Catalogue of Slovak Organisations:

H2020 Secure Societies

List of Institutions (RTOs, Industry, SMEs, Public Organisations, Universities)
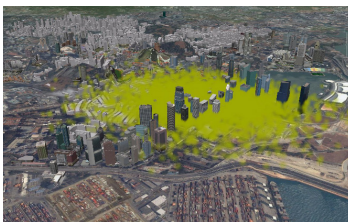
ESTE CBRN modelled activity on street surface, Prague Old City, after application of RDD:

ESTE CBRN modelled air volume activity, downtown of Singapore, after nuclear incident:

Contact(s):

Eva Fojcíková
fojcikova@abmerit.sk
+421 33 55 13 345

www.abmerit.sk

ABmerit Ltd.

Expert in field of emergency preparedness and response to radiological emergencies.

Decision support systems **ESTE** for crisis staff, for radiological accidents/incidents, whose ABmerit is author of, are operated in emergency crisis centers in Slovakia, Czech Republic, Austria, Bulgaria and other countries, at nuclear power plants and at national crisis centers. Details about ESTE systems can be found in RPD doi: 10.1093/rpd/ncz226.

Author of SW tool **ESTE CBRN**, which is instrument for modelling radiological situation after malicious application of radiological dispersion device (RDD, dirty bomb) in urban or industrial environment.

ABmerit with its ESTE CBRN participates at the Joint Research Center (JRC, EC) project "Urban Dispersion International Evaluation Exercise-UDINEE". Details can be found in: Boundary-Layer Meteorol (2019), Comparison of the ESTE CBRN Model with the Joint Urban 2003 Experiment, doi: 10.1007/s10546-018-0393-z.

ABmerit is one of the research organizations (beneficiary) of the H2020 FASTNET project: FAST Nuclear Emergency Tools for the reliable predictability of a severe accident progression and anticipation of the source term of a nuclear accident (https://www.fastnet-h2020.eu/).

ABmerit participates in the OECD-NEA project FASTRUN: "International benchmarking project on fast-running software tools used to model fission product releases during accidents at nuclear power plants".

ABmerit, within the project funded by the Czech State Office for Nuclear Safety, prepared models and simulations of radiological situation after criminal act with application of dirty bomb inside urban area (set of OECD NEA INEX-IV exercises).

Competencies and skills:

- response on radiation / nuclear emergency
- radiological impacts, protective measures

- modelling of radionuclides in rural / urban environment
- GIS and Remote Sensing analysis

Experiences in EU projects:

- Beneficiary in H2020 projects – FASTNET FAST Nuclear Emergency Tool

- UDINEE Urban Dispersion International Evaluation Exercise: ADMs that can be used in urban environment following dirty bomb events (project of EC)

Topics of interest in H2020 SC7 for 2020:

- SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster
- SU-DRS02-2018-2019-2020: Technologies for first responders

- SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe
- SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism

Project role within the project consortia – **partner / WP leader, SME**

Academy of Emergency Medicine

WHO WE ARE

The Academy of Emergency Medicine (AEM) is an international NGO based in Slovakia founded in 2014. As an NGO, we provide front-line emergency medical care, training and advice and assistance in remote areas throughout the world. AEM is currently operating all around the middle east where our certified paramedics, nurses and doctors are working to save human lives along some of the most volatile and kinetic front-lines.

WHAT WE DO

HUMANITARIAN AID - Direct provision of emergency medical care is what AEM provides for civilian and military populations in remote and hostile areas, during armed conflicts and humanitarian crisis.

ADVICE AND ASSISTANCE - Advice and Assistance is provided by AEM for its clients and partners working and living in austere environments and under harsh conditions.

TRAINING AND EDUCATION - Training and Education is delivered to our customers by highly experienced and qualified health professional instructors of AEM.

WHERE/HOW WE DO IT

Since the registration in the Kurdistan region of Iraq in 2016, AEM has been operating both in Iraq and Syria. During the course of our operations AEM has already treated over ten thousand civilian and military casualties. Our presence in the region has had a great impact on survival rate and treatment quality of war related injuries. As an organization AEM has been receiving logistical, technical, material and financial support from Slovak Agency for International Development Cooperation (SlovakAid/SAIDC), World Health Organization (WHO), United Nations Development Program (UNDP) and many others. AEM has been also a member of Trauma Working Group of WHO and has played a major role in the field of providing emergency medical care during the Mosul offensive.

