinator: *Temet Oy, FI*
- Partners / Other participants:
  - *Woitsch Consulting Oy (project manager), FI*
  - *Fraunhofer-INT, DE*
  - *VTT, FI*
  - *KEMEA, GR*
- Looking for partners with the following expertise:
  - *Civil protection / first responder agencies (regional, municipal)*
  - *Ministries of the interior*
  - *Specialists in social and societal studies*
  - *Specialists in application of social media*
  - *Standardisation body*
  - *Dissemination & communication specialist*

Name and e-mail of proposer/presenter

The topics we are interested in:

- Rashel Talukder, Polish Platform for Homeland Security
- rashel.talukder@ppbw.pl
- Role: Work Package Leader/Partner in WPs
- Topics of interest:

  - **SU-DRS01-2020:** Human factors, and social, societal, and organisational aspects for disaster-resilient societies
  - **SU-DRS02-2020:** Technologies for first responders
    - Sub-topic 3: [2020] Methods and guidelines for pre-hospital life support and triage
  - **SU-DRS03-2020:** Pre-normative research and demonstration for disaster-resilient societies
    - Sub-topic 3: [2020] First aids vehicles deployment, training, maintenance, logistic and remote centralized coordination means
  - **SU-INFRA01-2020:** Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe

Who we are?

POLISH PLATFORM FOR HOMELAND SECURITY

- Polish **NGO** established in 2005
- **Associates** representatives of Polish **LEA**, **universities** and **experts** in different security domains
- Cooperates with national and European **practitioners** in the area of security, sociology of security, civil society, migration, radicalisation, cybersecurity, anticorruption, prevention etc.
- Partner of security **networks** (ENLETS, i-LEAD, Threats Observatory for Young People)
- Since 2015 **participates in EU** proposals and projects (as a Partner and Work Package Leader)
- **9 ongoing projects** (2 national, 5 H2020, 2 ISF-Police)
- **Range of activities**: national and international level
- More information at: www.ppbw.pl/en
- www.twitter.com/PolishPlatform

Rashel Talukder, Managing Director, rashel.talukder@ppbw.pl

What we can offer:

- Effective diagnosis of LEA needs -> end-user requirements, usecases, scenarios
- Access to field tests, exercises in operational environment
- Research in the field of standardization
- Communication&Dissemination activities
- Legal analysis
- Development of training materials and conducting trainings
- Contacts to Polish LEAs and LEAs across different EU Member States (potential consortium partners)
- WP Leader or Partner in WP

Rashel Talukder, Managing Director, rashel.talukder@ppbw.pl

SU-DRS01-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies

- *K. Giorgos THANOS*
- *giorgos.thanos@iit.demokritos.gr*
- *NCSR Demokritos*
- Role: *Coordinator*

