



The destriero platform for multi-hazard disasters and complex crises reconstruction and recovery

Speaker / author: Sandra Frings, FHG
Co-authors: Christian Knecht, FHG
Michele Fiorini, Leonardo

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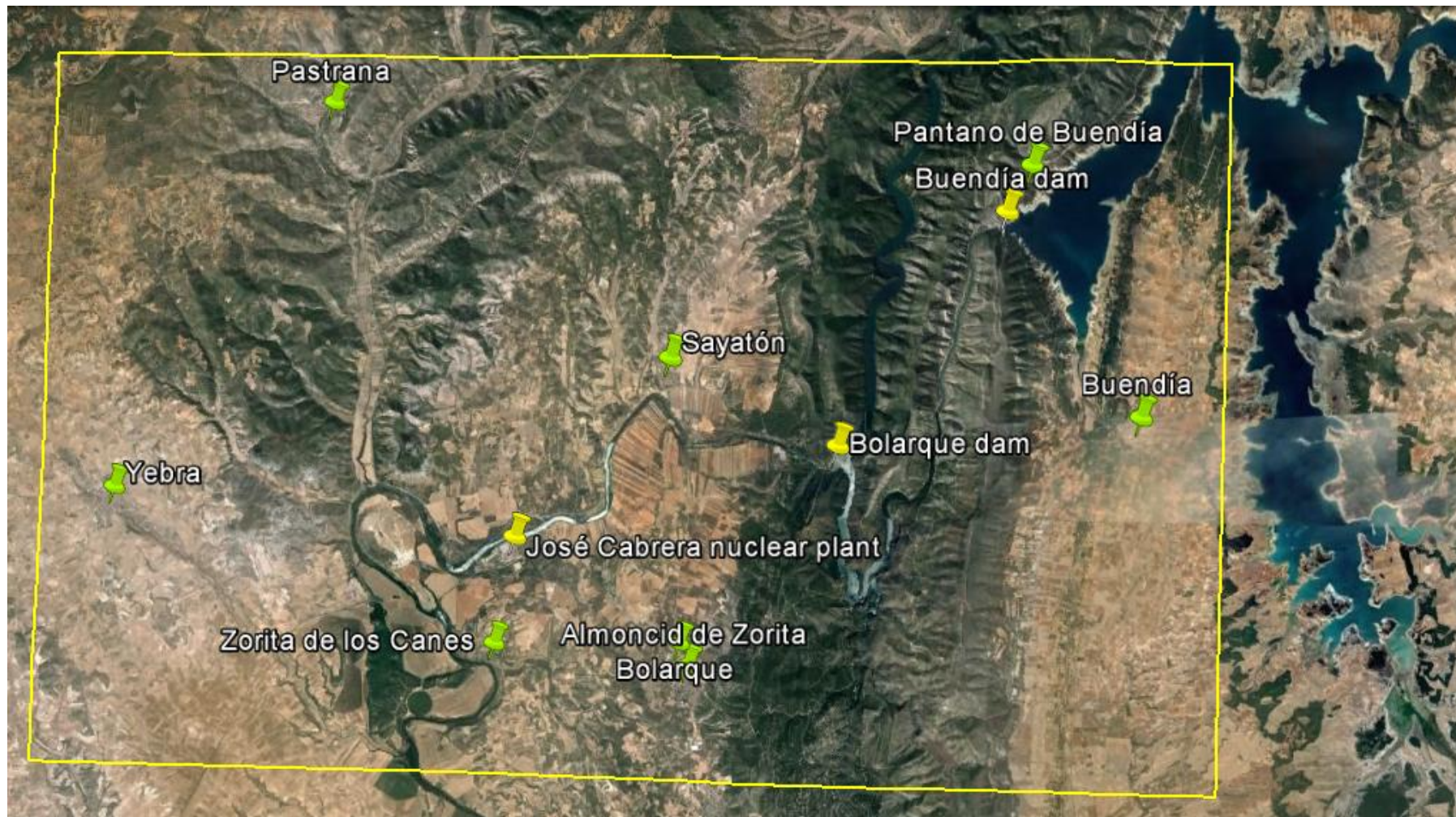
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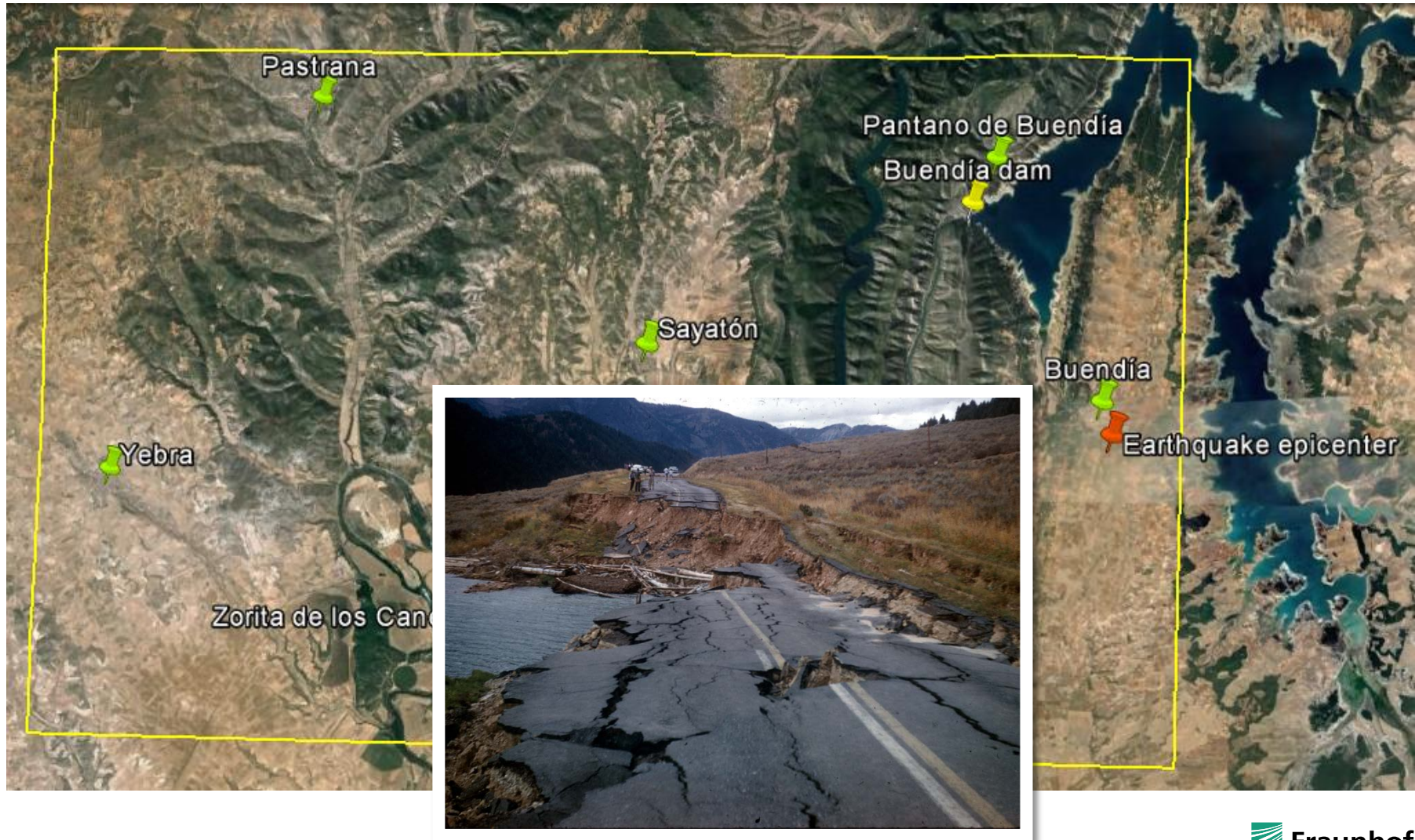
A DEcision Support Tool for Reconstruction and recovery and for IntEroperability of international Relief units in case Of complex crises situations, including CBRN contamination Risks