AEM was the first NGO to operate in the City of Mosul and other active combat zones. Our staff is always ready and eager to provide their services in areas of military operations in spite of harsh and life-threatening conditions. Due to our strategy, we have proved our importance as a major medical and security asset during acute armed conflicts and humanitarian crises. Since the beginning of our activities in the region our organization has been following international medical protocols and humanitarian law as well as the rules, procedures and laws of Republic of Iraq and Kurdistan region of Iraq. Our organization has been closely coordinating its efforts with all local governmental officials. AEM also always closely cooperates with international humanitarian community, civilian and military medical personnel and coalition security and armed forces.

Topics of interest in H2020 SC7 for 2020:
– SU-DRS02-2018-2019-2020: Technologies for first responders

Potential partners:

– Academy of the Police Force in Bratislava
– Emergency medical services Bratislava
– Ministry of Interior / Police Force
– Ministry of Interior / Fire and Rescue
– Ministry of Defence / Armed Forces

Matej Karlak
Chairman
chairman@academyofemergency
medicine.sk
+421 902 280 636

Oliver Valentovic
Deuty Chairman
deputychairman@academyof
emergencymedicine.sk
+421 903 740 712

info@academyofemergencymedicine.sk

www.academyofemergencymedicine.sk

Atos IT Solutions and Services, s r.o.

Atos Slovakia (IT sector) is a part of the global Atos company acting worldwide – (the headquarters in Bezon, Paris, France, around 250 employees) has excellent references both R&D projects, on the EU level as well on the national level.

We have established creative teams which are able to prepare such projects and to manage them. In case of the project: Cloud Collaborative Manufacturing Networks (C2NET) **Atos Slovakia was the coordinator of this H2020 project**.

Atos in Slovakia is acting mainly as **the system integrator** and provides **complex solutions for customers both in the public** (e-Government solutions) **and private sector** (industrial clients and banks) with the focus on digital transformation and Industry 4.0..

From the public ones we can mention the references at the **Ministry of Justice** (**Slovlex**- Slovak electronic law and portal of the entire legislation, registers of juridical institutions and physical persons), **Ministry of Interior** (ID documents), **Ministry of Education** (digital learning), **Office of the Prime Minister** (ITMS- a system for the management of EU structural funds). **Social Insurance Agency in Slovakia – Sociálna poisťovňa** (personnel databases and proceedings of the majority of the   social security agendas)- and a lot of other important customers from public and private area.

Atos Slovakia has made also got the experiences in the banking sector, mostly in the cyber security area.

Atos Slovakia acts also as the Coordinator for International **Centre of Excellence for Research of Intelligent and Secure Information and Communication Technologies and Systems**. A successful project: Centre of Excellence I (2015-2018) topics: smart grid, security and big data).

As a part of the MONICA project we have developed a brand-new **cloud solutions (and technical infrastructure)** being able to work with dynamic data with the very fast respond.

A reference project for the participation in H2020 Secure Societies calls is for sure the delivery for Bundesamt für Migration und Fluchtlinge (BAMF), Germany (biometry, face recognition) this reference was built up on the references made first at the Ministry of Interior in Slovakia and Atos references globally, but in particular the solutions have been developed in Atos Slovakia.

Topics of interest in H2020 SC7 for 2020:

- *Call – Artificial intelligence and Security: providing a balanced assessment of opportunities and challenges for Law Enforcements in Europe:* (see our project SLO-LEX- Slovak electronic law).
  SU-AI02-2020: Secure and resilient Artificial Intelligence technologies, tools and solutions in support of Law Enforcement and citizen protection, cybersecurity operations and prevention and protection against adversarial Artificial Intelligence
- *Call – Security (Border and External Security):*
  SU-BES02-2018-2019-2020: Technologies to enhance border and external security
  SU-BES03-2018-2019-2020: Demonstration of applied solutions to enhance border and external security (see our project for Bundesamt fur Migration und Fluchtlinge (BAMF), Germany)

- *And probably also calls related to the critical infrastructure*

Contact(s):

Roman Behul
Head of R&D and LEAR
roman.behul@atos.net
+421 911 686 699

www.atos.net/sk/

BAVENIR s.r.o.

bAvenir, s.r.o. is an SME based in Bratislava, Slovakia composing of senior personnel with proven experience in the field of ICT innovation, solution/enterprise architecture, strategic consulting and software implementation.

