



THE DRIVER+ ADVANCED CRISIS MANAGEMENT CONFERENCE

UNLOCKING THE INNOVATION POTENTIAL IN EUROPEAN CRISIS MANAGEMENT

19-20 February 2020 - Brussels, Belgium

Research Operational needs Lessons learned Shared Understanding Guidance Methodology S Knowledge base Reference implementation **Tools** Pragmatic European Test-bed Crisis Virtually connected facilities Unpredictability **Management** Challenges Coperation, Experience Disasters Crisis Labs novati Analysis Trial-driven development Portfolio of Solutions Practitioners

ABSTRACT ABOUT DRIVER+

WHAT IS DRIVER+? A RESEARCH PROJECT TO DRIVE INNOVATION IN CRISIS MANAGEMENT

Crisis management innovation must be capable of meeting multifaceted challenges and delivering solutions that are modular, flexible and adaptable. These solutions must be tested and validated in realistic environments to assess their true benefits and their overall suitability, before being adopted by end-users.





In May 2014, dedicated practitioners' organisations, research institutes, industries and SMEs teamed up to support the European Union to tackle this issue. Until April 2020 the broad aim of the DRIVER+ project, funded under the European Union's 7th Framework Programme, will be to improve the way capability development and innovation management are addressed, by assessing and delivering solutions that can be used, and combined, to address different types of large-scale crises.

WHAT IS THE ADVANCED CRISIS MANAGEMENT CONFERENCE? A SUMMIT TO IMPROVE CRISIS MANAGEMENT THROUGHOUT EUROPE

The Advanced Crisis Management Conference is the culmination of several years of work involving Trials, demonstrations, technology assessments and research to help improve crisis management throughout Europe, in particular in connection with climate change related-events such as wildfires and flooding.



WHAT WILL BE THE FOCUS OF THIS CONFERENCE? INNOVATION IN THE CONTEXT OF CLIMATE CHANGE-RELATED THREATS

The Conference will pay special attention to innovation for crisis management in the context of climate change-related threats like flooding and wildfires. The Conference will also provide a unique overview of how crisis management organisations can use the DRIVER+ project's outputs to select and evaluate solutions addressing identified crisis management gaps on a thorough, methodological basis. It will constitute an invaluable opportunity to access cutting-edge research, Trial feedback and technological solutions, with assessment insights from leading researchers and practitioners. In a series of keynotes, plenaries and specialist demonstrations, participants will learn about and experience actively the work and lessons learned of the DRIVER+ project teams:

- The development of a scientifically based trial methodology, the DRIVER+ **Trial Guidance Methodology** (TGM) for conducting trials of Crisis Management solutions and the **Test-bed Technical Infrastructure** (TTI) that underpins it.
- Reports on the large-scale **Trials** based on the TGM and TTI conducted in Poland, France, The Netherlands and Austria set up to assess technological and other crisis management solutions in realistic scenarios.
- The establishment of an open, cooperative information-sharing network, the **Crisis Management Innovation Network Europe** (CMINE).
- The establishment of a network of DRIVER+ **Centres of Expertise** to ensure the sustainability of project outputs.
- The DRIVER+ **Portfolio of Solutions** an on line database of crisis management technologies.



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ABSTRACT

AGENDA - DAY 1 WEDNESDAY 19 FEBRUARY

Facilitator: Albrecht Beck, Prepared International
Einstein ABC Room, Floor -1

MORNING SESSION

- 8:45 | REGISTRATION
- 9:30 | OPENING
- 9:35 | WELCOME BY THE EUROPEAN COMMISSION
- 9:45 CLIMATE CHANGE AS AN ENABLER OF WILDFIRE Matthew Jones | Tyndall Centre for Climate Change Research
- 10:05 | THE NEXT INNOVATION IN HUMANITARIAN TECHNOLOGY MUST BE RADICAL INCLUSION

Patrick Meier | WeRobotics

10:25 | KEYNOTE Q&A

10:45 | DRIVER+ PROJECT OVERVIEW AND ACHIEVEMENTS Marcel van Berlo | TNO/DRIVER+

11:15 | COFFEE BREAK

11:45 | THE DRIVER+ KEY OUTPUTS

Chiara Fonio | JRC/DRIVER+ Erik Vullings | TNO/DRIVER+ Steven van Campen | XVR Simulation/DRIVER+ Denis Havlik | AIT Austrian Institute of Technology/DRIVER+ Agnese Macaluso | Ecorys/DRIVER+ Todor Tagarev | Institute of ICT, Bulgarian Academy of Sciences/DRIVER+

12:30 | LUNCH & TOUR OF DRIVER+ EXHIBITION AND MARKETPLACE

AFTERNOON SESSION

14:00 | EU NEXT GENERATION EMERGENCY MAPPING

Konstanze Lechner | German Aerospace Centre (DLR)/DRIVER+

14:15 | THE DRIVER+ TRIAL EXPERIENCE

Chiara Fonio | Joint Research Centre (JRC)/DRIVER+ Steven van Campen | XVR Simulation/DRIVER+ Erik Vullings | TNO/DRIVER+ Selected DRIVER+ Trial organisers: Alice Clemenceau | Valabre/DRIVER+ Carsten Dalaff | DLR/DRIVER+ André de Rond | Veiligheidsregio Haaglanden/DRIVER+ Tomasz Zwęgliński | Polish Main School of Fire Service/DRIVER+ Selected providers of solutions assessed at the DRIVER+ trials: Martha Bird | Danish Red Cross/DRIVER+: Psychological First Aid training Ruud van den Beukel | Merlin Software: CrisisSuite Joost van der Hammen | Nelen & Schuurmans: 3Di

16:00 | COFFEE BREAK

16:30 | KNOWLEDGE MANAGEMENT, BECAUSE THE WHOLE IS GREATER THAN THE SUM OF THE PARTS

Karmen Poljansek | Disaster Risk Management Knowledge Centre, European Commission

