

Federated Control Room Support (FCRS)



Overall Goal

BRIDGE Federated Control Room Support (FCRS) makes it easier for multiple agencies to work together in complex emergency management operations. FCRS can be used to overcome the lack of interoperability between the actual (legacy) systems with which the many organizations at many locations must actually work.

Main Functionality

BRIDGE FCRS provides support for four basic tasks:

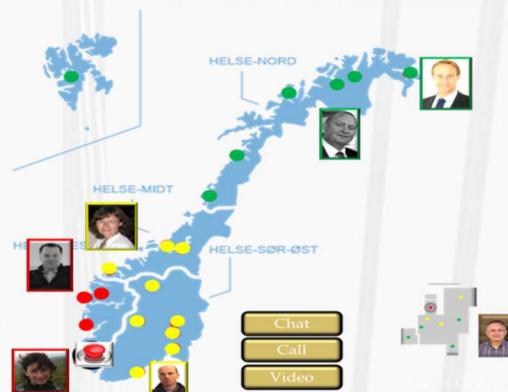
- **Team formation.** The formation of cross-agency and cross-border teams that will work together on specific processes such as air-support for fire fighting, evacuation, search and rescue, or the transportation the wounded to hospitals.
- **Team process monitoring.** FCRS allows teams and commanders to monitor the activities of simple and more complex joint processes, involving multiple agencies, roles, tasks and systems.
- **Team communication.** FCRS allows participants in teams to easily communicate within a team via multiple modes of communication as they become available by means of the infrastructure: chat, messaging, telephone, and videoconference.

BRIDGE FCRS takes a novel approach to the establishment of interoperability in ad-hoc teams across agencies and across borders. By taking a *capability-driven approach* that does *not* require joint standards and a common terminology right from the start FCRS makes it possible to achieve:

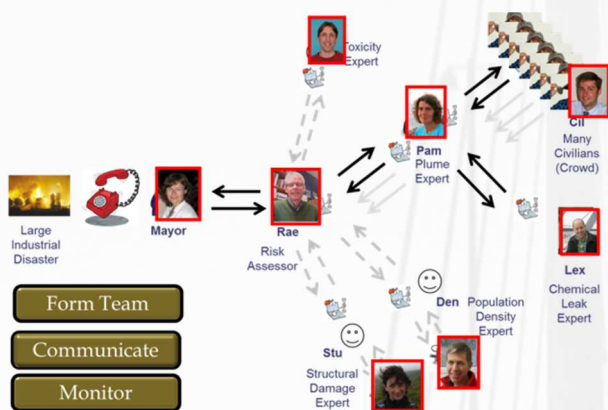
- **Emergent standard procedures** by evolving cross-agency operating procedures via practical emergence from the actually available capabilities that agencies have to offer.
- **Emergent standard terminology.** Evolve cross-agency understanding of the capabilities to provide information and to conduct work by means of emergence from actual interactions involving the request and provision of services.



The *Team Formation Module* consists of software that makes it easy for commanders to assemble a team that is completely capable of handling all specific tasks that are required to get the main job done. The key mechanism that makes this possible relies on principles of *professional self-organization*, where each participant in the team takes responsibility for acquiring all the specific support he or she needs to complete the tasks by means of smartly structured requests and responses.



Geographical View of Burn Wound Team



Process View of Evacuation Decision Team

The *Team Monitoring Module* makes it possible for any team member to see what other team members are doing and what progress they are making. This is done by visualizing the flow of the smart requests and responses at different levels of detail. This allows teams to improve or reconfigure themselves when critical services run into difficulties.

The *Team Communication Module* provides easy access to available modes of communication within a specific team and process.

Integration with Other Concept Cases

The FCRS concept consists of two main parts: the FCRS graphical user interface (GUI) and an advanced FCRS engine. The engine provides the advanced business logic to configure and monitor teams. The GUI makes it easy for end users to easily make use of this powerful logic. Via the BRIDGE middleware FCRS can make use of all other concept cases to conduct operations, depending on the scenario.

Features Visible in Demo III

The FCRS concept emerged in response to the need for overall interoperability of all developing concepts, at the level of business logic and human interaction. The concept will be validated during demo III and fully presented at the final demonstration. The FCRS concept is now in fact an innovative *exploitation activity* of Thales due to multiple commercial interests in follow-up to the R&D in BRIDGE.

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