The principal focus of the company is bringing to the market innovative solutions with high usability in the field of secure internet of things and its applications in the domains of smart energy and smart buildings. bAvenir understands that technology is here to serve people and thus successful solutions must bring more than unquestionable technical excellence – they must keep the user in their focus. Along this philosophy we are innovating our products and services.
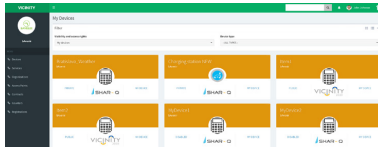
BVR plans to continuously upgrade and operate its IoT interoperability platform, developed in the frame of H2020 project VICINITY, in the frame of commercial spin-offs. BVR's ambition in 10 years horizon is to become a recognized provider of IoT and Smart Energy (integration) platforms targeting small and mid-sized actors with various added-value services.

Topics of interest in H2020 SC7 for 2020:
BAVENIR is interested in any topic with its experience in the development of secure IoT platforms.

Moreover, BAVENIR is especially interested to participate (as partner) in projects targeting the following topics:
- SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe
- SU-DS02-2020: Intelligent security and privacy management
- SU-DS04-2018-2020: Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches

Contact(s):

Štefan Vanya
Stefan.Vanya@bavenir.eu
+421 911 201 826

www.bavenir.eu

Beset, spol. s.r.o.

Company Beset is an established IT company counting 25 years of experience. With over 50 full time engineers it is a major partner for the CEE region. Our core business is custom software development, cyber security and system integration for private and government sector.

We have projects developed and implemented in these areas:
- Tax Fraud Systems
- Health Insurance Systems
- Cyber Security
- Network Traffic Analysis
- Information Security & Quality Management Systems
- Industry 4.0, Robotics, Erp/Mrp Systems
- Rules Management Systems
- Custom Software Development

Areas of activity:
Feasibility Study, Analysis, Design, Software Proof of Concept, Custom Software Development, Implementation, Support, Maintenance

Certificates:
- EU Facility security clearance certificate at the level "Secret" issued by National Security Authority of the Slovak Republic
- Certificate of Quality Management System EN ISO 9001:2008
- Certificate of Information Security Management ISO/IEC 27001:2013
- Certificate of Environmental Management System EN ISO 14001:2004
- Certificate of IT Service Management ISO/IEC 20000
- Certificate of Research & Development issued by the Ministry of Education, Science, Research and Sport of the Slovak Republic

In terms of our strategy to expand to EU, **we are looking for new potential partners** for cooperation on IT projects, Cyber Security projects, EU projects, R&D projects and IPA projects across the EU. We already have experience with Horizon 2020 projects.

Contact(s):

Viliam Čík
Managing Director
viliam.cik@beset.sk
+421 257 275 111

www.beset.sk

Bratislava water company, a.s. (BVS)

Company was established 2nd October 2002 and operates in the field of water supply system and sewage networks on the western part of Slovakia (Bratislava Region, part of Trnava and Trenčín Region). BVS is a large company with the main business activities focused on production of drinking water, supplying drinking water, collecting wastewater, cleaning wastewater as well as executing chemical, technical and lab activities.

Research and Development
Important goal of BVS is to be one of the R&D leaders in Slovakia and abroad in the field of waterworks and water management. For this purpose, we have created a project team for the projects focused on innovation to protect, save and monitor the drinking water and wastewater quality.

The objective is to provide benefits to customers of BVS through the introduction of innovations and new technologies, support for research and training of new professionals in the field of waterworks.

We successfully completed research projects supported by EU structural funds, and the Operational Programme Research, Development and CBC Slovakia – Austria and now we are implementing SYSTEM project (Synergy of integrated sensors and technologies for urban secured environment, Call: H2020-SEC-2016-2017-2) financed by Horizon 2020.

Topics of interest in H2020 SC7 for 2020:

Any that can benefit from protecting BVS critical infrastructure and population, such as:

- *Call – Protecting the infrastructure of Europe and the people in the European smart cities:*
  SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe
- *Call – Security:*
  SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies
  SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism
  SU-FCT04-2020: Chemicals: intelligence, detection, forensics
- *Call – Digital Security:*
  SU-DS02-2020: Intelligent security and privacy management

Contact(s):

Mgr. Veronika Pullmannová
veronika.pullmannova@bvsas.sk
+421 911 061 161

Mgr. Zuzana Horáčiková
zuzana.horacikova@bvsas.sk
+421 911 897 832

www.bvsas.sk

Citadelo

We are certified professionals in cybersecurity. We have carried out simulated attacks and security and infrastructure testing for our clients since 2006. Our chief objective is to uncover vulnerabilities, without causing harm or interrupting business process. We hold prestigious CISSP, OSCP, and CEH certifications.

