



Project ProFiTex



Project Title: Providing Fire Fighters with Technology for Excellent Work Safety

Acronym: ProFiTex

Duration: 01.10.2009 – 31.09.2012 (36 months)

Funding: European Union, 7th Framework Programme

Partner: RWTH Aachen University

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Mission Statement

The aim of project ProFiTex is to support fire fighters in their perilous work with a system that supplies mission-relevant information without overwhelming the fire fighter.

The design approach will be user-centered with tests starting at an early point in the project to gain maximum user acceptance. Professional fire fighters will be involved from the beginning of the project to ensure, that the system will be tailored to their needs. Project ProFiTex will continue several aspects of the work of the EU-funded project wearIT@work.

The ProFiTex system may comprise electronic devices like an infrared camera, localisation sensors and a human-computer interface device integrated into the fire fighters jacket. Since wireless communication is difficult over long distances and through several walls of a building, an innovative method to transmit information will be applied. A security rope carried by fire fighters during a mission shall be equipped with data transmission capabilities. This allows information to be sent outside to the command post and back to the fire fighter. By monitoring several parameters of the fire fighters condition like his movement pattern and stance, problems can be



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detected immediately. The fire fighter himself is supplied with the possibility to navigate even in smoky environments thanks to the infrared camera and the positioning system implemented into his equipment. Localized information (e.g. "door", "victim") can be fed into the system using the garment-integrated human-computer interface device.

Information will be displayed to the fire fighters, their group leaders and the commander outside the building. The amount and type of information supplied will be carefully chosen, considering the physical danger and psychic stress fire fighters are opposed to.

Work safety of fire fighters shall be increased, thus lowering the number of work-related accidents and casualties. Fire fighting missions will be more efficient using the system.

Contact

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