16:50 | THE DRIVER+ PORTFOLIO OF SOLUTIONS

Denis Havlik | AIT Austrian Institute of Technology/DRIVER+

17:00 INNOVATIVE SOLUTIONS IN CRISIS MANAGEMENT CONTEST AWARD CEREMONY

Todor Tagarev | Institute of ICT, Bulgarian Academy of Sciences/DRIVER+

17:15 | SUMMARY OF THE DAY

Philippe Quevauviller | DG HOME, European Commission

17:45 | TOUR OF DRIVER+ EXHIBITION AND MARKETPLACE

18:00 | NETWORKING BUFFET

AGENDA - DAY 2 THURSDAY 20 FEBRUARY

Facilitator: Albrecht Beck, Prepared International
Einstein ABC Room, Floor -1

MORNING SESSION

9:30 WELCOME BY THE EUROPEAN COMMISSION TO DAY 2

Angelo Marino | Unit B4 Safeguarding Secure Society, REA, European Commission

9:40 STRENGTHENING LINKS BETWEEN TECHNOLOGIES AND SOCIETY FOR EUROPEAN DISASTER RESILIENCE

Kees Boersma | VU Amsterdam

10:00 BUILDING A STRONG EUROPEAN CRISIS MANAGEMENT COMMUNITY: THE PORTFOLIO OF SOLUTIONS AND THE CMINE COMMUNITY

Albrecht Beck (Chair) | Prepared International Max Brandt | DG HOME, European Commission Harald Drager | The International Emergency Management Society (TIEMS) Harm Bastian Harms | Johanniter Germany Joerg Szarzynski | United National University (UNU-EHS) Todor Tagarev | Institute of ICT, Bulgarian Academy of Sciences/DRIVER+

10:45 | COFFEE BREAK

11:15 | STANDARDISATION IN DRIVER+ | WHITE PAPER PRESENTATION Marie-Christine Bonnamour | Public Safety Communication Europe (PSCE)/DRIVER+

11:25 AN EXAMPLE FOR THE NATIONAL UPTAKE OF SECURITY RESEARCH OUTPUTS: THE LITHUANIAN MODEL OF CENTRES OF COMPETENCE

Egidija Veršinskienė | Lithuanian Cybercrime Center of Excellence for Training

11:45 ADOPTING DRIVER+ SOLUTIONS: THE CENTRES OF EXPERTISE NETWORK

Brigitte Slot (Chair) | Ecorys/DRIVER+Jon Hall | Resilience Advisors Network (RAN)Anna Nalecz | Space Research Centre of the Polish Academy of Sciences/DRIVER+Christian Resch | Disaster Competence Network Austria (DCNA)Thomas Seltsam | Austrian Red Cross/DRIVER+

- 12:30 | THE DRIVER+ LEGACY: ESTABLISHING NEW CENTRES OF EXPERTISE Signature ceremony
- 13:00 | THE DRIVER+ LEGACY: LOOKING INTO THE FUTURE Marcel van Berlo | TNO/DRIVER+
- 13:15 | LUNCH
- 14:00 | END OF CONFERENCE

PERMANENT PARALLEL PROGRAMME

DRIVER+ EXHIBITION Discover our key outputs | Lobby (Floor -1)

MARKETPLACE Meet our solution providers and related projects | Baekeland (Floor -1)

SESSIONS - DAY 1 WEDNESDAY 19 FEBRUARY

19 FebruaryEinstein ABC Room, Floor -1

09:45 - 10:05 CLIMATE CHANGE AS AN ENABLER OF WILDFIRE

Matthew Jones | Tyndall Centre for Climate Change Research

Catastrophic Australian bushfires and global climate change trends highlight the need for innovative crisis management solutions and close multinational cooperation – both aspects are at the core of the DRIVER+ project. Matthew Jones will cover the latest science on climate change, its drivers and its consequences for global wildfire risk. Human-driven climate change promotes the conditions on which wildfires depend, enhancing their likelihood and challenging suppression efforts. Human-induced warming has already emerged as an upwards pressure on fire risk in many regions, including the western US and Canada, southern Europe, Scandinavia and Amazonia.

10:05 - 10:25 THE NEXT INNOVATION IN HUMANITARIAN TECHNOLOGY MUST BE RADICAL INCLUSION

Patrick Meier | WeRobotics

The blue planet we call home has become a lot more fragile in recent years. Life is facing unprecedented challenges here, ranging from climate emergencies to extreme inequality. To make matters worse, these problems are accelerating and affecting the Global South the hardest. We need to respond in a much faster, smarter and far more inclusively manner to solve these large-scale humanitarian problems.

Robotics solutions, such as drones provide the speed and scale to tackle these challenges. But access to these solutions is largely limited to experts from the Global North. This explains why the vast majority of humanitarian technology projects in the Global South rarely include local experts. Instead, they're led by foreign experts who typically don't know the local language, the local context, the local culture, or local needs. As a result, these projects are rarely effective or sustainable. In fact, they often exacerbate inequality by excluding local experts who are best placed to use these technologies responsibly and sustainably.

In this keynote, Dr. Patrick Meier will explain exactly how WeRobotics is decolonizing humanitarian technology. Meier will draw on concrete, locally led humanitarian robotics projects and trainings in Africa, Asia and Latin America to share the latest best practices and lessons learned. In doing so, he will argue that rigorously assessing innovative technology is essential and necessary. At the same time, we must go beyond the simple deployment of technology in humanitarianism and use this technology in a way that fosters global inclusion and justice.

10:45 - 11:15 DRIVER+ PROJECT OVERVIEW AND ACHIEVEMENTS

Marcel van Berlo | TNO/DRIVER+

Crisis management innovation must be capable of meeting multifaceted challenges and delivering solutions that are modular, flexible and adaptable. These solutions must be tested and validated in realistic environments to assess their true benefits and their overall suitability, before being adopted by end-users.

In May 2014, dedicated practitioners' organisations, research institutes, industries and SMEs teamed up to support the European Union to tackle this issue. Until April 2020 the broad aim of the DRIVER+ project, funded under the European Union's 7th Framework Programme, will be to improve the way capability development and innovation management are addressed, by assessing and delivering solutions that can be used, and combined, to address different types of large-scale crises.