Services:

- Security solutions for companies and organizations;
- Penetration tests and audits of all types (apps, AWS audits, …);
- Penetration testing for SCADA industrial control systems (ICS);
- Comprehensive security auditing for web applications;
- Mobile application security auditing;
- Security incident response and forensic analysis;
- Security analysis for local systems and wireless technologies;
- Penetration testing via social engineering methods;
- Trainings.

Topics of interest in H2020 SC7 for 2020:
We are interested in commercial projects or as a technological partner for cyber security topics.

Contact(s):

Tomáš Horváth
tomas.horvath@citadelo.com

www.citadelo.com

Exdwarf consulting, s.r.o.

Business Analytics and Project Management are the core competencies of Exdwarf.

In our analysis we apply range of quantitative methods, such as data mining techniques (varying from logistic regression and classification trees to neural networks), decision analytical models (multi-criteria models, decision trees, simulation-based methods), econometrical models (time-series, regression) and optimisation methods (linear, integer, multi-objective).In our projects we can combine agile and traditional (waterfall) methods and frameworks such as SCRUM, PMP, LBIT+/agile, PRINCE+ etc.

Exdwarf team members have track of records in R&D innovation projects (FP7 and Horizon 2020), digitalisation projects, research projects and business intelligence projects. In our most recent EU project Flood-serv we tested drones and became certified for UAV operation.

We believe that learning and knowledge are the key to growth of individuals and organisations.

Research & Innovation Projects, Areas:

- Information security
- Crowdsourcing
- Aerospace, UAV
- Hydrometeorology

- Cyber security
- Public Collaboration
- Pilot Projects
- Smart Cities

Potential partners:

- Bratislavsky Samospravny Kraj
- University of Presov, Slovakia
- Siveco Romania

- Slovak University of Technology
- Academy of the Police Force in Bratislava

Project role:

- Partner/beneficiary
- WP Leader – dissemination, piloting

Contact(s):

Tomas Koren
Managing Director
koren@exdwarf.com
https://www.linkedin.com/in/tomaskoren/

Dr. Tommi Tervonen
Co-founder, Advisor
tervonen@exdwarf.com
https://www.researchgate.net/profile/Tommi_Tervonen

www.exdwarf.com

Financial Administration, Slovak Republic

The Financial Administration is a modern, pro-client institution. The Financial Administration came into existence as of 1 January 2012 through the merger of the former Tax Administration and Customs Administration into a single organisation. The setting-up of the Financial Administration was preceded by the resolution to reform the administration of customs and taxes with a view to unifying the collection of taxes, duties and public insurance contributions through the UNITAS programme.

The main mission of the Financial Administration is to effectively collect and administer duties and taxes in order to provide revenue for the state budget of the SR and the budget of the European Union ("EU"), and protect the state's economic interests and guard state budget expenditure.

Slovak Financial Administration (SFA) use two stationary x-ray scanning systems for the control of vehicles on external border with Ukraine. One of the stationary scanning systems is deployed at the road Border Crossing Point (BCP) Vyšné Nemecké (SK) – Užhorod (UA), and another scanning system at the railway BCP Maťovce (SK) – Pavlovo (UA). Both scanning systems are valuable tools for the customs controls of imported goods in commercial traffic to prevent smuggling and facilitate trade. SFA also use two mobile scanning systems for the control of vehicles. Both mobile scanning systems are used for the controls within the Slovak Republic as well as for the controls at BCP Vyšné Nemecké.

Topics of interest in H2020 SC7 for 2020:
Development and increase of effectivity in the field of special x-ray scanning technologies

- SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism
- SU-BES02-2018-2019-2020: Technologies to enhance border and external security

Contact(s):

Lenka Hlaváčová
lenka.hlavacova@financnasprava.sk
+421 2 48 27 3055
+421 918 714 585

www.financnasprava.sk

Institute of Hydrology of the Slovak Academy of Sciences

Institute of Hydrology - Slovak Academy of Sciences (IH–SAS) is a scientific research institution which conducts a comprehensive research and teaching in the field of environmental science and water management to improve and disseminate knowledge on the circulation and quality of water in the nature.

