

BRIDGE SWARM

Concept Case



Overall Goal

BRIDGE SWARM (Situation aWare Resource Management) combines resource management (resource identification, involvement, task assignment, status reporting) with technology for achieving situation awareness, in order to:

1. Provide first responders with a continuous overview of the resources in their immediate surroundings (including human resources);
2. Communicate the state and context of human resources (e.g. their condition and health, environmental conditions like temperature, background noise, etc.);
3. Provide better context-aware predictions of activities of resources, e.g. estimated times of arrival for moving resources.

Main Functionality

Smartphone Functionalities:

Get insight into:

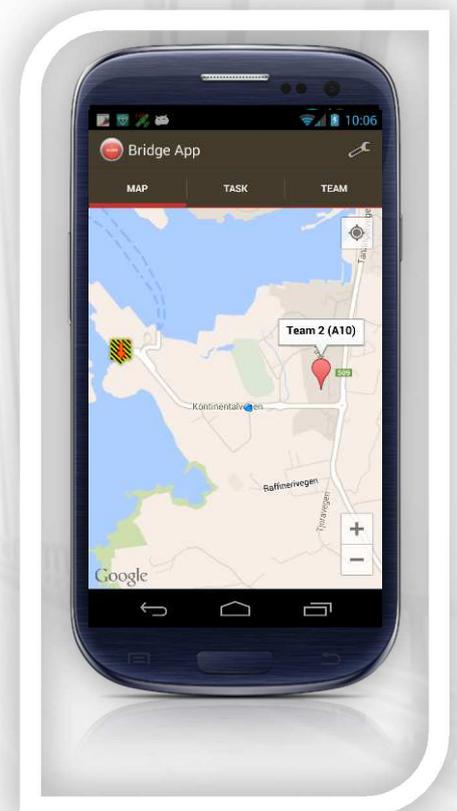
1. Location of the incident;
2. Location of command/control posts;
3. Location and status of surrounding resources;
4. Location, assigner and status of my current task.

Inform others about:

1. My task status;
2. My personal status.

Direct (emergency) voice contact with:

1. (Assistant) Incident Commander;
2. Any other person (configurable).



SWARM Smartphone application

Master functionalities:

Get insight into:

1. Location and status of resources;
2. ETA for moving resources;
3. Current tasks and their status.

Inform others about:

1. New task assignments;
2. Dynamic team formation.



SWARM resources shown on the Master

Integration with Concept Cases and BRIDGE Middleware

The SWARM Concept Case integrates the Master Table with a general purpose smartphone application through a secure publish/subscribe service provided by the BRIDGE Middleware.

Demonstrated in 3rd Demonstration, Stavanger

During the 3rd demonstration in Stavanger, SWARM will be used by the incident commander + assistants and a number of team leaders in the field for four major purposes:

1. Get insight into the current location and status of resources on the Master;
2. Assign tasks and keep track of task statuses on the Master;
3. View task information and the location of tasks and teams on the smartphone;
4. Modify personal status and the status of assigned tasks on the smartphone.

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