

PSCE Conference Report

Bled, 12-13 December 2018

Public Safety Communication Europe (PSCE) Forum held its 19th conference on **12-13 December 2018** in Bled, Slovenia. The conference was collocated with three workshops:

- A workshop on the use of social media and crowdsourcing for disaster management (E2mC project)
- A workshop on cross-border interoperability between Italy and Slovenia (Alpdiris project)
- A workshop on 5G for PPDR (5G Varnost – Slovenian National Project)

Around 150 delegates from more than 35 organisations attended across the 5 days to discuss the future of public safety communications.

Overall, the PSCE conference provided a platform to get informed on PSCE activities, also fostering effective interactions between public safety actors and the user, industrial and research communities.

The conference in Bled focused on the following topics:

- **Practitioners' training and education**
- **Smart Communications**
- **Wildfires: How to be better prepared?**

The conference also featured two collaborative sessions on the use of serious gaming for practitioners training and on how to define appropriate use case scenarios for PPDR.

Exhibition and poster area

An exhibition and poster area which allowed organisations, project and initiatives to showcase their products/services in public safety communications to relevant stakeholders, lasted throughout the conference. NEC, ISKREATEL, TELEKOM SLOVENIJE and INTERNET INSTITUTE presented their organisations/company and the services they offer in the field of disaster management and public safety communications. On the other hand, the E2mC, FORENSOR, DARENET, BEAWARE, CIPROVOT and HEIMDALL projects held a poster in the dedicated area.

A detailed overview of exhibitors and posters is available [here](#).



Figure 2. Poster Area

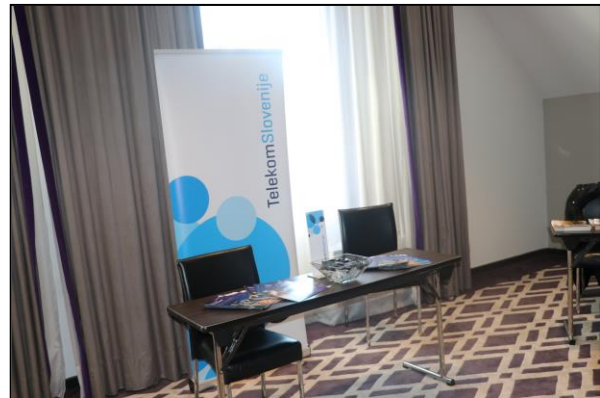


Figure 1. Telekom Slovenije Booth

The conference was kicked-off by a short word and a warm welcome from Harold Linke, PSCE President and Mr Darko But, director of the Slovenian Civil Protection Authority. This was followed by a short presentation by Ms Katja Banovec-Juros on the duties and scope of activities of the Slovenian Civil Protection Authority (ACPDR).



Figure 3. K. Banovec-Juros - ACPDR presentation

Focus 1. Practitioners' Training and Education

This first topic was kicked off with a presentation by Luka Novak, from the Municipality of Ljubljana and a presentation on ***emergency management, training and preparedness in the city of Ljubljana***. Mr Novak started by providing facts about the city of Ljubljana and the basic tasks handled by the municipality as far as training and disaster preparedness are concerned. It was namely emphasised that training was carried out through The Union Civil Protection Mechanism Training Programme (ModTTX), and based on real-life data and case studies. The scope of activities of the municipality included working with the public, first-aid and prehospital treatment and preparedness workshops as well as first psychological and social aid.

This was followed by a presentation titled: ***Innovating our exercises: scaling testing infrastructures to enable all European actors to plug in to highly realistic multi-discipline & large scale simulations*** carried out by Tim Van Achte and Yves D'Eer from Campus Vesta. The speakers presented the scope of activities undertaken by Campus Vesta namely emphasising the way end-users are involved, the types of exercises and the in-house exercise facilities. The presentation also highlighted an example of international exercise, zooming in on a recent so-called "Joint Activity" in Brussels. This is a multidisciplinary international exercise where additional teams plug in to existing exercise settings across member states. Examples where real social media platforms are used were further discussed, as well as settings where are used realistic online simulation platform, to train emergency management & coordination teams in the usage of social media as an invaluable data source.



Figure 4. Campus Vesta Presentation & H. Linke

Interactive Session 1: Serious Gaming for Practitioner's Training

The Practitioner's training and Education presentations were complemented by **an interactive session on *Serious Gaming as a way of enhancing Crisis Management training***. Kenny Meester introduced the audience to a new type of exercise, designed as a serious game, which provides a new way to introduce people to the field of disaster management in general and information management in particular. It was emphasised that experience is a crucial ingredient to be effective during emergency responses. However these experiences can be hard to acquire. Gaining field-experience happens ad-hoc, full-scale exercises are costly and practice sessions can be predictable. This is why serious games can offer a balance between realism, scalability and learning objectives and may constitute an effective way to train first-responders and crisis management practitioners. Furthermore serious games can be used to engage the public and raise awareness or facilitate testing and experimentation. Using various examples and a hands-on demo Kenny Meesters discussed different considerations in designing serious games such as the use of technology, game mechanics, learning objectives and storytelling.



Figure 6. Kenny Meesters - Serious Gaming



Figure 5. Interactive Session - Serious Gaming



Figure 7. Interactive Session - Serious Gaming 2

Interactive Session 2: How to define appropriate practitioner-focused scenarios

Emerging technologies are bringing new possibilities for PPDR organisations but the benefits of such innovations are not always clear. To better understand their potential, Monika Buscher (PSCE) set up a collaborative session on how to develop relevant practitioner focus scenarios for broadband communications. The session took the form of collaborative exchanges between participants and all collected outputs were presented on the following day.