IH-SAS is the only scientific institution in Slovakia, which examines the sources of surface and ground water complex in terms of their quantity and quality, to associate a variety of disciplines.

Years of experience and a unique combination of scientific expertise of IH-SAS employees enable to propose viable solutions to current problems of hydrology in Slovakia, but also in terms of the whole world.

Theoretical, laboratory and field research results are used for solution of various tasks linked with water management; our offices are equipped with leading-edge technology.

Institute of Hydrology SAS participated on the projects of national and international granting schemes, on research activities of International Hydrological Programme (IHP) of UNESCO and also on creation of Centres of excellence supported by the Research & Development Operational Programme funded by the ERDF. The Institute has also experience with participations in the projects of EC - FP7 EU and H2020.

IH-SAS is open to participate in many Topics where its expertise can apply.

Contact(s):

Dr. Yvetta Velísková
Director
veliskova@uh.savba.sk
uh@savba.sk

www.uh.sav.sk

Institute of Measurement Science of the Slovak Academy of Sciences

The Institute of Measurement Science of SAS is oriented to basic research in measurement science and mathematical methods for processing of measured data.

It is concentrated to research and development of new methods and systems for measurement in biomedicine and material science.

The research activities of the Institute are organized within 5 scientific departments:
- Department of Theoretical Methods;
- Department of Optoelectronic Measuring Methods;
- Department of Magnetometry;
- Department of Imaging Methods;
- Department of Biomeasurements.
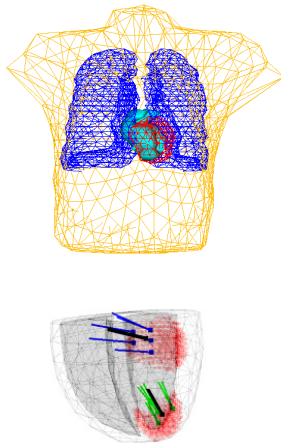
In last few years it participated in several EU FP and COST projects, projects supported from EU structural funds, and numerous international and national projects. Currently it is involved in 3 COST projects oriented to use of electromagnetic fields (EMF) in biomedical applications, CT and NMR imaging, and 5 bilateral projects with Japan, Belgium, Austria and Czech Republic devoted to optical measuring methods for nanoelectronics, HT superconductors, MRI, and interaction of EMF with biological tissues. The Institute also coordinates 11 national projects aimed at measurements in biomedicine and material science and is a part of the "University research park Biomedicine, Bratislava" built from the EU structural funds.

With respect to the proposed Horizon 2020 Work Programme 2018-2020 focused on secure societies, the Institute has a long-term experience in measurement technologies and model-based diagnostics based on the ECG, EEG, and MRI signals. Expertise related to the proposed Work Programme: Sensor HW design, measurement, and evaluation, development of SW solutions for data acquisition and analyses of physiological parameters, process description and analyses.

Topics of interest in H2020 SC7 for 2020:
- SU-DRS02-2018-2019-2020: Technologies for first responders
- SU-GM01-2018-2019-2020: Pan-European networks of practitioners and other actors in the field of security
- SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism
- SU-GM02-2018-2020: Strategic pre-commercial procurements of innovative, advanced systems to support security

Contact(s):

Viktor Witkovsky
witkovsky@savba.sk
+421 259 104 530

www.um.sav.sk

ISEM – International Security and Emergency Management Institute, n.g.o. (ISEMI)

ISEMI is an end-user organisation acting as professional platform of former or active police and national security officers, military, civil protection and crisis management experts from around the world with necessary security clearance and relevant long-term experience in crime prevention, counter-terrorism and CBRN-E threats, in the fight against organized crime, environmental crime, trafficking in human beings, cybercrime, drugs and weapons smuggling. Our team also has a wide experience of intelligence analysis, defence policy, border protection, critical infrastructure protection, countering hybrid threats, rescue and emergency assistance, health protection and in the field of justice and prosecution.

ISEMI has a long-term and close cooperation with many practitioners' units in area of security and emergency management in EU as well as outside EU.

ISEMI has been accredit by National Security Agency to handle with classified data at "EU, NATO Secret level".

ISEMI provides professional services to European Commission, many law enforcement, military agencies, rescue and emergency services and is actively involved in research projects under Horizon 2020 also.