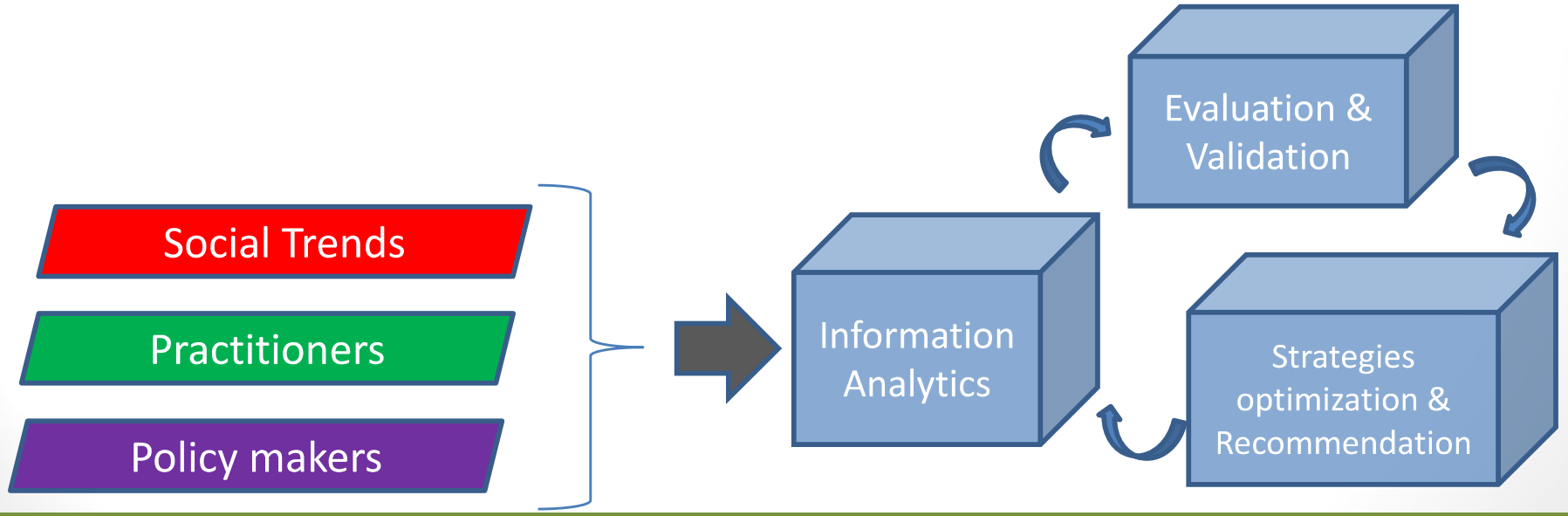
- Proposal activity: *SU-DRS01-2020*

K. Giorgos THANOS
Research Associate
Data Scientist/Engineer
Email: giorgos.thanos@iit.demokritos.gr
Phone number: (+30) 210 650 3254

Dr. Stelios C.A. Thomopoulos
Head of Integrated Systems Laboratory
Email: scat@iit.demokritos.gr
Phone number: (+30) 210 650 3155
Mobile: (+30) 6944 98669

Proposal idea/content

- *(**Social Trends**) : Social media/crowd-sourcing platforms data analytics: NLP techniques for distinguishing positive and negative **impact**.*
- *(**Practitioners**) : Security Practitioners/First Responders information exchange with victims and citizens.*
- *(**Disaster resilience experts & Policy makers**) : Information analytics coming from: Crisis&Disaster Management experts, Social sciences experts, Civil society organizations*
- ***Strategy plans optimization and recommendations** in terms of: (a) Health services, (b) Social services, (c) education and (d) governance in line with Sendai Framework.*



K. Giorgos THANOS – giorgos.thanos@iit.demokritos.gr

Project participants

- Proposed coordinator: *NCSR Demokritos*

- Looking for partners with the following expertise/ technology/ application field:
  - *Social Media and Crowdsourcing analysis - Machine Learning/Deep Learning, NLP*
  - *Security Practitioners, First Responders related to health, earthquakes, Fire incidents*
  - *Experts (Research organizations, NGOs, SMEs) in social sciences and policy advising, Crisis and Disaster management*
  - *Risk Management, cost-benefit analysis and socio-economics experts*

K. Giorgos THANOS – giorgos.thanos@iit.demokritos.gr

SU-DRS03-2020: Pre-normative research and demonstration for disaster-resilient societies

- *K. Giorgos THANOS*
- *giorgos.thanos@iit.demokritos.gr*
- *NCSR Demokritos*
- Role: *Coordinator*

