

First responder **A**dvanced technologies for **S**afe and efficien**T E**mergency **R**esponse

**Field trials of emergency alerting, ad-hoc networking and smart textiles at the Afidnes Training Center (ATC)**

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**Emergency responders' disaster preparedness:**

The EU-funded FASTER project will examine the impact and the role first responders can have in cases of disasters. It will take into consideration the entire lifecycle of emergency preparedness and response, including the planning, logistical support, maintenance and diagnostics, training and management. The ultimate aim of the project is to further the European Union's ability to respond to emergencies.

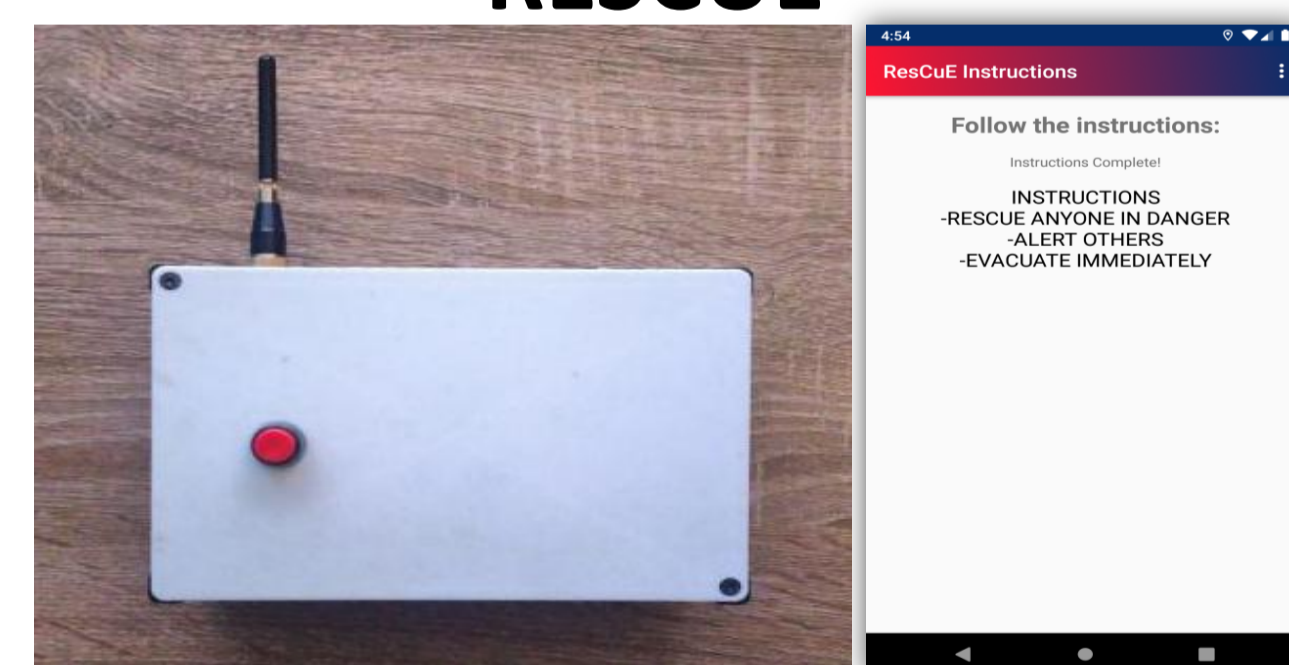
Duration: May'19 – Apr'21  
Participants: 22 (EU, Japan)  
Budget: 7,315,375 €

**Technologies Tested:**

MOvement Recognition for firSt rEsponders – **MORSE**



RESilient CommUnication Equipment – **RESCUE**



Smart Textiles Framework – **STF**



**Field Trials: 21-22 Oct 2021 @ ATC**

**Context/Scope:** ASR1-ASR3 operations

**Scenario 1:** Wide-area assessment

- Set up UCC, map the area, locate victims

**Scenario 2:** Rapid SAR (outdoors)

- Building search (fast), victim extrication

**Scenario 3:** Focused SAR (indoors)

- “Dark room” & smoke, IR navigation



**Operational Considerations:**

**MORSE:** Non-vocal team alerting

- Short-range intra-team emergency alerts

**RESCUE:** Reliable & secure messaging

- Secure message broadcasting
- Ad-hoc networking and data relaying

**STF:** Biometrics monitoring

- Detect stress, fatigue, accident (fall), etc.

**Results – Conclusions:**

- ✓ Technologies are easy to integrate within existing USAR procedures (ASRx).
- ✓ The project's components (MORSE, RESCUE, STF) are small and durable enough to be incorporated in existing First-Responder field gear.
- ✓ Health monitoring and message relaying between First-Responder members and team leader using “fog” networking (no WLAN) is very useful in real-world operations in disaster areas.
- ✓ The components offer faster operational capacity, safety and victim-oriented team deployment in the field.
- ✓ Next-gen USAR technologies will make operations much safer and more efficient.