Based on written agreement, ISEMI working very closely also with Ministry of Interior of Slovak Republic, especially with Section of crisis management (civil protection), police and FRS, so also these capacities can be jointly of use.

ISEMI is open to collaboration mainly in the field of gap & needs analysis of end-users, preparation and execution of tests/trials/demonstrations, development and implementation of trainings and exercises as well as networking (involvement of practitioners).

Topics of interest in H2020 SC7 for 2020:

- SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe
- SU-DRS02-2018-2019-2020: Technologies for first responders
- SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster
- SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism
- SU-FCT03-2018-2019-2020: Information and data stream management to fight against (cyber)crime and terrorism

- SU-FCT04-2020: Chemicals: intelligence, detection, forensics
- SU-BES02-2018-2019-2020: Technologies to enhance border and external security
- SU-BES03-2018-2019-2020: Demonstration of applied solutions to enhance border and external security
- SU-GM01-2018-2019-2020: Pan-European networks of practitioners and other actors in the field of security

As end-user, ISEMI is interested in collaboration in almost all calls, where contributions of security and emergency practitioners are expected.

Contact(s):

Martin Kostolný
Head of the Office
kostolny@isemi.sk
+421 910 850 285

www.isemi.sk

Ministry of Interior of the Slovak republic – Section of Crisis Management

The Section of Crisis Management is a department of the Ministry of Interior of the Slovak republic responsible for civil protection, crisis management, the integrated rescue system, civil emergency planning, critical infrastructure protection, economic mobilization, civil protection inventory and supplies management as well as humanitarian aid. As a State authority, it represents the Slovak Republic in the European Union, NATO and other international organizations / initiatives in the field of crisis management and civil protection. The Section, due to its field of activity, closely cooperates with the operative sections of the Ministry of Interior, be it the Presidium of the Police Corps or Presidium of the Fire and Rescue Corps. The Section of Crisis Management, being responsible for the integrated rescue system, coordinates though public safety answering point (112) all the units providing assistance in emergency situations, including Slovakia's Fire and Rescue Service, Emergency Medical Service (or other emergency medical service providers), Control Chemical Laboratories of Civil Protection, Mountain Rescue Service, and Mine Rescue Service. In relation to the foreign affairs, the Section serves as the national contact point for outgoing and incoming international assistance, both material (humanitarian aid) and non (civil protection modules – experienced teams of professional rescuers), being able to provide experts and/ or liaison officers for exercises and real-life missions abroad.

The Section of Crisis Management is by national law appointed to coordinate the international help provided in case of large international emergencies and for that reason creates, together with other departments of the Ministry, the civil protection modules.

The Section of Crisis Management is open to collaboration in the field of needs analysis of end-users /first responders, preparation and execution of tests & trials of developed new technologies, development and implementation of trainings and exercises as well as networking (involvement of first responders).

Section of Crisis Management is interested in collaboration mainly in calls, where contributions of emergency practitioners are expected and/or where its expertise might be of interest from the coordination point of view.

Contact(s):

Dominika Reynolds
Councellor
dominika.reynolds@minv.sk
+421 910 899 434

www.minv.sk

SECAR spol. s r. o.
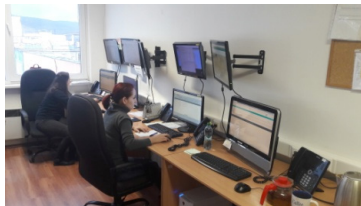

High range of security services

SECAR spol. s r. o. is an SME specialised in the field of security services. During almost 30 years on the market we have a lot of experience in international cooperation in bilateral partnerships as well as a national service provider of cross border incident management. We have 24/7 ARC with Multilanguage capacities available to our clients.

We are primarily focused on:

- Vehicle protection
- Electronic car fleet management control
- Facilities and premises monitoring
- High value freight monitoring and operational quality monitoring
- Installation of security systems (CCTV, Access control systems, Intruder alarm systems etc.)
- Detective services
- Security consulting and management

Recently we have been working on creating a mobile identification unit that would serve as a simple solution for identifying a huge group of people mainly during migration crisis. The mobile unit would gather required biometric information, check the accuracy of verbal statements and travel documents (if available), issue an RFID based ID bracelet for those persons that are judged suitable for asylum.

SECAR is open to any form of cooperation and/or participation where the security service is required.

