HEIMDALL

TEAMWORK: END-USERS AND TECHNICAL PARTNERS COOPERATING TO DEVELOP HEIMDALL
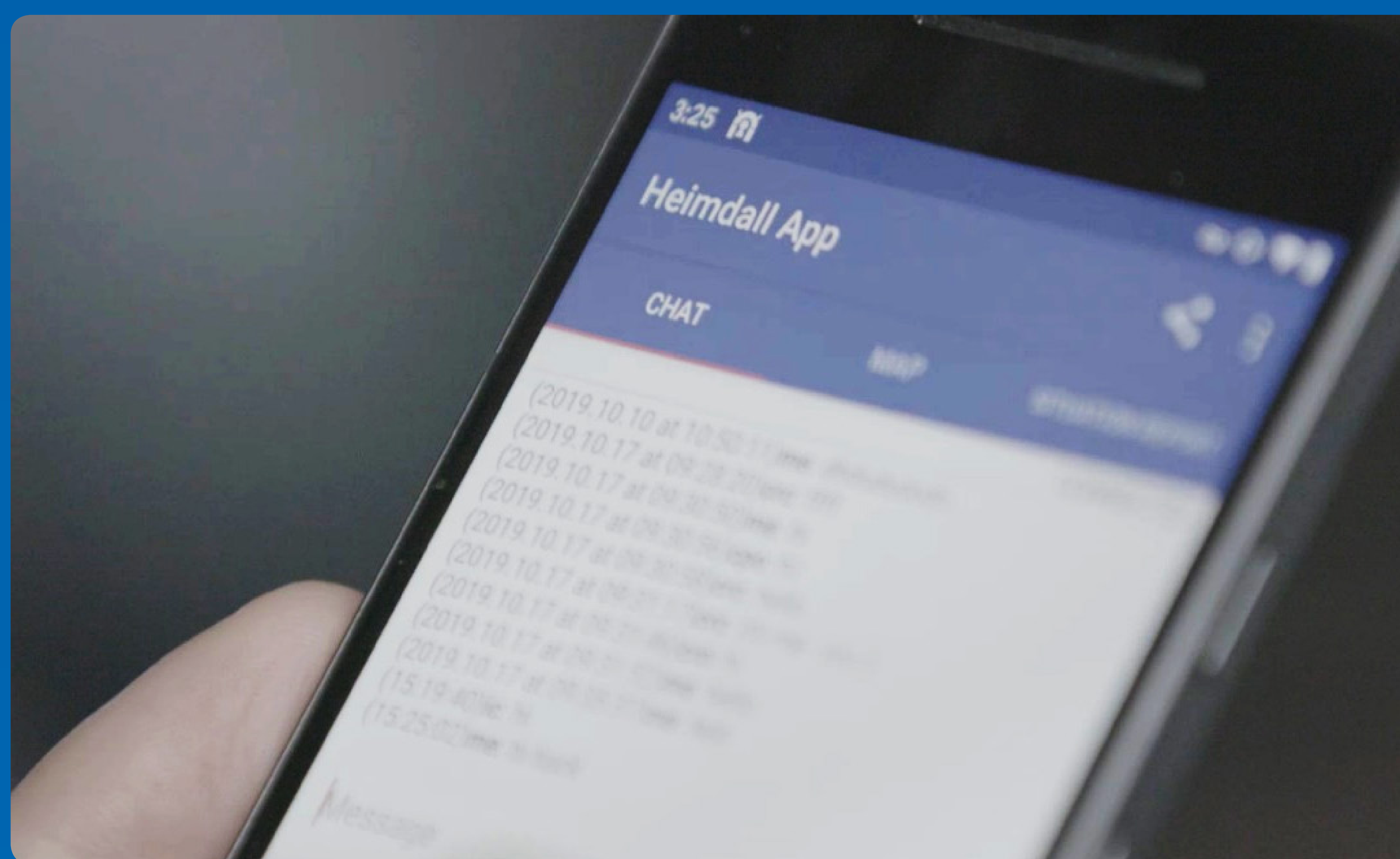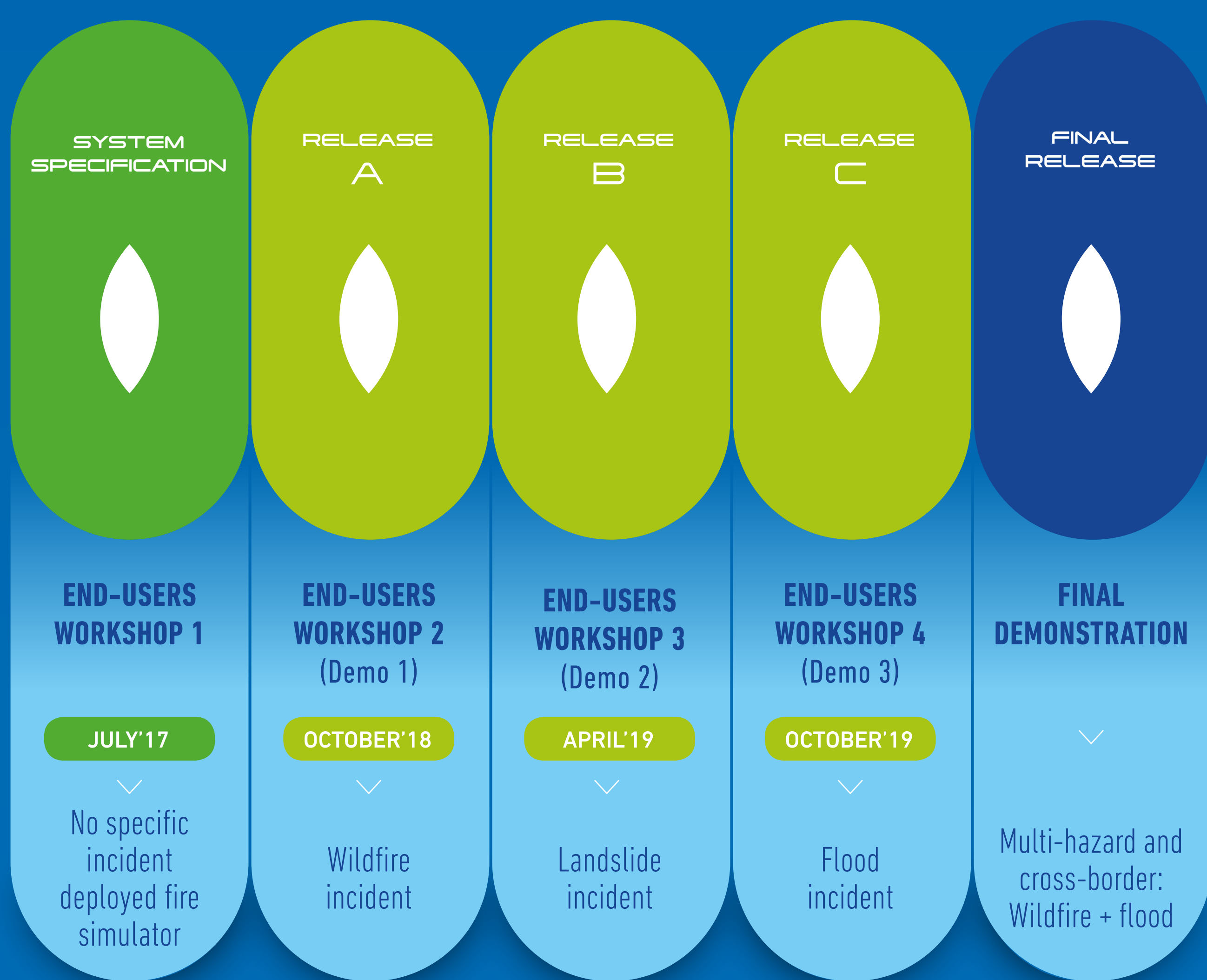
SYSTEM RELEASE PLANNING

