MULTI-HAZARD COOPERATIVE MANAGEMENT TOOL FOR DATA EXCHANGE, RESPONSE PLANNING AND SCENARIO BUILDING





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WHAT IS HEIMDALL ABOUT?

It is a cooperative multi-hazard management tool which provides data exchange, scenario building and situation assessment functionalities for preparedness and response planning in relation to wildfires, floods and landslides

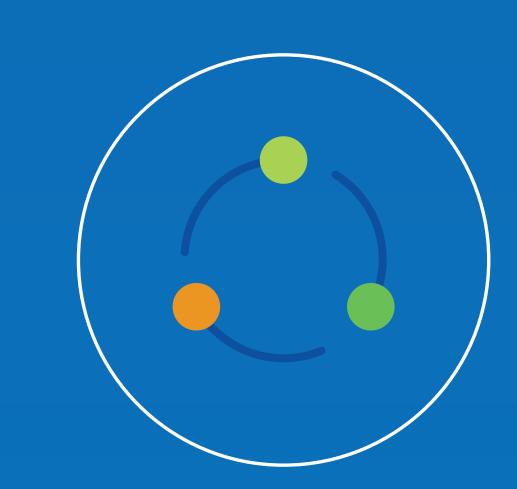
WHY IS HEIMDALL IMPORTANT?

Bearing in mind that climate change is amplifying natural disasters impacts, intensity and duration of extreme weather events in Europe and worldwide, we consider a need to build up a tool in order to foster knowledge and data exchange to cope with complex crisis situations which require participation, coordination and cooperation of multiple first-responder organizations and international aid.

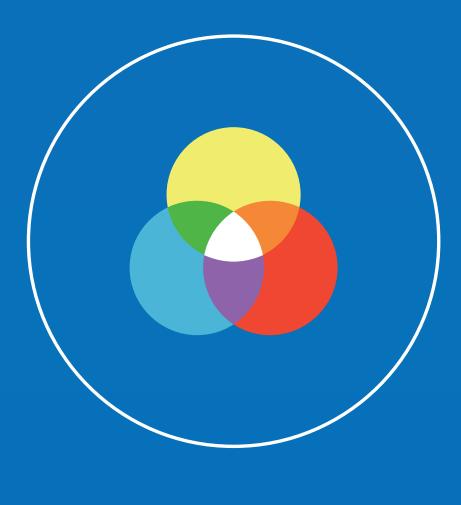
WHAT ARE HEIMDALL OBJECTIVES?



Improve data and information access and sharing among the involved stakeholders, including the population and first responders in the field, for emergency planning and management.



Provide a better understanding of the emergency situation by using advanced methods for realistic multi-disciplinary scenario(s) building, risk and vulnerability assessment, information sharing and response planning.



Recognise the value of information by advanced data fusion, situation assessment and decision support tools.

PROJECT TIMELINE

May 2017

Project kick off.

July 2017

1st End User Workshop.

June 2018

1st EU Review Meeting.

October 2018

1st System Demonstration and 2nd End User Workshop. April 2019

2nd System Demonstration and 3rd End User Workshop.

June 2019

2nd EU Review Meeting.

October 2019

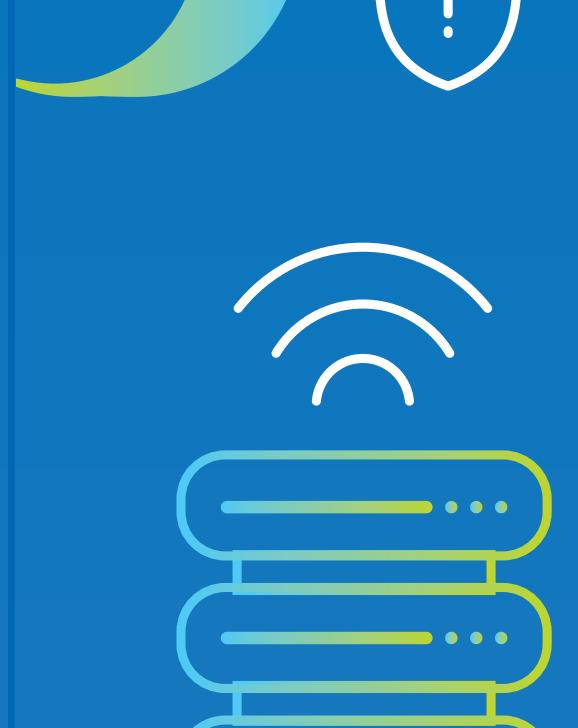
3rd System Demonstration and 4th End User Workshop.

March 2020

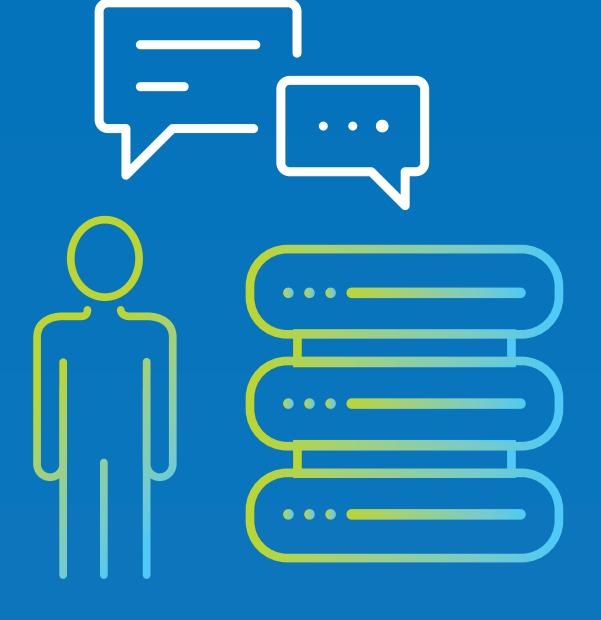
Final System Demonstration.