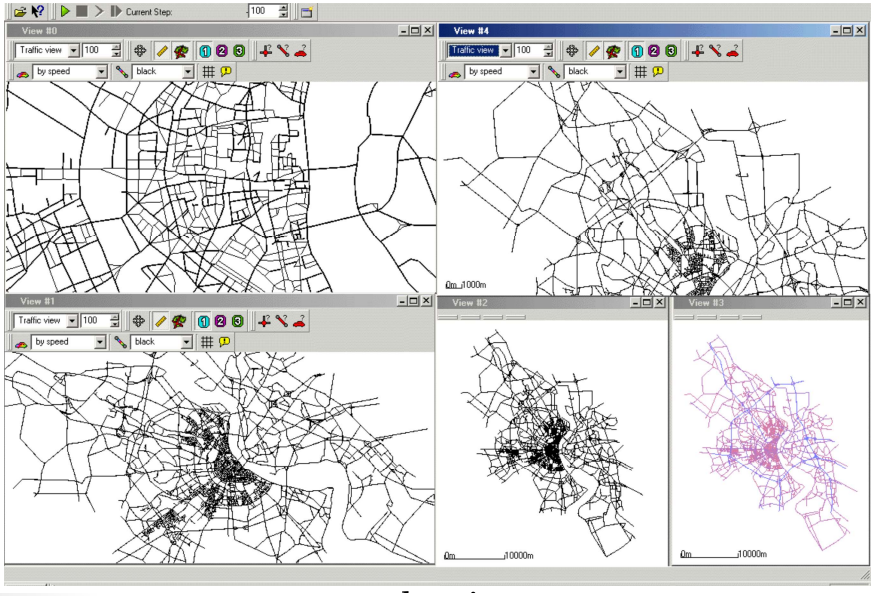
- Proposal activity: *SU-DRS03-2020, Sub-topic 3: [2020] First aids vehicles deployment, training, maintenance, logistic, and remote centralized coordination means*

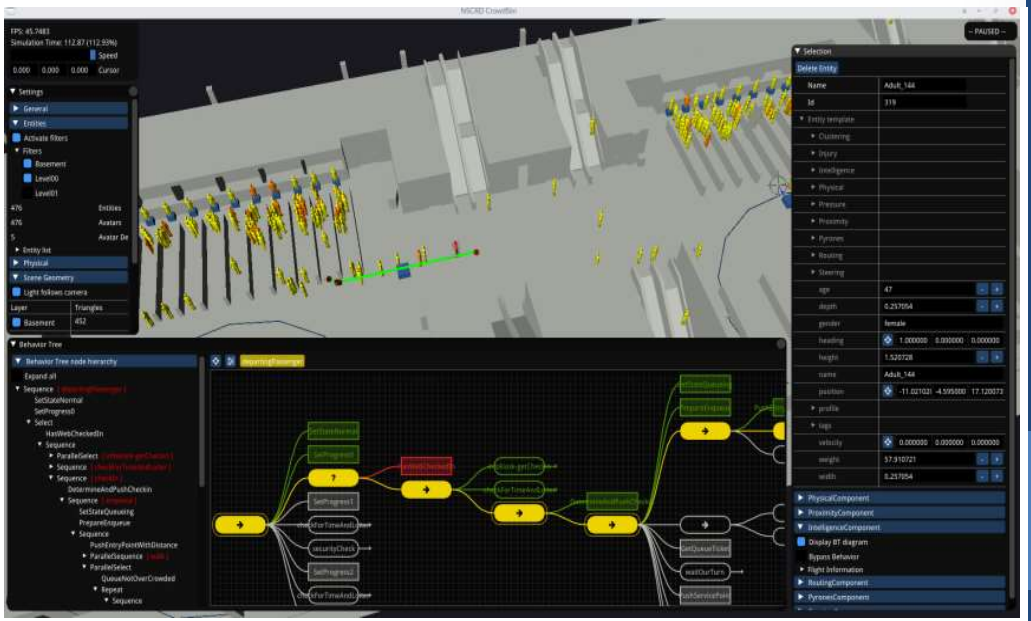
K. Giorgos THANOS
Research Associate
Data Scientist/Engineer
Email: giorgos.thanos@iit.demokritos.gr
Phone number: (+30) 210 650 3254

Dr. Stelios C.A. Thomopoulos
Head of Integrated Systems Laboratory
Email: scat@iit.demokritos.gr
Phone number: (+30) 210 650 3155
Mobile: (+30) 6944 98669