Contact(s):

Imrich Vavaček
vavacek@secar.sk
+421 903 464 492
+421 2 4445 3682

www.secar.sk

SEC Technologies, s. r. o.

SEC Technologies, s. r. o. is a pioneer in active stand-off detection of chemical and biological warfare agents. Stand-off detection means detection of gases from large distances without any physical contact with the detected item.

Our technology is utilizing Differential Lidar based on by our company developed tuneable CO2 lasers. Thanks to the CO2 lasers, sensitivity our system is 30x better compared to the-state-of-the-art.

This technology can be furthermore utilized in detection of greenhouse gases from distance.

Contact(s):
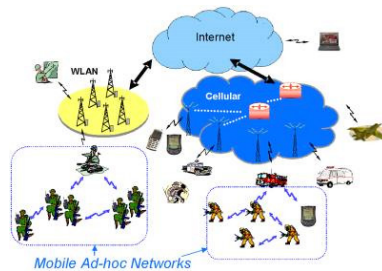
Michal Simko, PhD.
ms@sec-technologies.com
+421 905 327 966

www.sec-technologies.com

Slovak University of Technology in Bratislava, Faculty of Informatics and Information Technologies

Research & Innovation Projects:

Antisocial behaviour in online environment is one of the most actual and serious problems, which significantly threatens not only the principles, on which the web was built, but also has a critical overreach to society. Our primary focus is the research of models and methods for automatic identification of antisocial behaviour. We build explicit models based on analysis of integrated datasets, but also on qualitative understanding of malicious content and behaviour. We built a platform named **Monant,** which enables the pursuing of the research of antisocial behaviour in online environment.

Secure access control in Mobile Ad-hoc NETworks (MANET). The MANET network is a special kind of mobile ad-hoc network, which does **not rely on any fixed infrastructure** (e.g. swarm of drones, conferences, meetings, where group of people needs to exchange data or share the connection to the Internet).
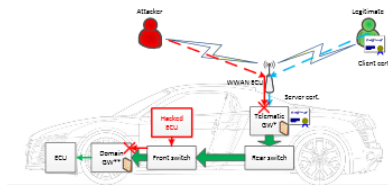
Security extension of automotive communication protocols using Ethernet/IP. We designed a **novel approach to secure In-vehicle Systems by taking advantage of Ethernet/IP technology** and proven security mechanisms from TCP/IP model. The main goal is to design an efficient solution that meets requirements for latency without requiring high amounts of processing power and provides secure exchange of control signals.

Topics of interest in H2020 SC7 for 2020:
- <u>SU-FCT02-2018-2019-2020:</u> Technologies to enhance the fight against crime and terrorism

FIIT STU is seeking for partners/partner.

Contact(s):

Dr. Daniela Chudá
daniela.chuda@stuba.sk

Dr. Ladislav Hudec
ladislav.hudec@stuba.sk

www.fiit.stuba.sk

Technical University in Zvolen

Technical University in Zvolen is a public university. It provides educational, scientific, research and development activities in closely related and socially important areas in the European research and education area in forestry, wood, ecology, environmental science and engineering, as well as on economics, management, information technology, rescue services and integrated security, industrial engineering and in other related border and interdisciplinary areas.

In the field of safety/security sciences, especially rescue services, crisis management and protection of persons and property, Technical University in Zvolen, namely the Department of Fire Protection of the Faculty of Wood Sciences and Technology, cooperates with important domestic and foreign institutions of higher education, research and practice, e.g. in the Czech Republic, Hungary, Poland, Russia, Serbia, Croatia and China. This is also the basis for developing activities in all prospective research and innovation areas. One of the important activities is the implementation of research and development projects with an emphasis on building a modern infrastructure, material and technical base, innovative approaches to the effective acquisition of new knowledge and its application in practice.

In the field of security research, it has been focusing on material research from the fire protection and safety point of view of, safety of handling and transport of dangerous substances, prevention of major industrial accidents, critical infrastructure protection, fire investigation based on forensic science application, safety/security risk management using the tools of geoinformatics and decision support, optimization of intervention activities of the first responders.
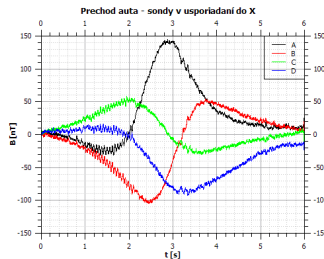
Topics of interest in H2020 SC7 for 2020:

- *Call – Security (Disaster-Resilient Societies):*
  SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies;
  SU-DRS02-2018-2019-2020: Technologies for first responders;
  SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies;

- *Call – Protecting the infrastructure of Europe and the people in the European smart cities:*
  SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe;
  SU-FCT04-2020: Chemicals: intelligence, detection, forensics.