11:45 - 12:30 - THE DRIVER+ KEY OUTPUTS TRIAL GUIDANCE METHODOLOGY

Chiara Fonio | JRC/DRIVER+

Crisis Management organisations often face difficulties in assessing the potential impact and benefits of new solutions. Investments in new, yet inappropriate, socio-technical solutions not only produce significant costs but may also have a negative impact on the operational performance of response organisations. The Trial Guidance Methodology has been co-developed and tested in various Trials with practitioner organisations, research organisations and solution providers. It has become a robust methodology to evaluate a wide range of innovative solutions.

www.driver-project.eu/trial-guidance-methodology



TEST-BED TECHNICAL INFRASTRUCTURE

Erik Vullings | TNO/DRIVER+

The Test-bed Technical Infrastructure (TTI) is a free of charge and open source platform for creating a rich Trial and training environment. Several software components facilitate the preparation, execution and evaluation of a Trial. The TTI connects innovative solutions both to each other and to legacy systems and enables the exchange of information between them. The Trials are designed by applying the Trial Guidance Methodology, while the Test-bed Technical Infrastructure creates the realistic and controllable Trial environment. This methodological and technical support helps Crisis Management organisations avoid spending a great deal of money on acquiring and implementing solutions that turn out to have little added value.

https://www.youtube.com/watch?v=rn1bxl53fpk



TRAINING MODULE

Steven van Campen | XVR Simulation/DRIVER+

The Training Module provides the organisers of future Trials and practitioner students with explanations, training, practice and assessments in applying the Trial Guidance Methodology, the supportive tools and methods (e.g. the Trial Guidance Tool, the Test-bed Technical Infrastructure and how to draw a baseline and innovation line). In addition, it makes references to other users of the Test-bed, such as the members of the Crisis Management Innovation Network Europe (CMINE) and potential Centres of Expertise (CoE) that will deliver the services developed within DRIVER+ after the project duration.

PORTFOLIO OF SOLUTIONS

Denis Havlik | AIT Austrian Institute of Technology/DRIVER+

The Portfolio of Solutions (PoS) is a state-of-the-art catalogue that provides an overview of innovative solutions for Crisis Management. It is online, open-source and interactive, and matches available solutions with practitioner needs. For each solution, practitioners can share their user experiences and solution providers can give background information and offer support. The Portfolio of Solutions therefore helps practitioners to decide whether a solution may be useful for them and provides support for the implementation and deployment of the listed solutions. Filters such as the crisis cycle phase, innovation stage, crisis type and size can be used to search all the available solutions within the PoS.

https://pos.driver-project.eu/en/PoS/solutions

CENTRES OF EXPERTISE NETWORK

Agnese Macaluso | Ecorys/DRIVER+

A Centre of Expertise (CoE) is an organisation that acts as the primary contact point for practitioner organisations at the national or regional level, supporting their capability development and innovation management. A CoE may choose to adopt either the whole suite of DRIVER+ outputs or only some of its components. While applying these outputs, organisations are free to tailor and adapt them to local or national needs, circumstances and capacities. Becoming a Centre of Expertise will strengthen an organisation's pioneering position in the Crisis Management and Disaster Risk Reduction ecosystem, both nationally and internationally.

https://www.driver-project.eu/centres-of-expertise-coe

CMINE COMMUNITY

Todor Tagarev | Institute of ICT, Bulgarian Academy of Sciences/DRIVER+

The Crisis Management Innovation Network Europe (CMINE) is a Community of Practice that fosters innovation and enhances a shared understanding in the fields of Crisis Management and Disaster Risk Reduction in Europe. CMINE comprises an online community platform and face-to-face meetings and workshops with the aim of tackling current and future challenges and facilitating the uptake of research and innovation by practitioner organisations. CMINE is designed to evolve continuously through collaboration with the aim of becoming a pan-European platform, centred on the exchanges between various Crisis Management professionals. These include policymakers, practitioners, members of the private sector, NGOs /CSOs, science and research, training and education, media and standardisation representatives.

www.cmine.eu









14:00 - 14:15 EU NEXT GENERATION EMERGENCY MAPPING

Konstanze Lechner | German Aerospace Centre (DLR)/DRIVER+

In recent years, geo- and earth observation technologies have developed into essential tools to support civil protection and disaster management by providing added value to crisis information. Several mechanisms for emergency mapping have been established at different (inter)national levels, at European level the Copernicus Emergency Management Service (CEMS). These services should be subject to constant development, as there is a permanent progress in technology and method development. Novel data sources such as various Earth Observation sensors from new satellite sensors, aerial or UAV platforms, but also web-based data sources like web archives, social media or others and their fusion can be used to provide more dynamic crisis information at different stages of the crisis cycle. The handling of large amounts of data or innovative forms of visualisation can be profitably incorporated into crisis mapping. In order to connect the two communities: research and development (R&D) with the operational crisis management (CM) and to ensure a mutual exchange, EU projects, especially for service development, and new frameworks as shown in DRIVER+ are essential. In this way, research results can be selected, further developed, tested and prepared for operationalisation.

14:15 - 16:00 THE DRIVER+ TRIAL EXPERIENCE

Chiara Fonio | Joint Research Centre (JRC)/DRIVER+ Steven van Campen | XVR Simulation/DRIVER+ Erik Vullings | TNO/DRIVER+ With selected DRIVER+ Trial organisers and providers of solutions assessed at the DRIVER+ Trials

Organising a trial to assess crisis management solutions ... what am I getting myself into? What actually is a trial? What are the steps to prepare it? What kind of different roles are there within a Trial? What kind of (technical) support is offered? And is it actually possible to collect too much data? The Trial Experience session provides answers to these burning questions. DRIVER+ can look back on five Trials organised all over Europe – and with a steep learning curve. Some of our Trial organisers will share their experiences, and three solution providers will reveal what they experienced during their participation in the DRIVER+ trials. This is also the moment to learn more about the DRIVER+ Trial Guidance Methodology and experience the Test-bed Technical Infrastructure live on stage. Be prepared!