Proposal idea/content

- *Implement CISE data model for Common Communication Data Exchange*
- *Optimization services for efficient First Aid resource management*
- *Integrate established simulation tools that manage transport networks, first aid vehicles fleet and parameters (geographical, environmental, socio-economic) related to emergency situations for validating best practices and training*
- *Focus on natural disasters related to earthquakes and Fire incidents.*





Name and e-mail of proposer/presenter

Project participants

- Proposed coordinator: *NCSR Demokritos, Can be discussed*
- ***In case of not leading the proposal we can support****: Proposal writing, Technical Management, Dissemination and Exploitation*
- ***Our expertise in this proposal regards****: the deployment of simulation tools, incorporating resource and risk management models with the aim of evaluating best practices and providing training services.*

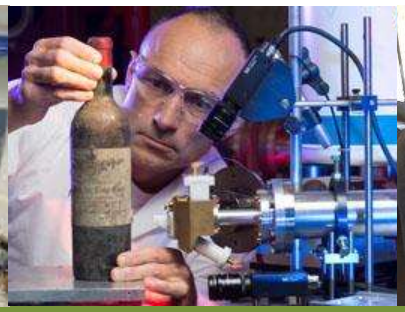
- Looking for partners with the following expertise/ technology/ application field:
  - *Vehicle fleet provider*
  - *Resource management, cost-benefit analysis, socio – econometrics analysis expert*
  - *End Users and Policy makers related to natural disaster management*

Name and e-mail of proposer/presenter

Sentinels Force project

- *Coordinator : C. Cerna*
- *e-mail : cerna@cenbg.in2p3.fr*
- *CENBG – IN2P3 – CNRS (France)*
- Role: *Proposal coordinator*
- Proposal activity: SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster

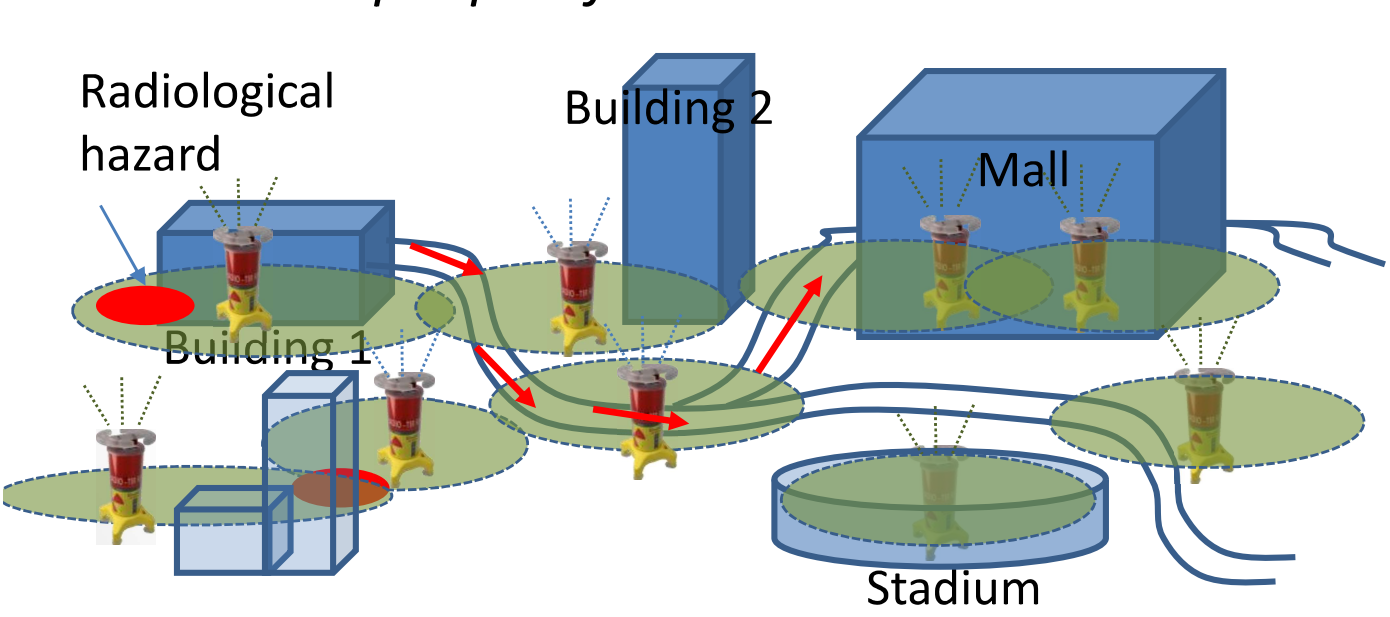
  ➔ *Radiological Technology*



Frédéric Druillole – Presenter - druillol@cenbg.in2p3.fr

Proposal idea/content

- *Improvement of **indoor/outdoor probes** to monitor presence of radiological objects in a secure area. Probes are able to **communicate between them** to improve detection efficiency. They send continuous information to an **operational center** to secure a dedicated area (parlement, street, stadium…).*
- *If an incident occurs, the system is able to show **safe paths** to extract peoples from the area without contamination.*



Technology challenge:
➔ European providers

Frédéric Druillole – Presenter - druillol@cenbg.in2p3.fr

Project participants

- Proposed coordinator: *C. Cerna*
- Partners / Other participants:
  - *2 firms from France*
  - *One is expert on radioprotection*
  - *One is expert on networking on defense and security*

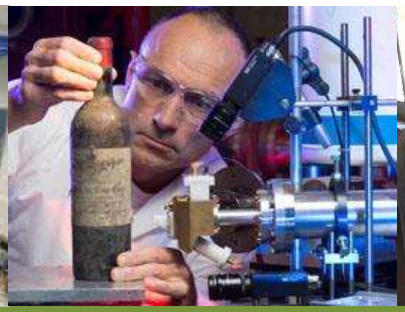
- Looking for partners with the following expertise/ technology/ application field:
  - *European firm in Detector mass production.*
  - *Security in radiological hazard*

Frédéric Druillole – Presenter - druillol@cenbg.in2p3.fr

Sentinels Force project

- *Coordinator : C. Cerna*
- *e-mail : cerna@cenbg.in2p3.fr*
- *CENBG – IN2P3 – CNRS (France)*
- Role: *Proposal coordinator*
- Proposal activity: SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster

