




AlpSAR

ALPINE SEARCH AND  
RESCUE

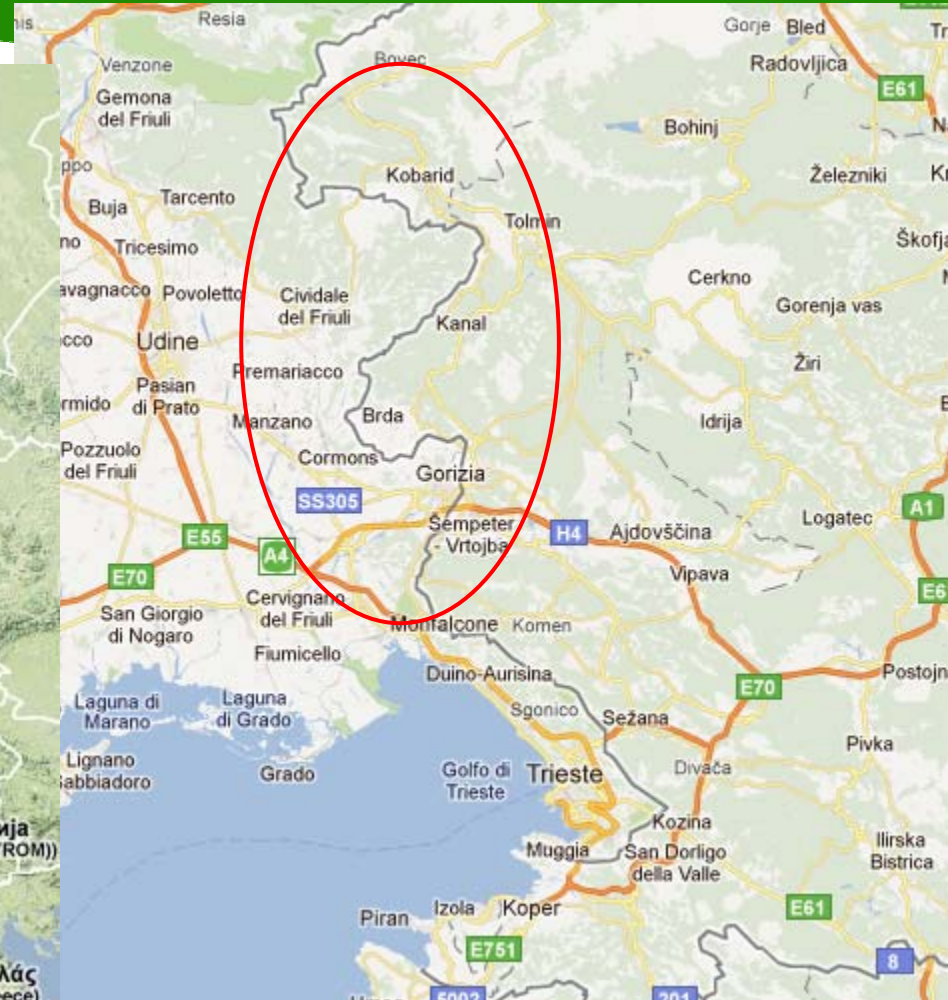
# ALPINE SEARCH AND RESCUE FOR SLOVENIA AND ITALY

# ALPSAR




- **ALPINE SEARCH and RESCUE**
  - **Improve the cooperation between Mountain Rescue Services of Slovenia and Italy in the case of incidents near the border**
  - **Improve the situational awareness during the missions**
  - **Increase the safety for the rescuers**
- 

# ALPSAR IN SHORT



# ALPSAR



- ❑ **Current Situation**
  - ❑ **Cooperation between Mountain Rescue services is based on personal relationship between the services**
  - ❑ **A protocol from January 18<sup>th</sup>, 2006**
- 

