

# Search and rescue

## Full situational awareness for all stakeholders and involved agencies



What if every second counts?

### The mission:

- Civil search and rescue
- Military search and rescue
- Support in the event of disasters
- Multi domain situational awareness

### Cross-agency collaboration:

- Maritime 
- Public transport 
- National air policing 
- Drone detection 
- Air traffic management 
- Emergency 

Search and rescue (SAR) is the search for and provision of aid to people who are in distress or imminent danger in different types of terrain.

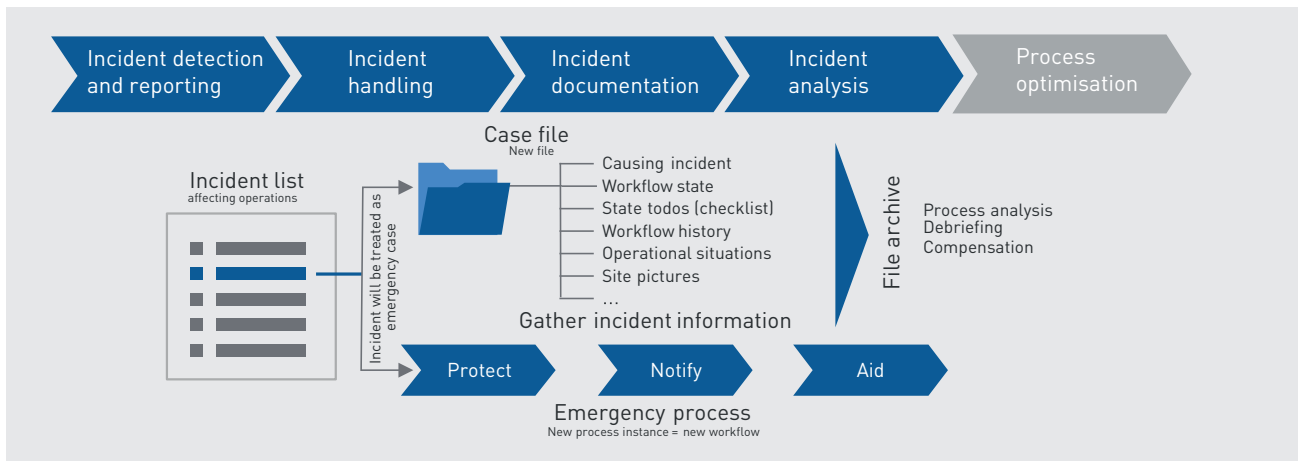
In SAR, secure communication and full situational awareness are the keys to success. All relevant information from multiple data sources must be combined and displayed in a common operational picture, either on fixed HMI's or on mobile devices to ensure fast decision-making and optimal coordination between all involved entities.

One of the main challenges in SAR missions is the time-effective dissemination of relevant information to the involved stakeholders. It is vital also to avoid overloading controllers with information or requiring them to manage multiple independent systems. For the efficient coordination of all involved entities, data fusion and synchronisation into one system are essential to keep the focus on the mission. Furthermore, the capability of data sharing across borders is also an important success factor, as such missions can be international incidents as well.

The Frequentis solution was built around the operator's needs and enables the seamless data fusion of all necessary information from different systems or data sources (air-, ground- or maritime-related) into the SAR solution. This integrated information is displayed in a common operational picture which is strongly intercorrelated with the incident management component of the system. The system centralises and organises management procedures, enhancing the quality of every SAR mission by accelerating alert, response and communication procedures.

If different SAR centres are equipped with identical systems and connected to each other, geo-redundancy can be provided. An intelligent resource planning module provides an overview on available resources and supports rapid deployment.

Frequentis' radio network secures the communication between parties. Organisations that handle medium and large areas of responsibility with a corresponding volume of incidents need an integrated incident management solution to support search and rescue operations.



### System features:

- SAR agenda
- COSPAS-SARSAT SPOC
- 24/7 operations
- No limitation in operator positions and remote sites (radio locations)
- Automated collation of incident-related data into a common operational picture
- Support for rapid and accurate decision-making
- Intelligent resource management
- Configurable incident form elements
- Debriefing and reporting
- Legal recording

The Frequentis Incident and Crisis Management System helps control centres across all domains responsible for incident response to coordinate and document their related activities. The system's rich feature set is mainly designed to place relevant, actionable knowledge right at the operator's fingertips for rapid, informed decision-making and 360° collaboration.

The system supports information gathering and presentation, alerting and recording for the operational management of incidents and emergencies by focusing on three vital aspects:

- Improved situational awareness through support for incident location identification and information about the incident zone, including multi-layer capabilities, for example, geo information, sensor data, places of interest.
- Unrivalled integration and visualisation of incident-relevant data through visualisation of the air picture based on civil and military radar data and other data sources, visualisation of the maritime picture based on radar data and maritime sources like S57 and AIS.
- Integration of voice communication services, enabling click-to-dial functionalities directly from the system.

The broad resource management module allows operators to quickly and easily assess resource availability in real time.

Configurable incident form elements guide the operator through the incident, without limiting freedom of decision or ad-hoc use of operational knowhow. Rapid incident handling is ensured through dynamic contact lists for automatic and semi-automatic alerting of emergency services and further staff needed in the SAR mission.

The common operational picture module is a GIS-based interface which visualises the incident data on a configurable map, allowing a fast overview on the current situation and an accurate analysis for further operational steps.

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