16:30 - 16:50 KNOWLEDGE MANAGEMENT, BECAUSE THE WHOLE IS GREATER THAN THE SUM OF THE PARTS

Karmen Poljansek | Disaster Risk Management Knowledge Centre (DRMKC), European Commission

Under the current landscape scenario, where intensification of the effects of natural and technological hazards due to climate change is combined with new ways of threatening our societies, the establishment of strong alliances to reinforce our capacities to better protect our future has become a must. Understanding disaster risk becomes essential to enhance resilience and contribute to smart, sustainable and inclusive growth. The Commission officially endorsed the concept of Knowledge Centres in its Communication on Data, Information and Knowledge Management (C(2016) 6626)). They bring together experts and knowledge from different locations inside and outside the Commission, creating a new instrument to develop and pursue informed and evidence-based EU policies. A growing number of Commission Services are collaborating to reinforce the links between the different Disaster Risk Reduction (DRR) and Disaster Risk Management related policies to ensure they maximise their impact.

While complexity and uncertainty are growing and a lot of developments cannot be predicted as such, a stronger anticipation culture would strengthen EU resilience. Policy-makers and risk managers increasingly rely on the wealth of existing knowledge at all stages of the DRM cycle – adaptation; mitigation; prevention; preparedness; response; recovery and reconstruction.

16:50 - 17:00 PORTFOLIO OF SOLUTIONS

Denis Havlik | AIT Austrian Institute of Technology/DRIVER+

Scout the market for new trends and capability offerings, or showcase your solution and receive direct feedback – via the Portfolio of Solutions. How does it work? Discover more in this session. PS: 100% of the winners of the Innovative Solutions contest (see next session) got lucky by signing up on the Portfolio of Solutions!

17:00 - 17:30

INNOVATIVE SOLUTIONS IN CRISIS MANAGEMENT CONTEST / AWARD CEREMONY

Todor Tagarev | Institute of ICT, Bulgarian Academy of Sciences/DRIVER+

The Crisis Management Innovation Network Europe (CMINE) and DRIVER+ have organised a competition for Crisis Management solutions with high innovation potential. The competition is expected to stimulate the uptake of innovative solutions, encourage synergies and cooperation between various projects and reduce the fragmentation in the Crisis Management domain.

The three winners of this Innovative Solutions Contest will be revealed to the public at this award ceremony. Discover three cutting-edge crisis management solutions and discuss further with them shortly afterwards at our DRIVER+ marketplace.

SESSIONS - DAY 2 THURSDAY 20 FEBRUARY

20 February 🕑 Einstein ABC Room, Floor -1 ♀

9:40 - 10:00 STRENGTHENING LINKS BETWEEN TECHNOLOGIES AND SOCIETY FOR EUROPEAN DISASTER RESILIENCE

Kees Boersma | VU Amsterdam

Europe and its members states have increasingly dealt with recurrent, interrelated and crosssectional crisis situations including natural (flooding, drought, earthquakes); technical (nuclear, chemical, infrastructure collapse); and security (terrorist attacks; cyber-attacks) that lay a heavy burden on society. Crisis response organizations face major shifts, including the emergence of new organizational forms, citizens' initiatives, technological opportunities and means of communication. As a result, authorities, under pressure to restore order in a matter of days, struggle to govern the various responses and to manage an overload of potentially conflicting information. In recent years, social media and crowdsourcing have been integrated into crisis management for improved information gathering and collaboration. The effectiveness of these new techniques on disaster resilience, however, remains unclear owing to the diversity among disaster response organizations, risk perception and vulnerability. In my talk, I will address the effects of social media and crowdsourcing on European disaster resilience.

10:00 - 10:45 BUILDING A STRONG EUROPEAN CRISIS MANAGEMENT COMMUNITY: THE PORTFOLIO OF SOLUTIONS AND THE CMINE COMMUNITY

Albrecht Beck (Chair) | Prepared International Max Brandt | DG HOME, European Commission Harald Drager | The International Emergency Management Society (TIEMS) Harm Bastian Harms | Johanniter Germany Joerg Szarzynski | United National University (UNU-EHS) Todor Tagarev | Institute of ICT, Bulgarian Academy of Sciences/DRIVER+

Experts from different international crisis management networks will exchange on the importance – and the challenges – of networking and community-building to enhance shared understanding and innovation in crisis management. Supporting these efforts, the Crisis Management Innovation Network Europe (CMINE), developed within DRIVER+, is an umbrella network linking existing projects, networks and initiatives.

11:15 - 11:25 STANDARDISATION IN DRIVER+ | WHITE PAPER PRESENTATION

Marie-Christine Bonnamour | Public Safety Communication Europe (PSCE)/DRIVER+

Standardisation potentials identified during the standardisation potential workshop in September 2018 have been included into a "white paper" which has been developed by the CMINE group on standardisation. Standardisation potentials which were identified by the other CMINE task groups have been collected during recent weeks. The final document will be presented during the DRIVER+ Advanced Crisis Management Conference. Additionally, a link has been built to the STAIR4SECURITY project, which will take up the standardisation potentials, by integrating it in a platform collecting all standardisation potentials and CWAs developed by research projects.

11:25 - 11:45 AN EXAMPLE FOR THE NATIONAL UPTAKE OF SECURITY RESEARCH OUTPUTS: THE LITHUANIAN MODEL OF CENTRES OF COMPETENCE

Egidija Veršinskienė | Lithuanian Cybercrime Center of Excellence for Training, Research & Education

Lithuania, being a small country, has limited resources to dedicate to R&D in the different security areas. However, crises and threats our country faces require most innovative tools, technologies and competences. Especially since LEA operations are based on a multi-functional approach, a wide range of innovative technologies plays a critical role to ensure the effective performance of security forces, such as small jurisdiction's police agencies. The Lithuanian government has made great efforts to foster innovation in the field of security, however the impact of research results is still not sufficient. Egidija Veršinskienė, the Director of the Lithuanian Cybercrime Center of Excellence for Training, Research & Education explores forces that may slow down the uptake of security innovation and introduce the role of Centers of Competence as a key ingredient for success.