# EXISTING PROTOCOL

- On January 18th, 2006 the Republic of Slovenia and FRIULI VENEZIA GIULIA Region (FVG) signed a Protocol regarding the cooperation between the civil protection services of both countries. One issue that was addressed in this Protocol is the cooperation **between the Mountain Rescue services of both countries at the common border in the Alps.**

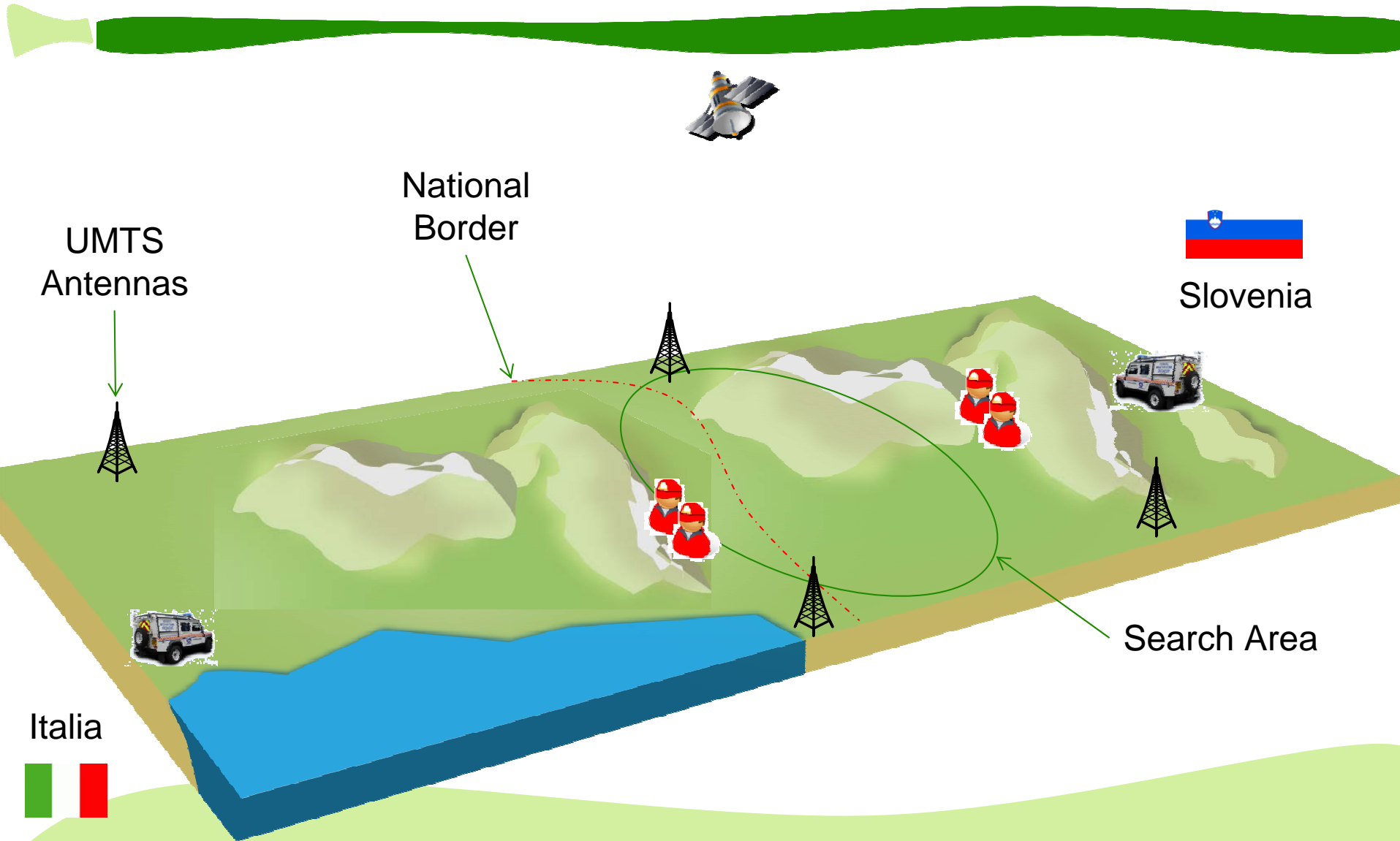
# ALPSAR IN SHORT

- EC Civil Protection Project
- Theme: Preparedness / Improve the effectiveness of emergency response by enhancing the preparedness and awareness of civil protection professionals and volunteers
- Duration: 24 Months, Official Start: January , 2011
- Three partners:
  - HITEC Luxembourg S.A.  
*Coordinating beneficiary*
  - Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (URSZR)  
*Associated beneficiary*
  - Protezione civile della Regione Autonoma Friuli Venezia Giulia (PCRAFVG)  
*Associated beneficiary*

# PROJECT OBJECTIVES

- **Improve the effectiveness of emergency response by:**
  - **Implementing the Protocol** between both Slovene and PCRAFVG Mountain Rescue Services to improve coordination
  - Provide a full and common tracking system including 2D and 3D visualisation
  - **Improve the situation awareness** of both tactical and coordination teams by sharing mission based information via:
    - The deployment of mobile application for the teams on site
    - The deployment of web-based tools for the coordination entities
  - The services offered will be picture, maps and location based information in complement with the existing voice communication
  - **Increase the safety** of the Search and Recue teams in missions