TUZVO is looking for the position of a partner within the project consortia.

TECHNICAL UNIVERSITY IN ZVOLEN

Contact(s):

Prof. Danica Kačíková, PhD.
kacikova@tuzvo.sk
+421 45 520 6829

Assoc. prof. Andrea Majlingová, PhD.
majlingova@tuzvo.sk
+421 45 520 6065

www.tuzvo.sk

Technical University of Košice, Faculty of Aeronautics

The Faculty of Aeronautics of the Technical University of Košice was established on 1 February 2005 as a successor of the Air Force Academy of gen. M.R. Štefánik in Kosice, which had been a prestigious educational institution in Europe and in the world having provided university education for airspace engineers, pilots and air operating personnel for over 30 years.

**Research topics** include but are not limited to:
- **Object security** involving development of special sensors and electronic systems according to the specific user requirements, including sensors based on the magnetic microwires, analogue and digital circuits of the signal processing.
- **UAV detection**, UAV electronics, magnetic measurements, signal processing and visualisation.
- **Aviation security** and safety, human efficiency, modelling and analysis of aircraft operations and procedures.
- **Search and rescue** applications.
- **Environmental security**, risk analyses, risk mapping, UAV utilization for the detection of the dangerous gases, air quality monitoring in the industrial smog or disaster areas.
- Creation and analysis of spatial emission characteristics of aircraft antennas in a special anechoic chamber and on real aircraft and helicopters.
- Computer aided design, manufacturing, engineering, analyses and calculations, mold design and manufacturing for the plastic components and prototypes using the 3D printers and NC milling machines, CAD/CAM model creation using the 3D scanner.

Contact(s):

Assoc. Prof. Ing. Monika Blišťanová, PhD.
monika.blistanova@tuke.sk
+421 55 602 6116

FA TUKE is open to participate as a partner within the project consortia in the research and development topics within the frame of its area of expertise.

www.lf.tuke.sk

University of Žilina,
Faculty of Security Engineering

Faculty of Security Engineering is faculty of technology with more than 65 years of educational and scientific activities in the field of complex protection of society and citizens. The focuses are on trainings of crisis managers, security managers, fire fighters, rescue services workers and other security and safety professionals.
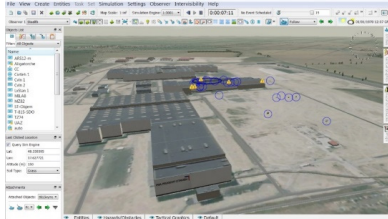
Research activities:
Improvement of security and crisis management in public administration and business entities:
- creation of a general security theory and tools to assess the security of the environment,
- complex risk management, creation of procedures for risk analysis and design of preventive measures of management and technological nature in social, business, technical, technological and natural environment,
- optimized process of emergency planning, ensuring the prevention and resolution of major industrial accidents and their ecological consequences.

Raising the level of fire safety:
- improvement of the effectiveness of intervention actions tactics of fire and rescue services,
- addressing current challenges in the integrated rescue system, with emphasis on the efficiency of deployment of manpower and resources to deal with emergencies,
- improvement of fire safety of buildings.

Ensuring complex protection of people, property and information:
- resilience assessment of the critical infrastructure and assurance of its protection,
- development of theoretical foundations of Criminalistics and Criminology, focusing on prevention projects,
- design, evaluation and implementation of physical protection systems against anthropogenic threats,
- development problems of management system of information security and its implementation into practice.

FBI UNIZA is open to participate in many Topics where its expertise can apply.

Contact(s):

prof. Tomáš Loveček, PhD.
tomas.lovecek@fbi.uniza.sk
+421 41 513 6864

www.fbi.uniza.sk

Contact us:

Peter Beňo, NCP for SC7 H2020
Slovak Centre of Scientific and Technical Information
Phone: +421 907 608 918
e-mail: peter.beno@cvtisr.sk

Andrej Kurucz, Head of Liaison Office
Slovak Liaison Office for Research and Development
Phone: +32 471 515 484
e-mail: andrej.kurucz@cvtisr.sk