

PSCE Conference

Brokerage Event

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Human factors contribution

Human factors contribution in the development of the Concept of Operations and tools

Topic: SEC-01-DRS-2016: Integrated tools for response planning and scenario building

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Motivation:

- Challenge is to develop more efficient coordination among actors working with disaster risks → better coordination is needed
- Realistic scenarios with collaborative management need to be defined
 - Our team develops risk scenarios (emergencies) → analyses collaboration network needed for each risk scenario → defines full-blown scenarios (emergencies and their management)
- When developing technology (for demonstration in operational environment or for making the system complete and qualified)
 - Our team provides functional requirements for technology development from the usage (collaboration) point of view
 - Our team provides UX target setting
 - Our team provides co-development of tools with users, including evaluation with end-users



Expected Results

- The project has an appropriate model of cooperation among all actors involved in disaster risk, based of realistic multidisciplinary scenarios (including relevant risks and the corresponding models of collaboration)
- The project has appropriate tools to be used in the field and in the offices (prototype demonstrated in operational environment or system complete and qualified)
 - The tools provide relevant functionalities, needed in work
 - The tools are usable and accepted by end-users

What we have:

- Researcher team in VTT with multidisciplinary human factors expertise (psychologists, industrial designers, social psychologist, cognitive scientist, engineers)
- Virtual lab in VTT for demonstrating the usage of tools in various contexts
- Mobile and wearable interfaces
- Also other VTT expertise available, e.g. socio-economic impacts (CRISMA) and climate change (TOPDAD)

Our experience:

- Experience on EU projects
 - For example COPE (2008-2011) which developed emergency response management command and control performance by combining a human factors approach with technology development; see <http://cope.vtt.fi/>
- Experience on safety-critical domains
 - Projects for example in the *nuclear domain (ConOps, user interface development, V&V), for the *emergency response centres (user requirements for new tool development), *telecommunication (trust on autonomous functionalities)

What we are looking for:

- Coordinator and partners (emergency professionals, technical experts...)
- Also other topics in Security section are relevant