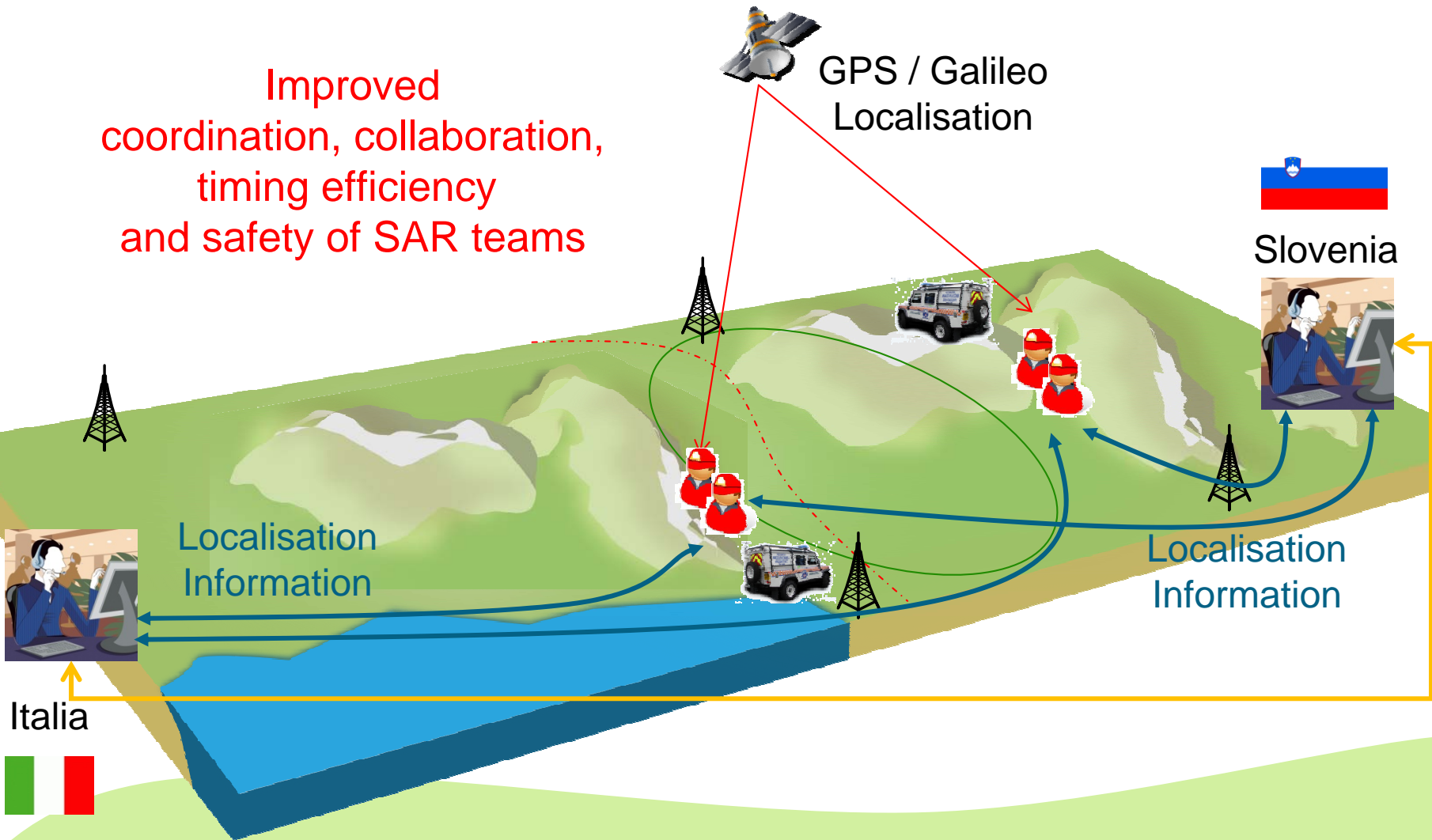
# TYPICAL SCENARIO





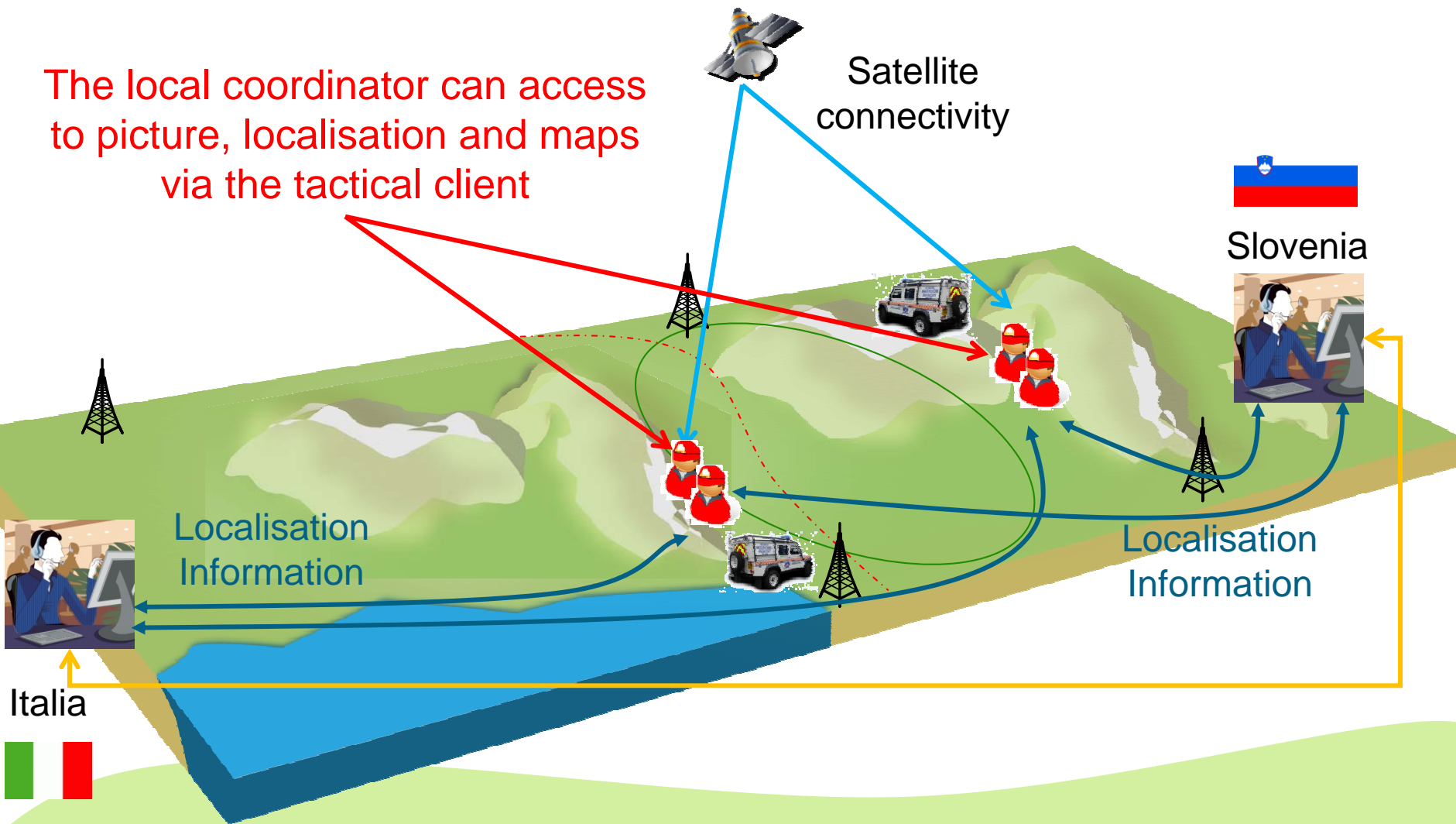