Release planning for incremental system development includes a series of End-User Workshops to test and evaluate the preliminary system releases and gather end-user feedback until the Final Demonstration.

SYSTEM ENGINEERING

SYSTEM SPECIFICATION	RELEASE A	RELEASE B	RELEASE C	FINAL RELEASE

STAKEHOLDER MANAGEMENT

END-USERS WORKSHOP 1	END-USERS WORKSHOP 2 (Demo 1)	END-USERS WORKSHOP 3 (Demo 2)	END-USERS WORKSHOP 4 (Demo 3)	FINAL DEMONSTRATION
JULY'17	OCTOBER'18	APRIL'19	OCTOBER'19	
No specific incident deployed fire simulator	Wildfire incident	Landslide incident	Flood incident	Multi-hazard and cross-border: Wildfire + flood

COLLABORATIVE DESIGN

Cooperative, interactive and iterative efforts between HEIMDALL end-users, technical partners and Ethical, Legal, and Social Issues (ELSI) experts, all part of the HEIMDALL consortium, drive the design and implementation of effective and accepted system capabilities.
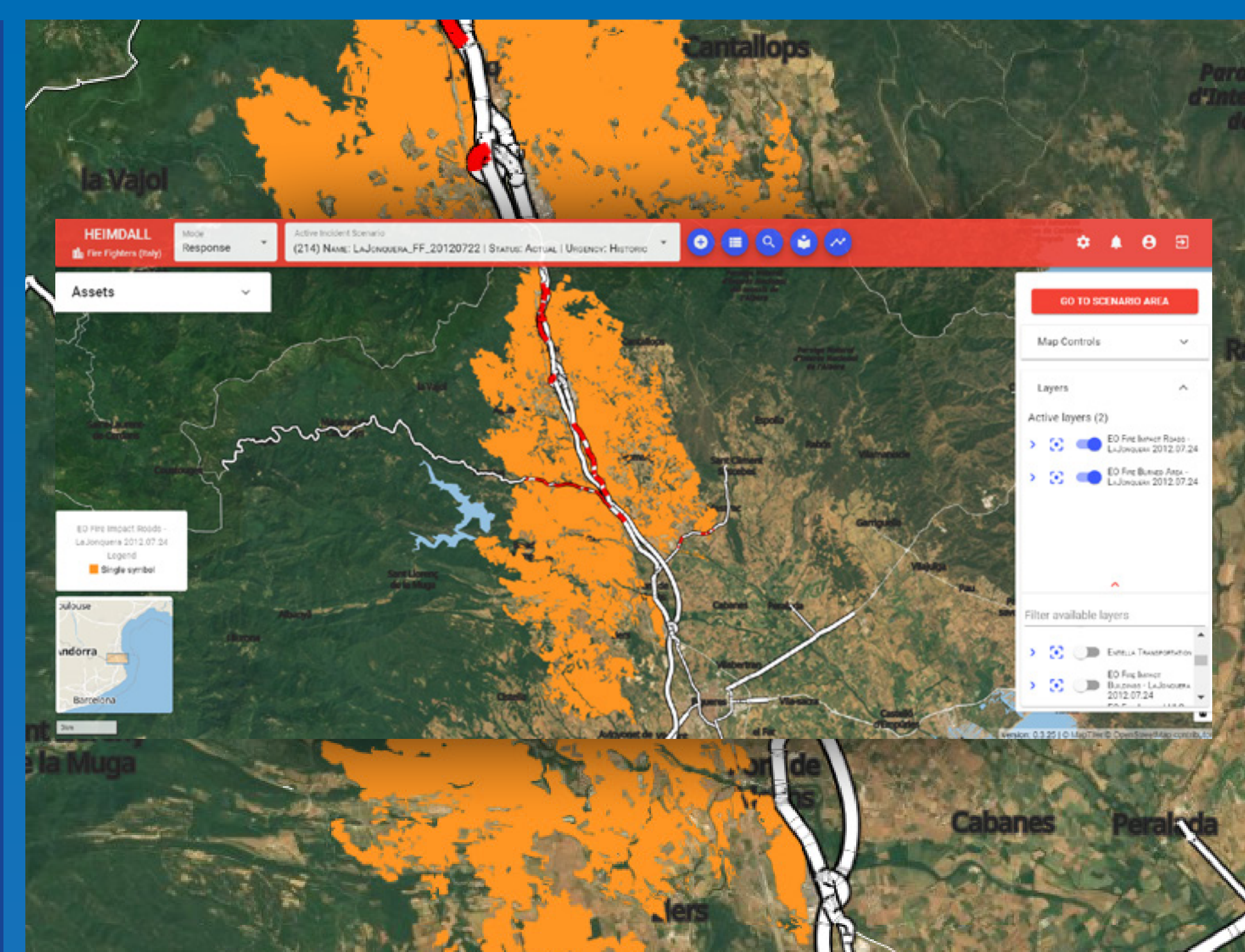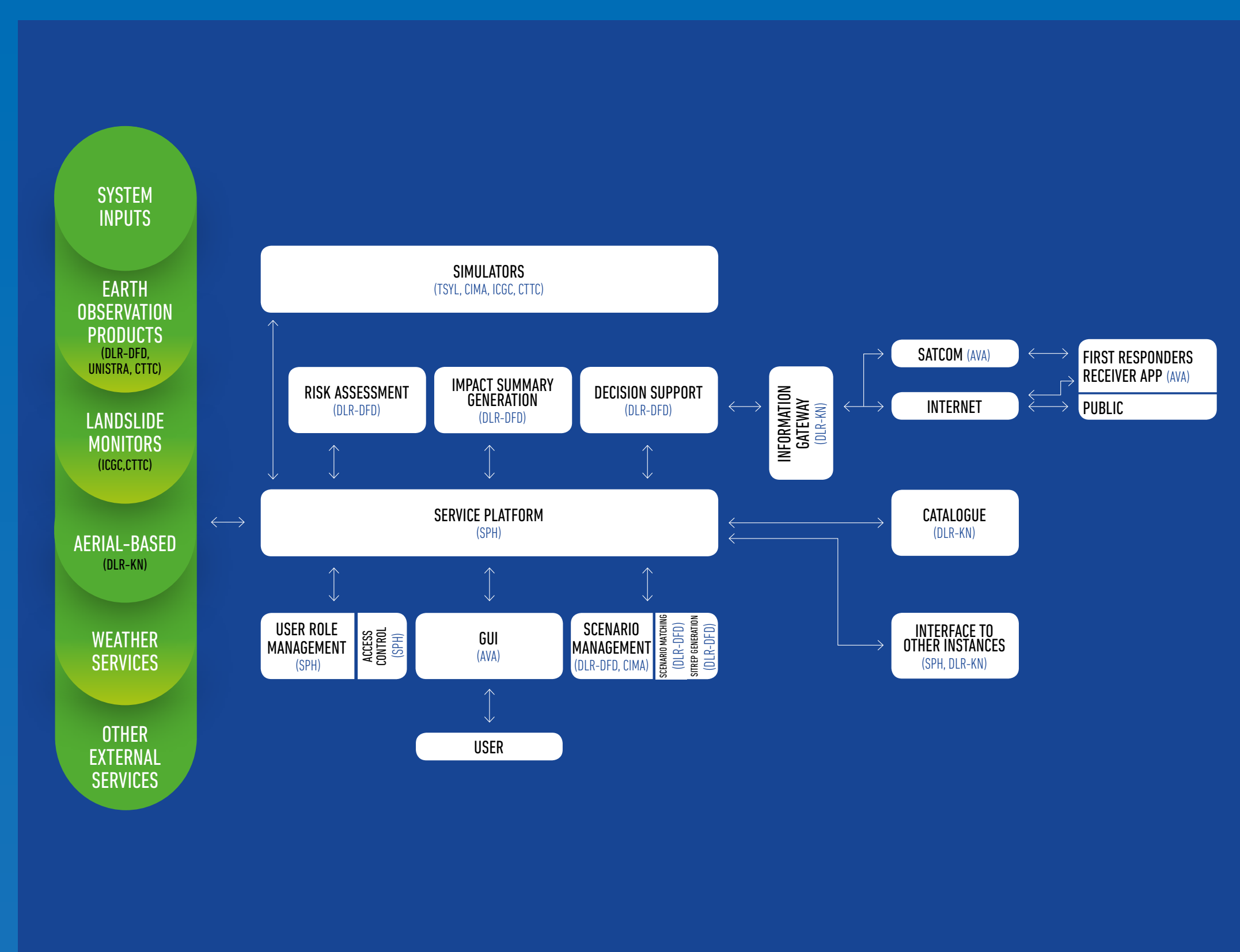
END-USER REQUIREMENTS:

Identify user and operational needs and transform them into requirements towards the development of a cooperative system to assist in decision making during hazard emergency situations, accounting for ethical, legal, and social issues (ELSI).

SYSTEM REQUIREMENTS:

Consider, analyse and translate user needs and ELSI issues into system specific requirements in order to base the design of the overall HEIMDALL platform on them.

TECHNICAL REQUIREMENTS:

Incorporate user requirements into the engineering scope by specifying sub-modules delivering products and services and accordingly coordinating them with the HEIMDALL system engineering.

DATA COLLECTION

In order to prepare the use cases that are performed during the End-User Workshops, a standardised methodology for data collection from former incidents as well as data processing and analysis is adopted.

The tactical analyst shall ensure that the data being collected and processed in steps 1 (data collection) and 2 (data processing) are enough to perform the analyses on incident behaviour (3), define the most optimal strategy and tactics to use (4), and decide upon the distribution of the available means for emergency operations (5). The final step (6) is to identify and compare potential lessons learnt from other international study cases previously analysed that have similar characteristics.

1 DATA COLLECTION
- Identify sources (e. g. emergency services, official national and regional sources), local residents, media and news
- Field work
- Compilation (e. g. meteorological data, cartography, other data)
- Processing

2 DATA PROCESSING
- Extract images from videos
- Ordering available photos and resources
- Extract information from databases and cartography
- Data corrections
- Data validation

3 RISK & BEHAVIOR ANALYSIS
- Wildfire risk, flood risk, landslide risk
- Fire perimeter, flood affectation area, landslide area
- Isochrones
- Fire behavior (speed, flame length, spotting), flood level, land mass mobilized

4 STRATEGY PRIORITIES & TACTICAL OBJECTIVES
- Description of the decision-making structure
- Strategy (objectives and decisions taken)
- Analysis of priorities, potentials & critical points
- Tactics & Operations (temporal and spatial analysis)

5 OPERATIONS AND IMPACTS
- Means deployed (temporal and spatial analysis)
- Impact on vulnerable assets (buildings, roads)
- Impact on critical infrastructures

6 APPLICABLE LESSONS LEARNT
- Comparison to other similar study cases
- What went well, what went wrong
- Achievement of objectives