11:45 - 12:30

ADOPTING DRIVER+ SOLUTIONS: THE CENTRES OF EXPERTISE (COE) NETWORK

Brigitte Slot (Chair) | Ecorys/DRIVER+ Jon Hall | Resilience Advisors Network (RAN) Anna Nalecz | Space Research Centre of the Polish Academy of Sciences/DRIVER+ Christian Resch | Disaster Competence Network Austria (DCNA) Thomas Seltsam | Austrian Red Cross/DRIVER+

DRIVER+ is putting in place a network of organisations operating in the domain of Crisis Management and Disaster Risk Reduction and acting as the primary contact point for practitioner organisations at the national or regional level, supporting the capability development and innovation management. These Centres of Expertise may choose to adopt either the whole suite of DRIVER+ outputs or only some of its components. In this panel discussion, representatives of some of the first DRIVER+ CoEs will share their experiences with and expectations for becoming a part of this network of adopters of DRIVER+ solutions.

12:30 - 13:00 THE DRIVER+ LEGACY: ESTABLISHING NEW CENTRES OF EXPERTISE

Signature Ceremony

Witness three European crisis management and disaster risk reduction organisations becoming DRIVER+ Centres of Expertise!

FACILITATOR & SPEAKERS WHO ARE THEY

ALBRECHT BECK | FACILITATOR PREPARED INTERNATIONAL

Dr. Albrecht Beck is the Managing Director of Prepared International, a consultancy firm based on leading experts in the field of disaster management and preparedness. Until recently, he has held the position of Global Mass Evacuation Coordinator of the United Nations. Prior to this post, he was the Disaster Preparedness Expert for Middle East, North Africa and Central Asia at the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA). Albrecht is a leading expert in the field of Mass Evacuations and disaster risk diplomacy. He is a Guest Professor at the United Nations University and has headed International Disaster Coordination in more than 13 mass disaster events.



AGNESE MACALUSO ECORYS/DRIVER+

Agnese Macaluso is a consultant at Ecorys, a research and consultancy company, focused on (strategic) development, implementation and evaluation of public policy. She has experience on issues related to conflict prevention, urban violence and local governance, violent extremism and EU foreign relations. Her areas of expertise are: • Coordination and implementation of projects in the domain of urban innovation, regional integration and security; • Coordinate acquisition of projects with EIB, European Commission, WORLD BANK, DFID; • Strategic planning within EU and international market. Previously, Agnese was a researcher at The Hague Institute for Global Justice under the Conflict Prevention Program and worked for the European External Action Service and Italian Ministry of Foreign Affairs. She holds a Master's degree in international Relations and European Studies from the University of Florence.



BRIGITTE SLOT ECORYS/DRIVER+

Dr. Brigitte Slot is Director of the Security and Justice sector at Ecorys, a research and consultancy company, focused on (strategic) development, implementation and evaluation of public policy.



CHIARA FONIO JRC/DRIVER+

Dr. Chiara Fonio currently works as a project officer at the Joint Research Centre (JRC) of the European Commission (Disaster Risk Management Unit, Ispra, Italy). Her research interests range from disaster risk management to surveillance and privacy issues. She has been involved in many research projects focused on crisis management, crisis and risk communication as well as on the impact of surveillance technologies in urban contexts. Her most recent book is the edited volume Big data, Surveillance and Crisis management (Boersma, F.K & Fonio, C., Routledge, 2018). In DRIVER+ she has been leading the activities which led to the development of the Test-bed.

DENIS HAVLIK AIT AUSTRIAN INSTITUTE OF TECHNOLOGY/DRIVER+

Dr. Denis Havlik is a scientist at the Austrian Institute of Technology (AIT). Within DRIVER+, he has led all activities related to the Portfolio of Solutions (PoS) and Trial Guidance Tool (TGT).

EGIDIJA VERŠINSKIENĖ L3CE

Egidija Veršinskienė is Director of the Lithuanian Cybercrime Center of Excellence for Training, Research & Education (L3CE), a non-profit NGO which invests in technology, conducts research, and manages Open Source Intelligence projects focusing on illegal interference incidents — related to data, systems or operation of computers affecting a wide range of foreign countries. Egidija has a wealth of experience in the expert use of Open Source Intelligence Tools (OSINT), visual analytics and integration platforms aimed at protecting and supporting strategic decision-making processes. L3CE coordinates an international network of Centers of Excellence (for example, the SENTER Network) that brings together a unique set of EU research organisations operating in the domain of cybercrime at the intersection of scientific excellence, technological innovation, as well as the social sciences. In the security domain generally, L3CE also addresses information warfare, hybrid threats and full-spectrum awareness of cybersecurity itself.









ERIK VULLINGS **TNO/DRIVER+**

Dr. Erik Vullings has been a Senior System Integrator for more than 12 years at the Netherlands Organisation for Applied Scientific Research (TNO), focussing on technology development in the area of Modelling and Simulation. He previously worked for three years as a R&D programme manager in Australia on Identity & Access Management, and for five years as systems engineer and programme manager for Philips Centre of Applied Science, developing B2B equipment. Within DRIVER+, he has been leading activities related to the Test-bed Technical Infrastructure.

KARMEN POLJANSEK DRMKC

Dr. Karmen Poljansek has a PhD in earthquake engineering. She works in a team of Disaster Risk Management Knowledge Centre at European Commission, Joint Research Center (Italy). She is a specialist of earthquake risk assessment of critical infrastructures, multihazard risk assessment methodologies as well as disaster risk reduction policies at EU and world level. Karmen's recent activities range from developing a concept and methodology of INFORM Global index, a tool for understanding the risk of humanitarian crises and disasters, to developing standardized European approach to systematically record and manage disaster loss databases. She was appointed Editorin-Chief of the first DRMKC flagship multi-author report "Science for disaster risk management 2017: knowing better and losing less. Now she is a scientific coordinator of INFORM development at JRC and she is coordinating the preparation of the Recommendations for National Risk Assessment for DRM in EU.