# TYPICAL SCENARIO

Improved coordination, collaboration, timing efficiency and safety of SAR teams



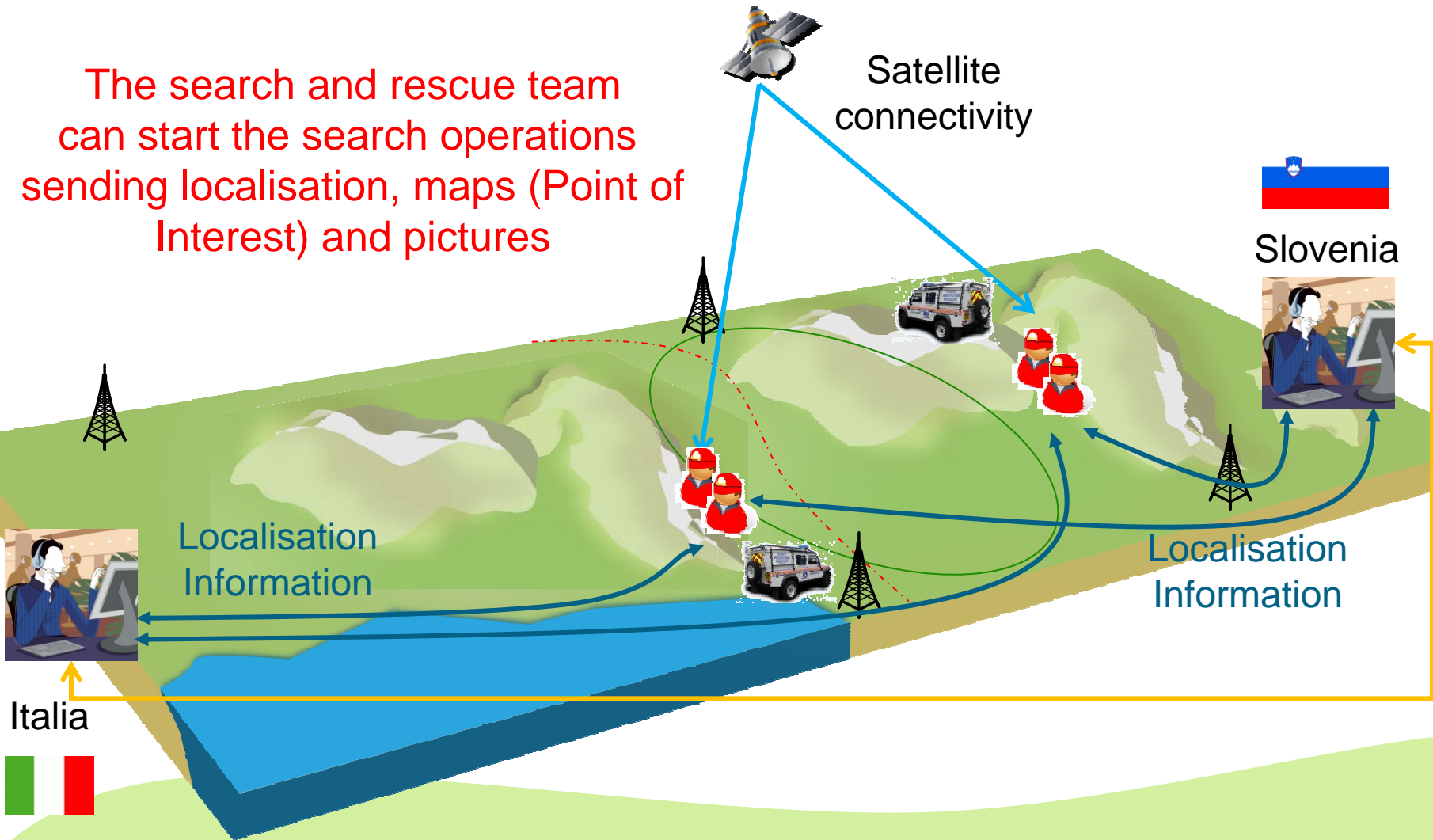
# TYPICAL SCENARIO

The local coordinator can access to picture, localisation and maps via the tactical client