The event: Where – Spain



What – Earthquake near Buendía

00:00



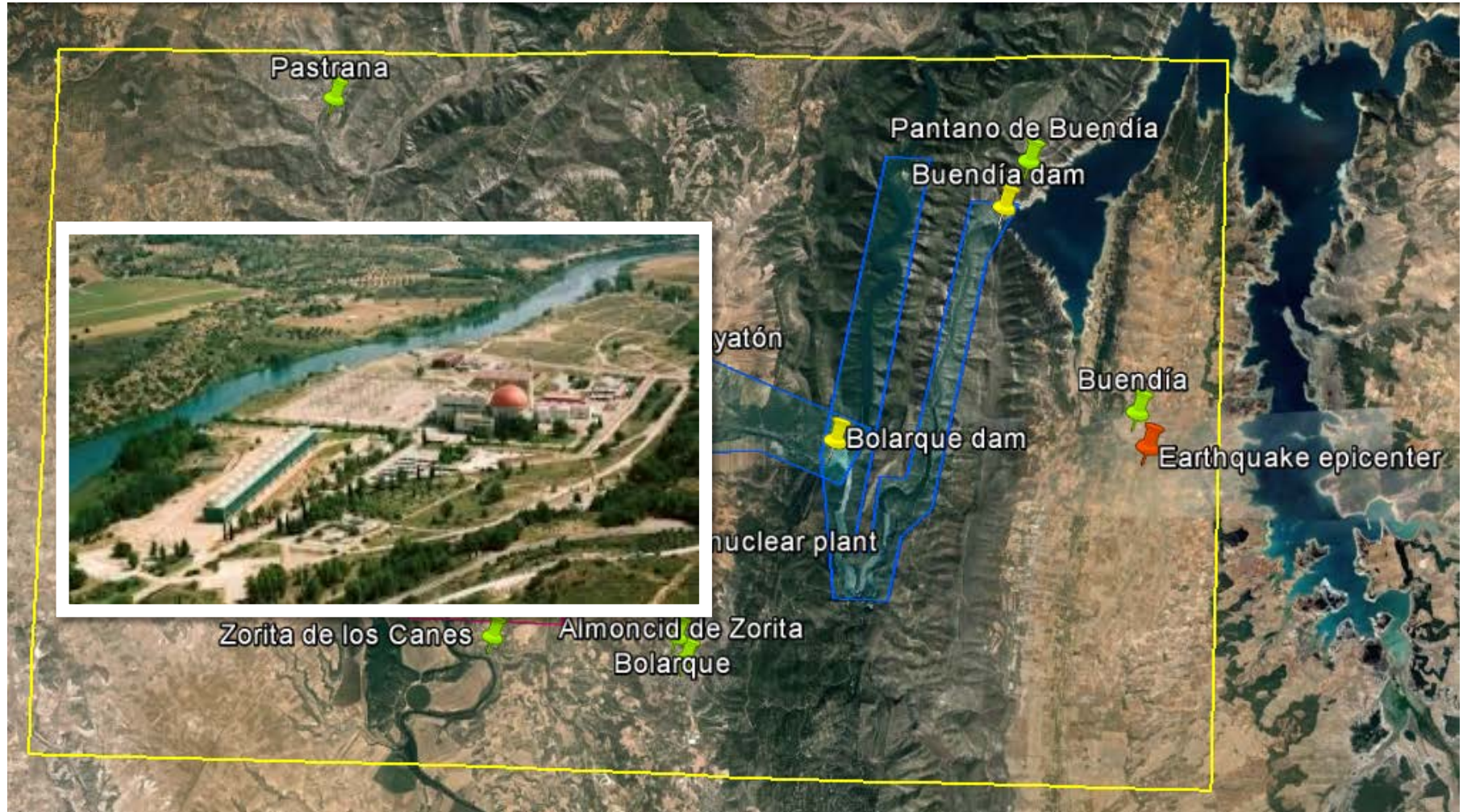
What – Break of Buendía dam and flood

00:30





What – Radiation leak at José Cabrera nuclear plant 01:30



- Our intervention starts 72 hours after the event
 - We assume that the first response has already been provided
 - Now it is time to (according to recommendations from the EU Commission and the UN Development Group):
 - get a better understanding of the situation
 - assess the impacts (e.g. nuclear contamination)
 - select reconstruction projects

The challenge (1 / 4)

- Diverse stakeholders are involved
 - Policy Makers
 - Strategic Coordinators
 - Operational Units
 - General Public

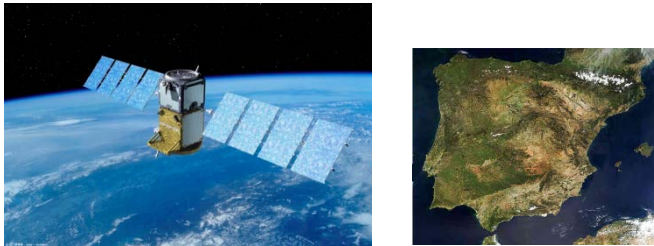

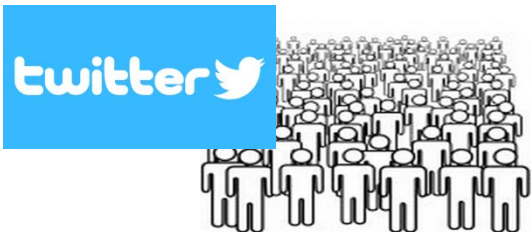



The challenge (2 / 4)

- The decision makers need to communicate and coordinate
- We need to agree on plans
 - Under pressure
 - With distributed and limited resources
 - Lack of accurate information
 - From different locations

The challenge (3 / 4)

- We need to share the same view of the situation

Diverse Heterogeneous data sources	
 <p>Satellite, maps</p>	 <p>Field (sensors, reports, ...)</p>
 <p>People (crowd-sourcing)</p>	 <p>Official sources</p>

The challenge (4 / 4)

- We need to assess the impact of the disaster
 - How to assess the nuclear contamination level?
- We need to select and prioritise reconstruction projects
 - How to select projects, based on different criteria (e.g. budget and benefits for society)?