KEES BOERSMA VU AMSTERDAM

Dr. Kees Boersma is Associate Professor and Director of Research of the Department of Organization Sciences of the Faculty of Social Sciences of the Vrije Universiteit Amsterdam (VUA). He is especially interested in how people, including professional responders, volunteers and citizens, give meaning to what they actually do during crisis situations. He also investigates how the various actors use ICT for information sharing, mobilisation, steering and coordination. Kees Boersma is (co) editor of several books and journals on crisis and disaster governance. He has been a board member of the Information Systems for Crisis Response and Management (ISCRAM) association for two years in a row. As an 'academic traveller' he has walked in the fields of engineering, innovation studies, history of science and technology, science and technology studies, organization science and public administration, surveillance studies and criminology, urban studies, and crisis and disaster management.





KONSTANZE LECHNER DLR/DRIVER+

Dr. Konstanze Lechner received a degree in applied environmental sciences at the University of Trier, Germany in 2004 and the Ph.D. in physical geography at the University of Bonn, Germany in 2008. Since 2008, she has been a scientific employee at the German Aerospace Center (DLR) for the Center for Satellite based Crisis Information (ZKI). As senior researcher she has been coordinating national and international research projects on the use of Earth Observation data for crisis management, humanitarian relief and in the field of civil security. Main topics are the Earth Observation-based monitoring of crisis situations as well as linking research with operations through close interaction and cooperation with users. Within DRIVER+ she has had two roles: she supported the Trials as a practitioner with innovative ZKI tools and she was Trial owner coordinating Trial the Netherlands.



MARCEL VAN BERLO TNO/DRIVER+

Dr. Marcel van Berlo is a senior project manager at TNO (the Netherlands) in the field of human factors and security since 1993. Selected topics of interest are crisis management, disaster risk reduction, community resilience, urban security, team performance, training and serious gaming. He holds a Ph.D in Instructional Psychology and Technology from the University of Leuven (Belgium). From 2000-2005 he was coordinating the Team Training research group within TNO, from 2011-2014 he coordinated the Community Resilience product group, and from 2004-2017 he was a senior business developer in the field of human factors and security. Since 2017 Marcel has been the Technical Coordinator of the European research project DRIVER+ and since 2019 the chair of the EARTO Security and Defence Research Working Group. He is a member of the editorial board of the Dutch magazine 'Secondant' on public safety and security.

MATTHEW JONES TYNDALL CENTRE FOR CLIMATE CHANGE RESEARCH

Dr. Matthew Jones is Senior Research Associate at the University of East Anglia. He recently joined the Tyndall Centre for Climate Change Research following a postdoctoral research role at Swansea University. Matt has a broad interest in the global carbon cycle and a particular focus on the roles of landscape fires and fossil fuel combustion in this cycle. Matthew contributes to international collaborative efforts to quantify the global carbon budget, which accounts for emissions of carbon from fossil fuel combustion and land use change and the uptake of carbon by the terrestrial biosphere and by oceans. Matthew's work has focussed on the legacy effects of fire on the terrestrial carbon cycle. Historical landscape fires influence the modern carbon budget, while present-day fires will continue to influence this budget in the coming decades, centuries and even millennia. Matt holds a PhD in Physical Geography at the University of Exeter.



PATRICK MEIER WEROBOTICS

Over the past 15+ years, Dr. Patrick Meier has worked on a wide range of humanitarian technology projects with multiple international organizations including the United Nations, Red Cross, World Bank and 30+ other organizations like the Harvard Humanitarian Initiative, Planet Labs, Facebook, Ushahidi and QCRI. His book, Digital Humanitarians, has been praised by experts at the UN, Red Cross, World Bank, Harvard, MIT, Stanford, Oxford and others. Patrick serves as the Executive Director of WeRobotics, which scales the positive impact of humanitarian operations through the localization of appropriate robotics solutions. Prior to WeRobotics, he co-founded the Digital Humanitarian Network and served on the Innovation Team of the UN Secretary-General's World Humanitarian Summit (WHS). He also served as a fellow at MIT and Stanford and holds a PhD from the Fletcher School of Law and Diplomacy and an MA from Columbia University. Patrick was born and raised in Africa.



PHILIPPE QUEVAUVILLER DG HOME

Dr. Philippe Quevauviller is Research Programming and Policy Officer at DG HOME. He started his career at the European Commission in 1989 as scientific officer at DG RESEARCH, then as policy officer at DG ENVIRONMENT (in charge of EU groundwater policies) in the years 2002-2008, and back to DG RESEARCH from 2008 to 2013 in the area of hydrometeorological hazards. He moved to the Secure Societies Programme in 2013, firstly at DG ENTERPRISE (2013) then at DG HOME (2015), where he is responsible for research programming in the area of Disaster Resilient Societies. Since 2014, he is coordinating the development of the Community of Users on Secure, Safe and Resilient Societies. Besides his work at the European Commission, he is also Associate Professor at the Vrije Universiteit Brussel (VUB), a scientific writer and editor. He holds two PhDs (oceanography and environmental chemistry) and the highest French University degree (HDR).



STEVEN VAN CAMPEN XVR SIMULATION/DRIVER+

Steven van Campen is a senior incident command instructor and exercise consultant at XVR Simulation. He holds an MSc. in Aerospace Engineering and an MSc. Industrial Design Engineering from Delft University of Technology and is certified by Linköping University as an EmergoTrain System senior instructor. He has interests in education and crisis management and is involved in the design and implementation of simulation centres and innovations in incident command training. He lives with his family in the Netherlands and enjoys cooking, woodworking and theatre.



TODOR TAGAREV INSTITUTE OF ICT, BULGARIAN ACADEMY OF SCIENCES/DRIVER+

Dr. Todor Tagarev is a former Minister of Defence (2013). He has represented Bulgaria on EDA's R&T Steering Board and the NATO Science and Technology Board. Currently he is Professor at the Institute of Information and Communication Technologies of the Bulgarian Academy of Sciences and leads its Centre for Security and Defence Management.



