NEXT GENERATION
CRISIS AND DISASTER MANAGEMENT (CDM)

In an event of crisis, to react efficiently and effectively, whilst of course having a well-trained team and good preparation, an adequate overview of the situation and close coordination of all actors involved are required. At the Center for Digital Safety & Security of the AIT Austrian Institute of Technology, we develop innovative digital solutions which enable organizations to make informed decisions faster and to implement these decisions more effectively.

This includes concepts and solutions for the collection and exchange of data, the extraction of information such as exchange of experience and knowledge between the organizations involved. As a result, we are building a broad technological expertise, which ranges from IoT sensor networks on interoperability and data rooms to data analytics and mobile solutions.

AIT CDM SOLUTIONS
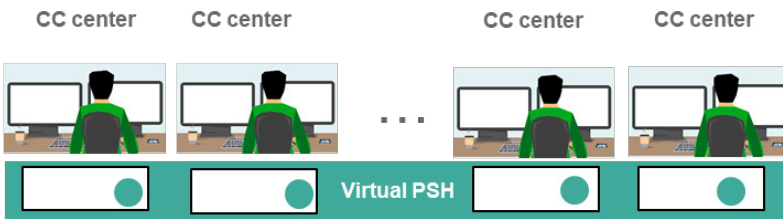
ENVIRONMENTAL MONITORING & DATA MANAGEMENT
- UWEDAT – high-performance sensor network
- EMIKAT – emission data management & analytics
- Climate adaptation & mitigation tools for smart cities & regions
- Remote sensing analytics

PUBLIC SAFETY
- PSH Public Safety Hub – resilient communication for C2/CDM Systems
- Crowd Tasker – community interaction & alarming
- PoS – Portfolio of Solutions / database for public safety solutions
- CBRN Sensor Systems

AIT PUBLIC SAFETY HUB (PSH)

CC center   CC center   CC center   CC center

Virtual PSH

HIGHLY FLEXIBLE AND INTEROPERABILITY OF IT-SYSTEMS IN HETEROGENEOUS MULTI-STAKEHOLDER ENVIRONMENTS

The distributed AIT Public Safety Hub (PSH) platform enables the seamless exchange of information between federated systems of different organizations (both military and civil IT systems). The PSH improves the cooperation of emergency services, volunteer organizations and citizens for the effective management of disasters. This is even more important because when coping with disasters, processes between the operating task forces must be harmonized and synchronized.

The special technological architecture of the new platform includes the secure and flexible data exchange between most diverse organizations without creating numerous dependencies and without creating single points of failures. Such a modern and flexible communication platform can easily bundle separate competencies and ensure a highly secure and efficient cooperation of different organizations in crisis situations. Fully automated data exchange between the information systems is thus ensured. This will make it possible in the future to cope with major events and catastrophes even faster and to send help to the right places even more quickly and precisely.

MAIN CHARACTERISTICS OF THE PSH SOLUTION

- Interoperability: The PSH enables a seamless exchange of information between systems and enables unified data and system control.
- Flexibel: Vendor and data format independent platform, which supports an incremental rollout.
- Resilience: Ability to work in network partitions in case of network failures by redundancy of functionality and inspection functions for failover cases.
- Scalability: Through vertical as well as horizontal scalability – reflecting organizational structures -, the system can be adapted.
- Information Distribution: With intelligent addressing and routing at application level, the data is only distributed to the required recipients

KEY FEATURES

- Highest economic solution for establishing interoperability
- Standardised interfaces
- EMSI, CAP Common Alerting Protocol (OASIS)
- EMSI Emergency Message Structure of the exchange of Information (ISO)
- NATO compatible

FURTHER INFORMATION

- www.cooperative-digital.solutions/psh/

SELECTED REFERENCES

- Austrian Crisis and Disaster Management System in Styria
- EU project Driver+ training event in Austria https://www.driver-project.eu/
- Austrian eGovernment award 2020

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