- DESTRIERO focuses on post-crisis reconstruction and recovery planning

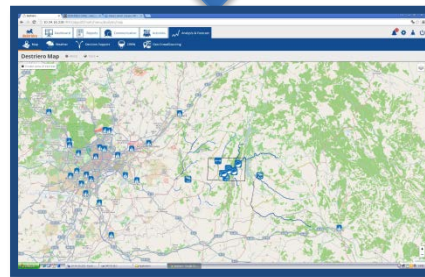
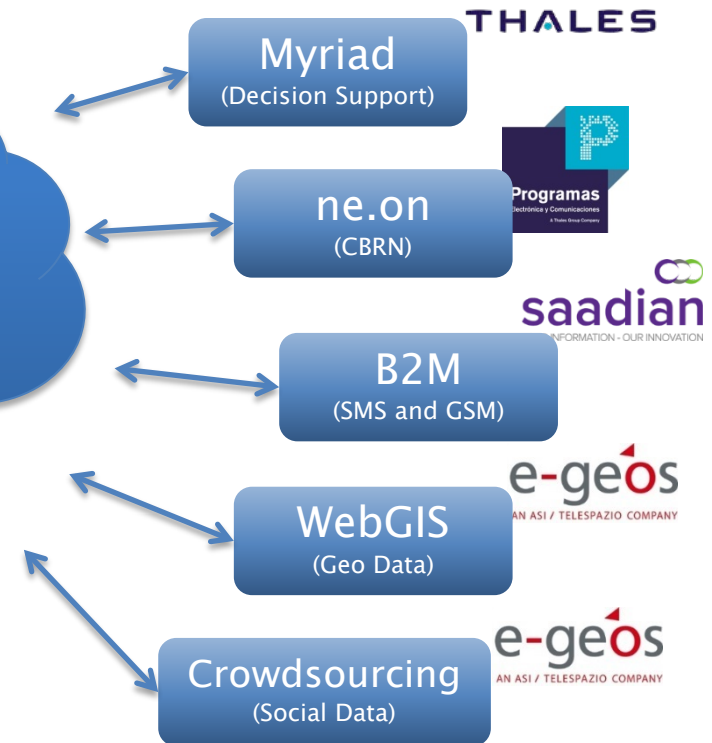


- A platform designed to:
 - Support continuous damage and contamination assessment
 - Increase and improve information sharing
 - Support prioritisation and joint decision making