MARKETPLACE INNOVATIVE SOLUTIONS AND PROJECTS

Permanent parallel programme - 19 & 20 February
Baekeland Room, Floor -1

A marketplace will be central to the event, allowing practitioners to discover innovative crisis management solutions, including the ones that have been tested during the DRIVER+ Trials. You can also explore a range of related projects. Discover them all and interact with them!



ANSUR ASIGN

ASIGN from AnsuR reduces disaster response time by providing better and more relevant information faster for improved situational understanding and decision making. ASIGN smartphone apps and Web services specifically provide high definition geospatial photo and video communication with very low capacity, supporting mobile satellite communication and networks affected by disasters.



MERLIN CRISISSUITE

CrisisSuite, developed by Merlin Software, is an online software application, enabling organisations to successfully manage information during a crisis. All crisis information is securely stored in the cloud and is available anytime, anywhere.

GMV SOCRATES OC





Psychosocial Centre

International Federation of Red Cross and Red Crescent Societies

PSYCHOLOGICAL FIRST AID TRAINING

The IFRC Reference Centre for Psychological Support will present its solution: PFA (Psychological First Aid). PFA training provides knowledge on what PFA is, guidelines on how to perform PFA and an experiential training package to build the capacity of first responders and their leaders to deliver quality PFA. SOCRATES OC enhances analysis and decision-making capabilities by means of an improved shared situational awareness based on relevant information about the operational situation including crisis events, missions and resources. The information is created by the operator or comes from external sources. The information is displayed on a Common Operational Picture (COP). SOCRATES OC enables the exchange and sharing of the information (expandable and customizable) among SOCRATES nodes and with other external systems (using existing standards like ISO's EMSI - Emergency Management Shared Information) enabling the reporting and tracking of events and interorganisational tasking (mission assignment) and resource management.



DLR AIRBORNE AND TERRESTRIAL SITUATIONAL AWARENESS

The solution "Airborne and Terrestrial Situational Awareness" is composed of several individual components and tools, which are integrated into a complete system, ready to be deployed in different scenarios. DLR's optical 3K camera system is integrated into the research aircraft D-CODE, a modified Dornier Do228 with a digital autopilot, which will be operated as a remotely piloted vehicle (RPV) during the selected trials. The flight path planning and remote control will be executed by the ground control station U-Fly, which is connected to the RPV using a data link for command, control, and communication (C3). The RPV will provide aerial images and send the data over a separate payload data link to the ground system. Based on the aerial images and additional data, information layers relevant for crisis management will be derived and provided as geowebservices and map products using the resources of the ZKI- Tool. KeepOperational will combine the derived information layers, together with data from terrestrial traffic sensor. KeepOperational is an extension to the DLR Traffic Data Platform. The Traffic Data Platform consists of a set of services for processing and analysis of traffic data. In combination with the information layers obtained from aerial imagery, KeepOperational provides traffic analysis and route planning capabilities on infrastructure, affected by a crisis.



VWORLD VIEWTERRA SUITE

vieWTerra Evolution 4D Earth Viewer platform, developed by VWORLD, is a comprehensive offline or online GIS & Simulation platform offering a very cognitive 4D virtual Globe environment. It allows user data, entities and assets import for terrain and scenario building, access to complementary OGC layers and addition of multiple geotagged information, photos and videos, in support of predictive analysis and shared situational awareness, and usable in all phases of the Disaster Management cycle.

Nelen & Schuurmans



NELEN & SCHUURMANS 3DI

3Di is a cloud-based versatile water management instrument that enables flood forecasting and risk mapping. This solution is provided by Nelen & Schuurmans. 3Di models are fast, accurate and visual. 3Di results present flooding locations, water depths, arrival times and damages in high detail. Moreover, flood mitigation measures can be modelled for their effectiveness. Experts and decision-makers can interact with the model to simulate dike breaches, rain events and storm surges.



CrowdTasker enables crisis managers to instruct large numbers of non-institutional (either spontaneous or pre-registered) volunteers with customizable tasks, contextual information, warnings and alerts, as well as to crowdsource information from them. The received feedback is evaluated and visualized and provides managers with a detailed overview of the situation, which is used in turn to trigger adequate relief services.



MDA COMMAND & CONTROL

MDA

MDA Command & Control (C4I) system allows for efficient, real time response to tasks in the field (e.g. people in need of medical assistance), by allocating the site, allocating the resources needed and available, tasking the resources and following up the accomplishment. This can be achieved for large number of incidents simultaneously and for large number of resources to the same task, grouping them if needed. The system receives and disseminates information to dedicated apps both used by the general public as well as by the team members and volunteers.



MEDEA ADVANCING ATTOSECOND AND FEMTOSECOND XUV SPECTROSCOPY

MEDEA is an EU funded Coordination and Support Action project, the scope of which is to establish and further develop a regional Network of practitioners and other security related actors in the Mediterranean and the Black Sea region. The aim of MEDEA is to engage a critical mass of security practitioners and actors including first aid responders, border guards, national police, civil protection teams, humanitarian workers, defence entities and other interested stakeholders in efficient cooperation with cross-discipline entities from other countries. The expected result would be the effective response to all security threats common to the Mediterranean and Black Sea region. The requirements from all four communities will be featured as inputs (regional operational needs) in the Mediterranean and Black Sea Security Research and Innovation Agenda (MSRIA).



WWU - C³M HUMLOG SUITE

HumLog Suite is a performance assessment platform that serves logistic processes in crisis management. It can operate on both current operational logistics networks and fictional (planned) network configurations. The functionality comprises strategic planning support as well as tactical and operational decision support by assessing and comparing the network performance under given situations and realistic management actions.

DAREnet

DARENET FLOOD RESILIENCE IN DANUBE REGION

DAREnet is a network of practitioners dealing with flood resilience in the Danube River Region, supported by a continuously evolving multidisciplinary community of stakeholders consisting of policy makers, academics, industry and many more. The DAREnet project will enable Flood Management Practitioners in the Danube River Region to connect and exchange with national and European stakeholders in a truly collaborative environment; to identify and analyse by and for themselves relevant innovation gaps; to translate the gaps into a joint innovation strategy to improve flood resilience in the future.