Figure 10. Interactive Session - PPDR Use Cases



Figure 9. . Interactive Session - PPDR Use Cases 2



Figure 8. . Interactive Session - PPDR Use Cases 3

Focus 2. Smart Communications

The first presentation under this topic was carried out by Ana Robnik from ISKRATEL. Ms Robnik presented *Safe City Solution as a Foundation of Smart City*, emphasising that Safe Society and Well-preserved Assets in smart cities are the key objectives and achievements for governments, mayors and policy makers. Therefore it is essential to provide a safe city digital twin, a comprehensive and intelligent view of what is happening in the city by unifying and integrating the events and contextual information from heterogeneous information sub-systems into a single information space, by visualizing such information and open communication path to other services and applications.

The second presentation titled *Smart Communications for volunteer engagement* was done by Camilo Palacio, Austrian Red Cross. It was emphasised that we are confronted with a society that is increasingly willing to help and volunteer but a decreasing level of loyalty to life-long-relationships and engagements with organisations. There is a trend to project-orientated, short-term and with short-notice volunteering and other forms of engagement (micro-volunteering, online volunteering). The Austrian Red Cross has evolved his innovative model for using spontaneous volunteers, to a novel way for communicating and interacting with volunteers and the population by using its smartphone app. The Team Österreich app allows proper communication with the population, providing alerts and safety tips and also, giving them the opportunity to support the relief activities.

For the third presentation, Harold Linke (HITEC) discussed *The Internet of Public Safety Things* or 'IoPST' and the way they can provide the public safety community with new tools to help the emergency services acquire additional information for the emergency services to increase quality of service or help carry out their duties in a more efficient manner. The speaker presented a variety of use cases such as the use of sensors in a communications network to provide early warning information of catastrophic events or emergency situations as well as the fact that IoT can offer new capabilities in remotely accessing devices or systems, e.g. cameras, sensors, locks, equipment, etc. When these devices are connected to the internet or via a dedicated radio or cellular network, remote monitoring, diagnostics and control can become a reality. It was concluded that implementing innovative applications, and making use of dedicated IoPST hardware networks will give the emergency services potentially lifesaving tools that they can use.



Figure 12. C. Palacio - Smart Volunteer Engagement



Figure 11. A. Robnik - Safe City / Smart City

Focus 3. How to be better prepared against Wildfires?

Jose Luis Diego (Valencia Police) presented the **benefits of an enhanced Decision Support System against Wildfires**. The speaker introduced the presentation by using concrete examples of recent wildfires which had a disastrous effect, and provided related statistics. Recent wildfires in Greece, Portugal and Sweden were highlighted and their implications. Against this background, the speaker presented the DSS put forward by the BeAware project. The solution proposes a holistic approach to the realization of crisis management frameworks supporting all the phases in an emergency sequence and offers an integrated solution to provide early warnings, risk assessment, aggregated analysis of multimodal data and decision support to the authorities in order to plan and coordinate the most effective response with the available resources.

This was followed by a presentation on **Firefighting concepts based on aerial support strategies** by Alexander Almer, from Joanneum Research. The speaker emphasised how Innovative and efficient Forest Firefighting Concepts are becoming increasingly important due to the growing number of forest fires worldwide and also in Europe. Innovative support strategies focuses on a near real-time situation picture, modules to control resources such as mobile rescue teams, vehicles/equipment on the ground, airborne fire-fighting units efficiently and interactively for different control strategies for the various types of forest fire. The key use cases are near real-time monitoring of vulnerable, affected as well as extinguished forest areas and support improve the in-situ management, mission evaluation and resource management.

The topic was punctuated by a presentation on **UAV-based solutions against wildfires** by Kyros Yakinthos from the University of Thessaloniki. It was emphasised that the rapid advances in aeronautical industry, electrooptical systems, and mission planning algorithms have allowed for the design and large-scale production of Unmanned Aerial Vehicles (UAVs), capable of carrying a wide variety of missions. Wildfires surveillance and support in corresponding rescue operation is a perfect example of a mission that can be accomplished by UAVs. The design and development of such UAV systems was presented, together with suggested operation scenarios based on the very recent and shocking incident of the Mati disaster at Attiki in Greece. Emphasis was given on the pros and cons of the UAV-based solutions for wildfires, against existing conventional solutions.



Figure 14. K. Yakinthos - UAV against Wildfires



Figure 13. A. Almer - Aerial Support Strategies

Other Presentations: Semantic Interoperability

Snjezana Knezic and Martina Baucic from SPLIT University presented the latest PSCE White Paper on **Semantic Interoperability**. It was emphasized that, during the disaster response phase semantic interoperability has always been an important part of the communication between first responders. Even though both technology and standardisation are constantly evolving, this part of the communication is still very challenging. The response phase usually includes many first responders using their own terminology and corresponding semantics. Existing standards related to disaster and emergency management help, particularly if they are created by international organisations but countries' first responders still rely on their own semantics. Against this background, the speakers discussed the system developed by the EPISECC project, which allows end users to enter, use and update their own semantic structures and performs automatic semantic matching of the their concepts. A brief explanation of the service's concept as well as developed structures and processes was given.



Figure 15. M. Baucic - Semantic Interoperability