Information Sources



3rd Party Systems

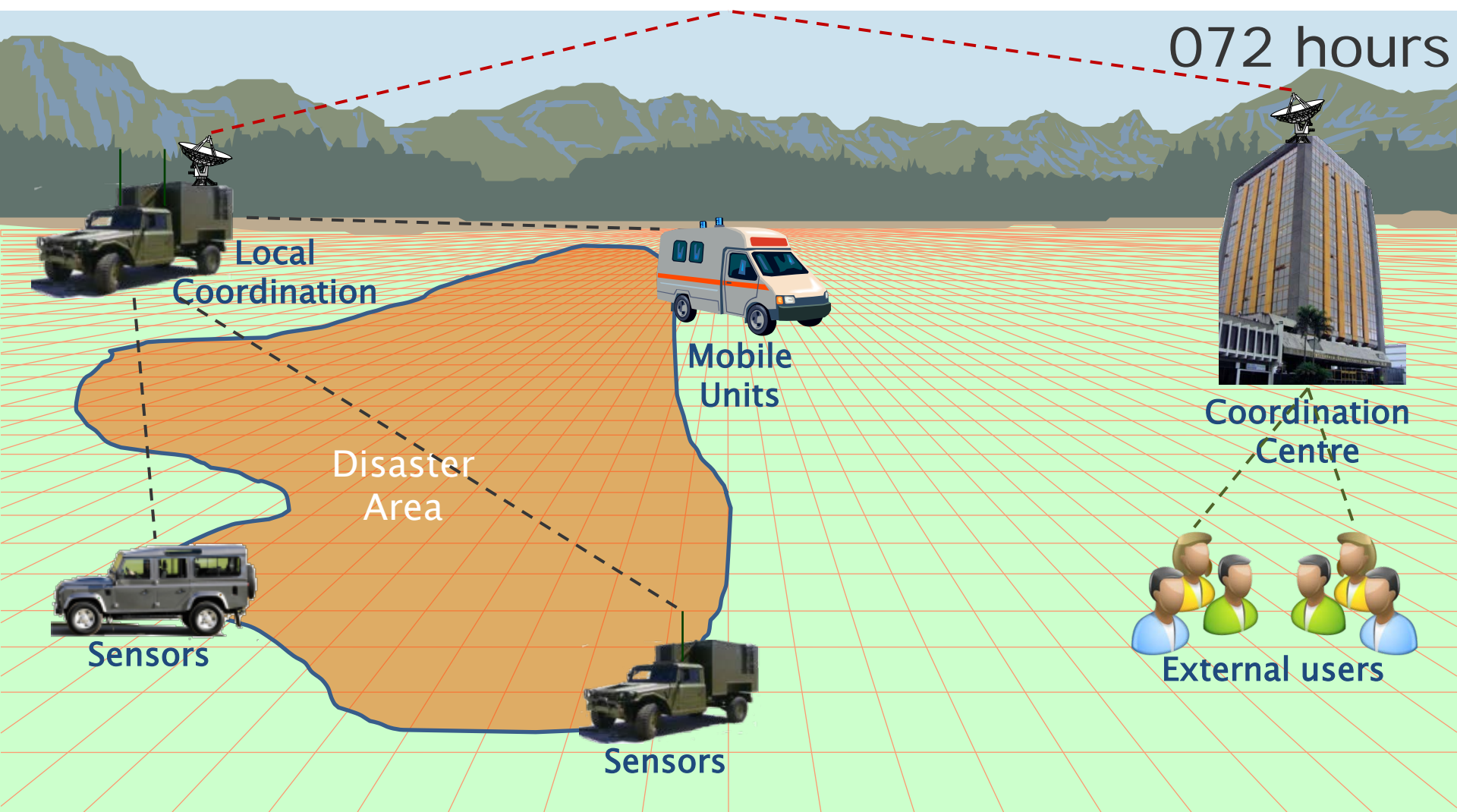


DESTRIERO Interface

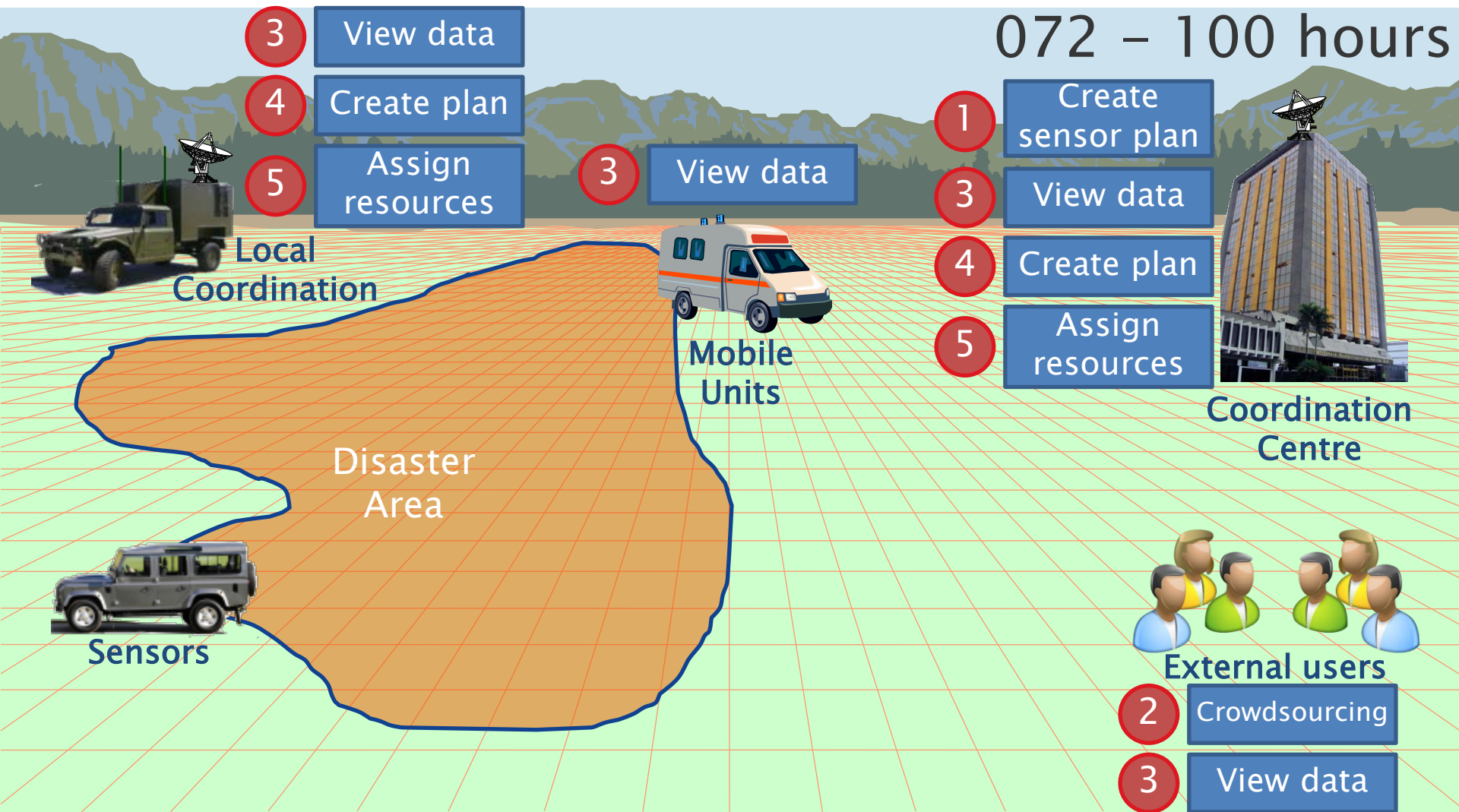
Steps for demonstration

- **Step #1: Initial Situational Awareness**
 - Create a plan to get relevant information from the field
 - View crowd-sourcing retrieved data
 - Share the data between the users
 - Create damage assessment plan in a collaborative way
 - Resource allocation
- **Step #2: Refining Situational Awareness**
 - Missing data identified: create plan to recover CBRN data
 - Use conference calls to organise the plan and set it up
 - Create and exchange reports with the coordination centre
 - Update a plan via SMS and be notified
 - Get data from the field and display it on the map
- **Step #3: Impact analysis and decision support**
 - Upload information from external sources
 - Get CBRN data from the field
 - Produce contamination report
 - Show CBRN report on the map
 - Show historical information
 - Upload reconstruction projects
 - Use the decision support tool to define a recovery strategy
- **Final Step: Creation of Damage, Loss, and needs Assessment (DaLA) report**