October 2020: End of Project

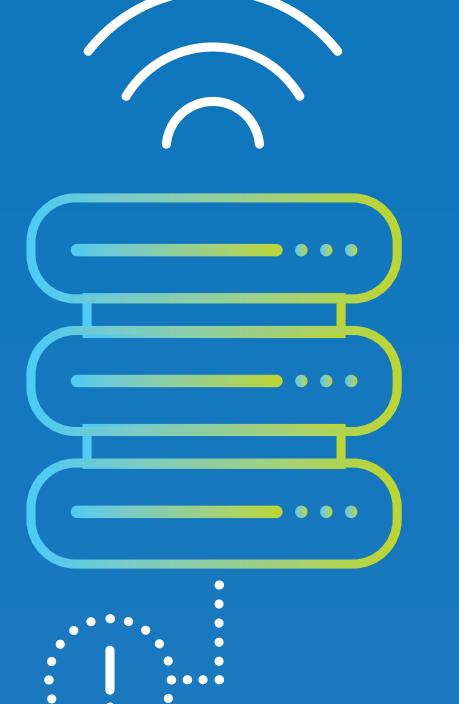
HOW DOES HEIMDALL WORK?



Different HEIMDALL data sources, drones, earth observation and landslide in-situ sensors DETECT an incident and gather information



User considers POLICIES and procedures, checked with the HEIMDALL database



Scenario MATCHING provides similar situations from the database

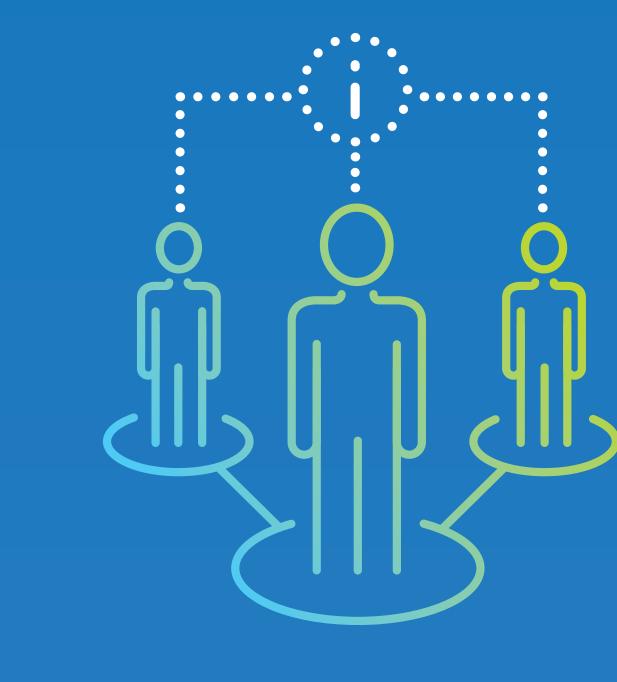
Simulation provides a

FORECAST of

the situation development



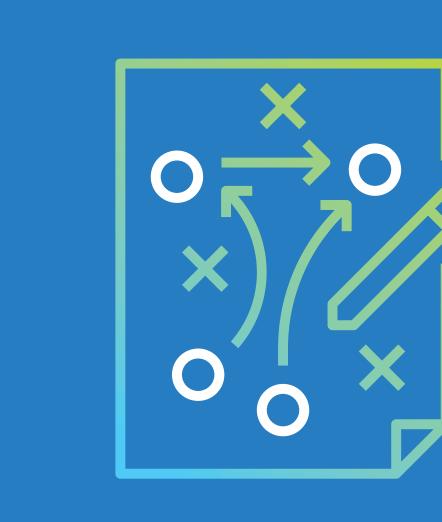
HEIMDALL decision SUPPORT tools provide information on options and contingencies



NICATION systems send relevant information to users on the field and inform the public

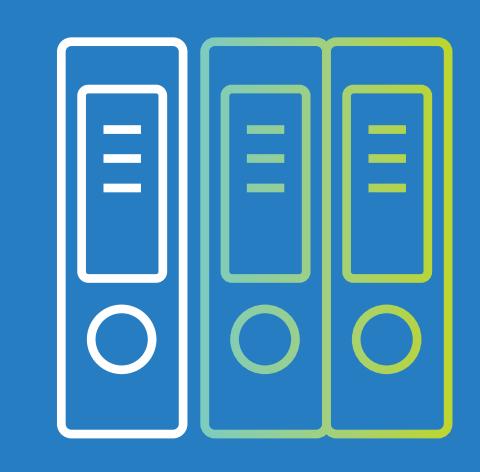


Scenarios, response plans and decisions are SHARED between organizations at national and international level



Situation and impact assessment tools help the user to analyse POTENTIAL

CONSEQUENCES and possible futures of a situation to develop the best-suited working strategy



HEIMDALLSTORES response plans, decisions taken and lessons learnt