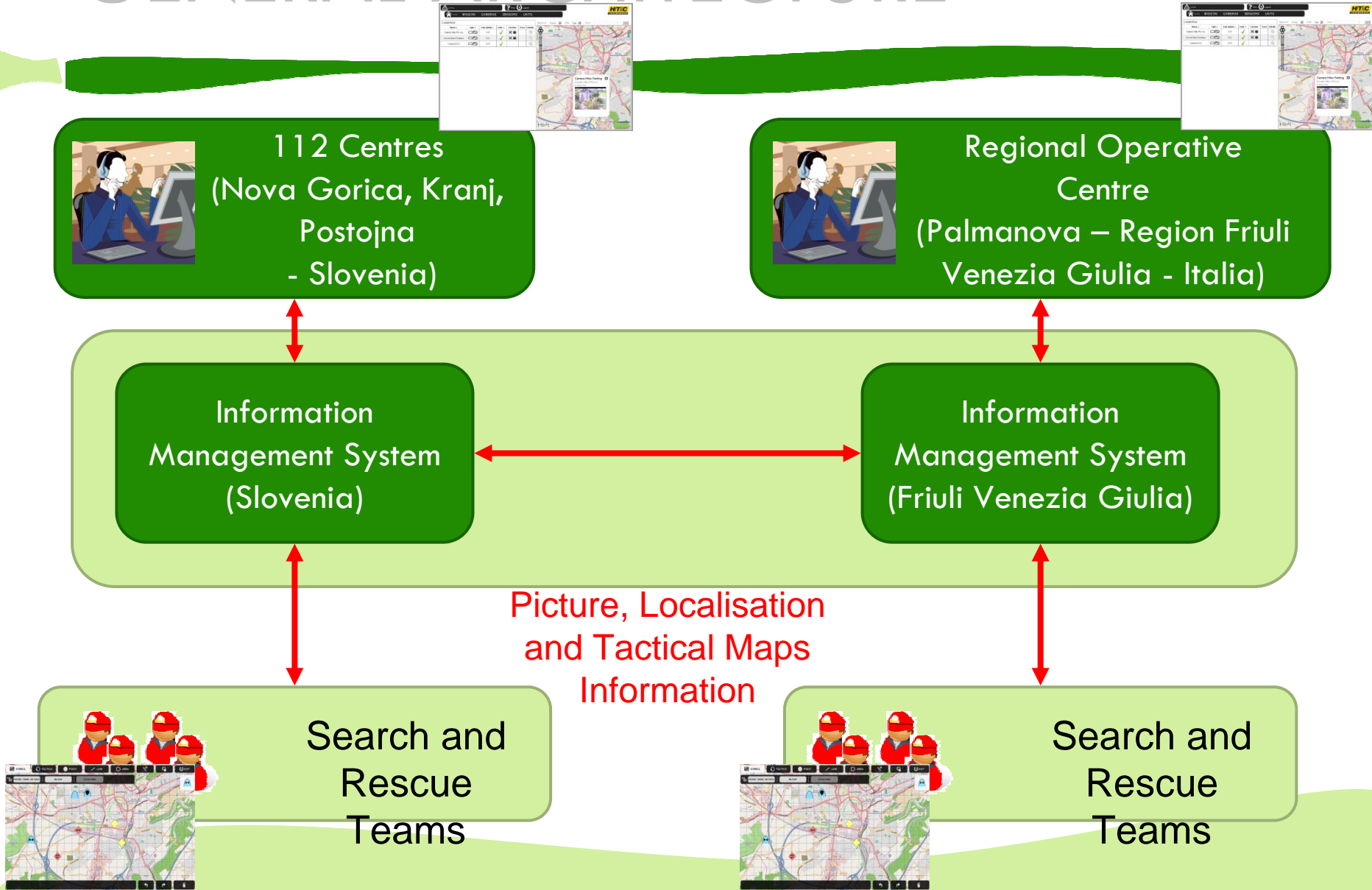


# TYPICAL SCENARIO

The search and rescue team can start the search operations sending localisation, maps (Point of Interest) and pictures



# GENERAL ARCHITECTURE




# THE SERVICES

- For the Search and Rescue team:
  - Capability to send pictures
  - Capability to send localisation
  - Capability to participate in the creation of tactical maps having some third party information (like avalanche warning)
  - Capability to follow the other members of the team
  - Synchronous and asynchronous data transmission  
(important for the places where there is no GPRS/UMTS coverage)

# THE SERVICES



- For the team coordinator:
    - Capability to view pictures
    - Capability to view the localisation and the history
    - Capability to participate in the creation of tactical maps having some third party information (like avalanche warning)
    - Capability to follow all members of the team
    - Nomadic Satellite connectivity
- 

# THE SERVICES

- 112 centre or Operative Centre:
  - Management of the search rescue teams (taskforce)
  - Capability to view pictures
  - Capability to view the localisation and the history
  - Capability to participate in the creation of tactical maps having some third party information (like avalanche warning)
  - Capability to follow all members of the team
  - Capability to share these information between URSZR and PCRAFVG