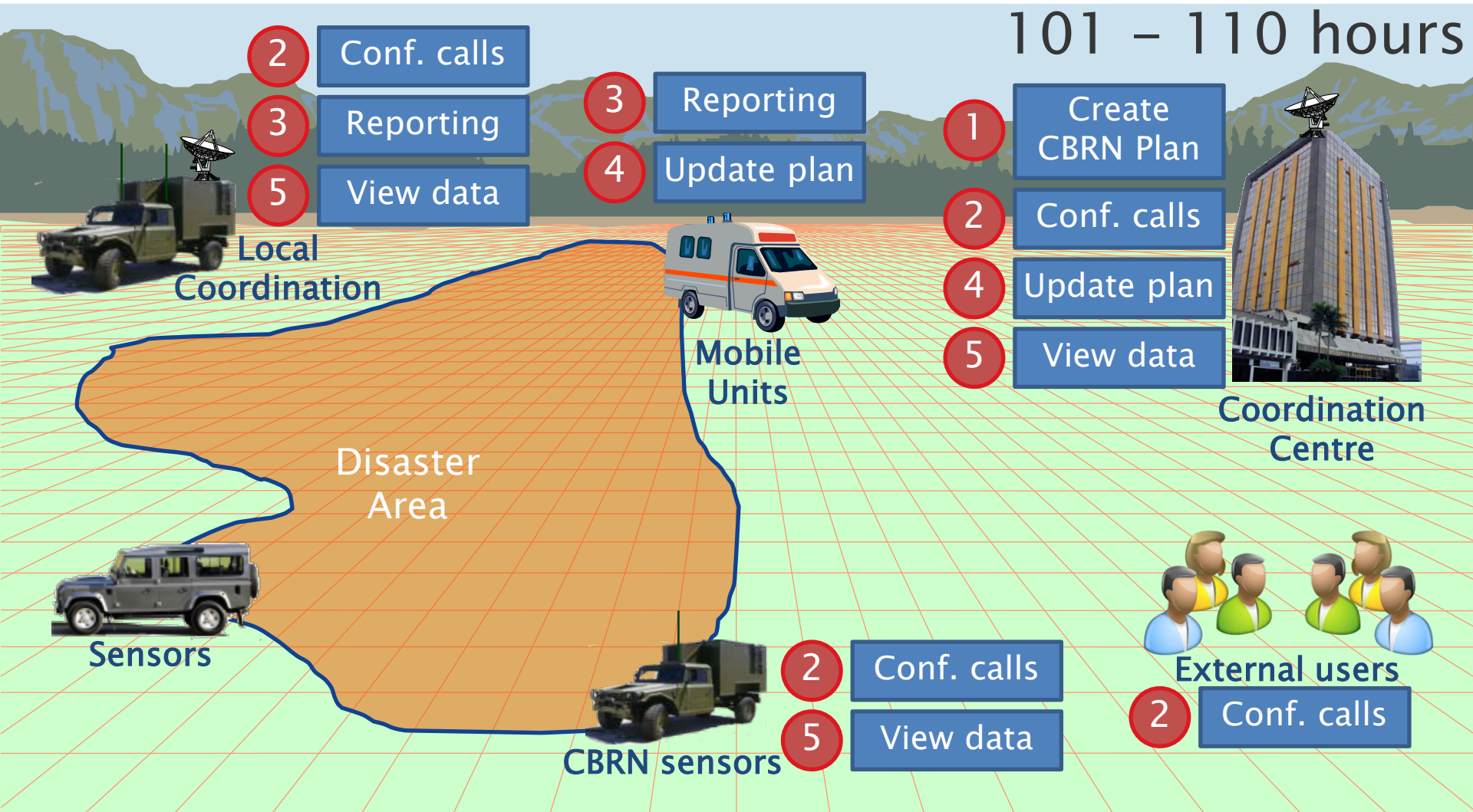
Initial Set Up: DESTRIERO system & users