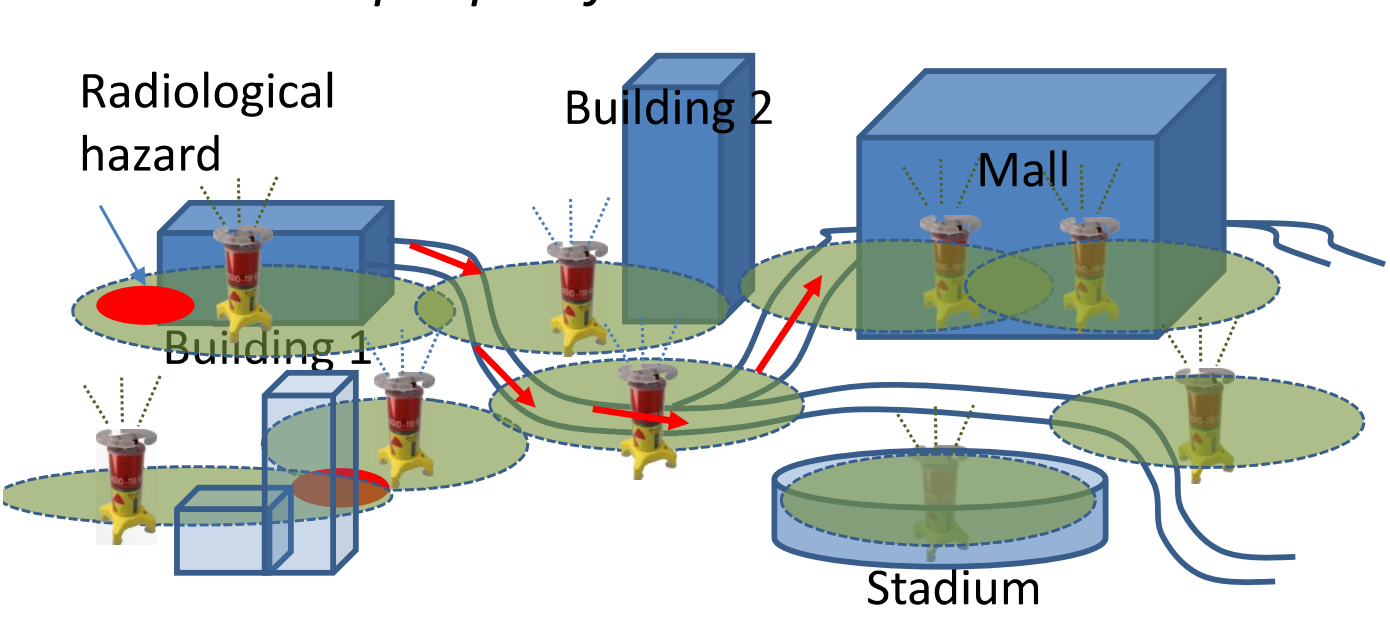
  ➔ *Radiological Technology*



Frédéric Druillole – Presenter - druillol@cenbg.in2p3.fr

Proposal idea/content

- *Improvement of **indoor/outdoor probes** to monitor presence of radiological objects in a secure area. Probes are able to **communicate between them** to improve detection efficiency. They send continuous information to an **operational center** to secure a dedicated area (parlement, street, stadium…).*
- *If an incident occurs, the system is able to show **safe paths** to extract peoples from the area without contamination.*



Technology challenge:
➔ European providers

Frédéric Druillole – Presenter - druillol@cenbg.in2p3.fr

Project participants

- Proposed coordinator: *C. Cerna*
- Partners / Other participants:
  - *2 firms from France*
  - *One is expert on radioprotection*
  - *One is expert on networking on defense and security*

- Looking for partners with the following expertise/ technology/ application field:
  - *European firm in Detector mass production.*
  - *Security in radiological hazard*

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ENRICO

(smEs aNd pRactItioners Cbrn platfOrm)

- *Giovanni VASSALLO*
- *Zanasi & Partners*
- *Italian SME specialised in security, defence and intelligence, winner of:*
  - *+20 EC-funded security projects, several of which in the CBRN field (e.g. TASKMED)*
  - *1st and 2nd EDA PADR (STF-2017/2018): PYTHIA + SOLOMON*
- Role: *Proposal coordinator*
- Proposal activity: *SU-DRS04*

Giovanni VASSALLO (giovanni.vassallo@zanasi-alessandro.eu)

Proposal idea/content

- *Development of a **lead time reducing and cost-effective testing platform**, including both a physical laboratory and a virtual environment for risk assessment, standard / security compliance and real-time analysis*
- *Implementation of a **marketplace clustering SMEs and practitioners in the CBRN sector**, to promote a stakeholders' alliance and the uptake of niche technologies at EU level*

Giovanni VASSALLO (giovanni.vassallo@zanasi-alessandro.eu)

Project participants

- Proposed coordinator: Zanasi & Partners Security Research and Advisory
- Partners / Other participants: DRI Defence Research Institute, Tecoms security through research, Fondazione ICSA
- Looking for:
  - *SMEs involved in the CBRN field*
  - *Public / Private research organisations*
  - *Security and defence practitioners*
  - *Experts in business development*
  - *IT integrators*

Giovanni VASSALLO (giovanni.vassallo@zanasi-alessandro.eu)