# PHASES

## 1. Common Cooperative Procedure Definition

- Analyse of the existing procedures and processes in Slovene Mountain Rescue Services and PCRAVFG
- Adaptation of the procedure to match with the new capabilities of the tools

## 2. Implementation, adaptation and integration of the tool set

- The different network and software tools will be adapted to comply with the updated procedures requirements
- Several validation workshops will be organised to validate the adaptation process

## 3. Field Trial

- The tool set will be installed on servers in Slovenia and Italy with synchronisation mechanisms
- Trainings for selected Search and Rescue teams will be organised
- Several real trials will be organised and concluded by a workshop
- Final adaptation of the procedures and tool set will be realised


## 4. Start the productive use

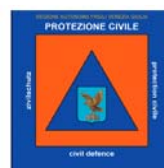
- The deployment equipments and services will be used in the day to day operations



# CONCLUSION



- New data collaboration tools and data communication will allow a better coordination between the mountain rescue service of Slovenia and Italy in the Alps.
  - The situational awareness of the team leader is increased. This allows a better coordination of the missions.
  - The tools are designed to be as easy to use as possible.
- 



# AlpSAR

# ALPINE SEARCH AND RESCUE

**Harold Linke**  
Project Coordinator  
[harold.linke@hitec.lu](mailto:harold.linke@hitec.lu)