Phase 1: Initial Situational Awareness

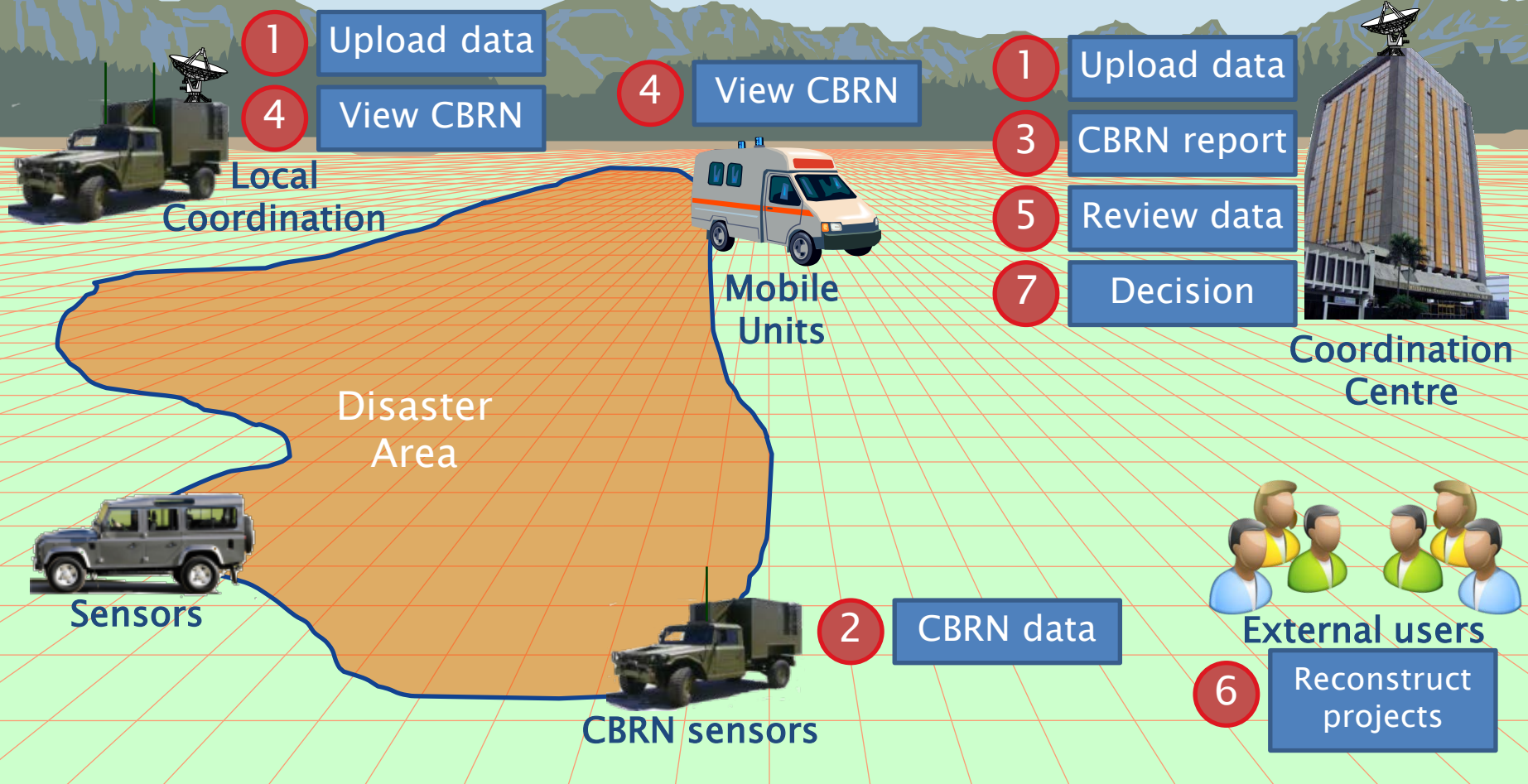


Phase 2: Refining Situational Awareness



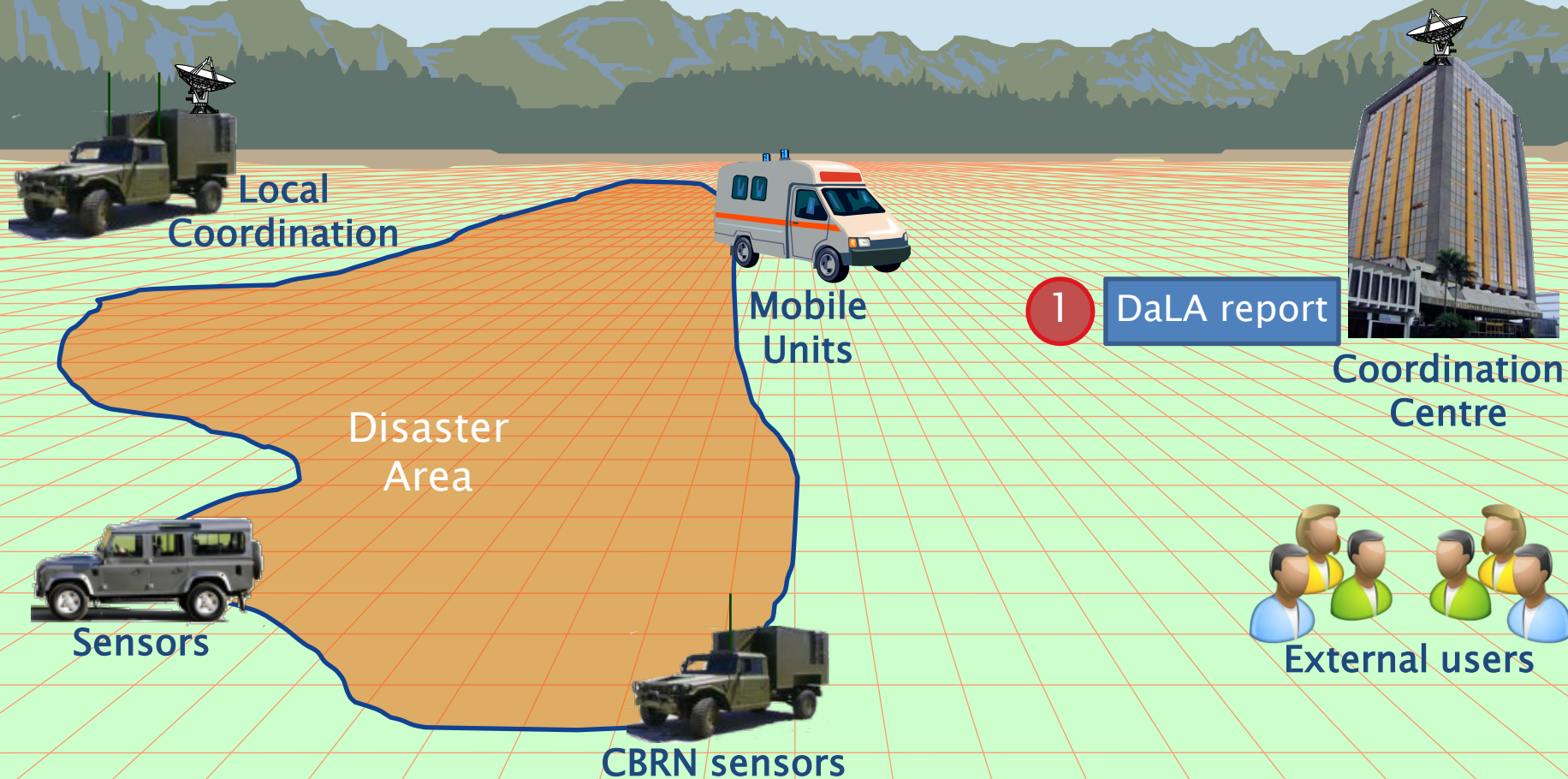
Phase 3: Impact analysis and decision support

111 – 114 hours



Final Phase: Generate DaLA report

30 Days



Welcome to DESTRIERO!

What it is

A DEcision Support Tool for Reconstruction and recovery and for IntEroperability of international Relief units in case Of complex crises situations, including CBRN contamination Risks

DESTRIERO focusses on post-crisis reconstruction and recovery planning

DESTRIERO actors

- Policy Makers
- Scientists
- Industry
- Operational Units
- General Publics

What DESTRIERO aims to offers to you

Automatic information retrieval and availability of heterogeneous sources

- Satellite data and aerial photos
- Data from the field (e.g. report uploaded by mobile devices)
- CBRN Sensors (e.g. Colibri and Falcon5000)
- Social Networks (e.g. Facebook, Twitter etc.)
- Crisis Situation (e.g. built-in processing for UNOCHA, RELIEFWeb, WHO and others)

GIS Functionalities

- Exchange and sharing of geo-spatial data
- Disaster Assessment Maps
- Spatial Analysis

Decision Support

- Evaluation of "best" fundable project alternatives for recovery and reconstruction
- Best fundable projects prioritization

Collaborative Tools (SMS and Call Conferencing)

- Possibility to send and receive SMS text Messaging through the platform
- Possibility to start call conferencing among heterogeneous organization

User Post-Disaster Activity Planning and Management

- Create a new Planned Action Activity to be conducted
- Update, modify and delete a planned activity
- Automatic conflict resolution on submitted planned activities through the identification of redundant activities planned by different organizations

Who we are

The Destriero research project

Destriero is a European research project (FP7/2007 - 2013, grant agreement n° 312721) with thirteen research and industrial partners.

Components

The table gives an overview about the Destriero HMI components and the number of changes since login.

Time since login: 00:00:03

Menu item	Created object(s)	Updated object(s)	Deleted object(s)
Reports	0	0	0
Communication	0	0	0
Tasks	0	0	0
Analysis & Forecast - Map	0	0	0
Analysis & Forecast - Weather	0	0	0
Analysis & Forecast - Decision Support	0	0	0
Analysis & Forecast - CBRN	0	0	0
Analysis & Forecast - Geo-crowd sourcing (GCS)	0	0	0

Thank You!