EUSDR EU STRATEGY FOR THE DANUBE REGION

The EU Strategy for the Danube Region (EUSDR) is a macro-regional strategy to address common challenges within the Danube Region and seeks to create synergies and coordination between existing policies and initiatives. EUSDR's Priority Area 5 (PA5) on Environmental Risks address the challenges of water scarcity and droughts by supporting project elaboration and implementation in the field of drought management and climate change related spatial planning, by disseminating scientific results to anticipate regional and local impacts of climate change through research. In addition, PA5 addresses the challenge of floods by continuously providing support to the implementation of the Danube Flood Risk Management Plan, coordinated by the ICPDR and in line with the EU Floods Directive. Finally, EUSDR PA5 supports the assessment of disaster risks in the Danube Region and encourages actions to promote disaster resilience, preparedness and response activities.



Swedish Civil Contingencies Agency

MSB EARLY RESPONDERS INNOVATION ARENA

The Early Responders Innovation Arena project's main objective is to enable a living lab, focusing on first response organisations – rescue services, ambulance and police. The Living Lab will be based on a combination of virtual, simulated and real-life events and environments. In the living lab, innovators, researchers and those responsible for civil protection and first response will be able to collaborate in real-life and safe conditions to foster development and innovation in the field.



FIRE-IN EUROPEAN FIRE AND RESCUE INNOVATION NETWORK

The first European Fire and Rescue Innovation Network. FIRE-IN has been designed to raise the security level of EU citizens by improving the national and European Fire & Rescue (F&R) capability development process. FIRE-IN addresses the concern that capability-driven research and innovation in this area needs much stronger guidance from practitioners and better exploitation of the technology potentially available for the discipline. Fire-IN argues that this is to be achieved by practitioners more effectively coordinating on operational needs, on available research and innovation, on standardisation, and on test & demonstration and training. Further, Fire-IN claims the need for the development of a common research culture that is to be achieved by better cooperation between practitioner and research/industry organisations.



Ehealthpass[™] is an innovative feature rich patient-centred platform for family health and chronic disease management. It provides health records' access, multi-language information sharing with professionals and relatives, treatment planning and monitoring, emergency support and geolocation, with a focus on patient consent and privacy. It also supports an open ecosystem where developers can utilize the infrastructure for app development.



UMEÅ UNIVERSITY SAFETY & SECURITY TEST ARENA

Safety & Security Test Arena is a large regional collaboration project in northern Sweden with multiple benefits. The project will result in better collaboration between first responders at large accidents and mass injury sites, new opportunities for development of products and services in the safety sector, and ultimately a Test Arena for development and evaluation.

SIM·CI

SIM-CI SIM SAFE

SIM SAFE is a cloud based platform which enables users to simulate and visualize the impact of multiple trends and disruptive events on societies and their critical infrastructures. The platform is provided by SIM-CI.



Winners of the CMINE Innovative Solutions Contest

DRIVER+ EXHIBITION DISCOVERING OUR KEY OUTPUTS

Permanent parallel programme - 19 & 20 February 🕑 Lobby, Floor -1 💡



The development of a scientifically based trial methodology, the DRIVER+ Trial Guidance Methodology (TGM) for conducting trials of Crisis Management solutions and the Test-bed Technical Infrastructure (TTI) that underpins it



Reports on the large-scale Trials based on the TGM and TTI conducted in Poland, France, The Netherlands and Austria set up to assess technological and other crisis management solutions in realistic scenarios



The Training Module supports the TGM, so that future Trial organisers can attend an in-depth, interactive training course instructing them what the Test-bed offers and how it can be used.



The DRIVER+ Portfolio of Solutions: an online database of crisis management technologies



The establishment of an open, cooperative information-sharing network, the Crisis Management Innovation Network Europe (CMINE)



The establishment of a network of DRIVER+ Centres of Expertise to ensure the sustainability of project outputs

CMINE THE CRISIS MANAGEMENT INNOVATION NETWORK

THE CMINE APP IS NOW AVAILABLE CRISIS MANAGEMENT UPDATES ON THE GO!

The CMINE app provides a much easier and quicker access to the features of the main platform:

- Information about crisis management events wherever you are
- Instant crisis management news
- Direct information about related projects and networks
- Possibilities to collaborate around special interests
- Facilitated meetings with peers through live status updates
- Identification of other experts dealing with crisis management via the directory
- ... And much more!





Learn the latest on upcoming crisis management events Collaborate around special interests Stay up to date with crisis management news Tailor your profile to boost your visibility



The CMINE app is free! To download it, go to:

- the App Store: https://apps.apple.com/us/app/cmine/id1495658537
- Google Play: https://play.google.com/store/apps/details?id=hivebrite.cmine.app

If you have any questions, please contact the CMINE helpdesk on cmine-helpdesk@projectdriver.eu

#DRIVINGINNOVATION SHARE YOUR VIEWS

THE ADVANCED CRISIS MANAGEMENT CONFERENCE ON SOCIAL MEDIA JOIN THE CONVERSATION

Are you planning to post on social media during the DRIVER+ Advanced Crisis Management Conference? We invite you to use the hashtag #**DrivingInnovation** to be part of the conversation surrounding the event.





These other hashtags are relevant to the topics on the agenda: #CrisisManagement #ClimateChange #InnovationManagement #EUResearch #EUResearchResults #EUProtects #EUCivPro #EUSavesLives #CapacityBuilding #Wildfires #Floods



Research Operational needs Lessons learned Shared Understanding Guidance Methodology S Knowledge base Reference implementation **Tools** Pragmatic European Test-bed Crisis Virtually connected facilities Unpredictability Management Challenges Innovative solutions Cooperation, Experien novation Disasters Crisis Labs Analysis Trial-driven development Portfolio of Solutions Practitioners



DRIVER+ project February 2020





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