Integrating Satellite technologies And Crowdsourcing for emergency Response Operations, early Warning and Disaster management

Lefteris Mamais (SpaceTec Partners)

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What is 3ISACROWD?

• A proposal for the sixth FP7 Space call addressing the topic: "Integrated downstream service activities and applications"

• A consortium consisting of 13 partners spread across Europe and led by SpaceTec Partners

• An effort to establish a project with the main objective to integrate crowdsourcing into the current operational GMES Emergency Management Service. This will only be realised if the project is selected for funding.
Today, GMES services address six main thematic areas:

- Land Monitoring
- Marine Environment Monitoring
- Atmosphere Monitoring
- **Emergency Management**
- Security
- Climate Change

GMES Emergency Management Service - Mapping:

- Global
- Rush (hours/days) and non-rush (weeks)
- Reference, delineation, grading maps
- EU CPs, International Humanitarian Aid, European Commission agencies are users
Motivation

• GMES EMS-Mapping is one of the most significant achievements of the European Earth Observation programme (fully operational since April 1, 2012)

• But *in-situ* component is missing or underdeveloped

• Crowdsourcing for emergency management has proven added-value

• Synergy of EO with SatNav and SatCom could further enhance the Emergency Management (GMES EMS)
Objectives

1. Integrate crowdsourcing into Rush Mapping services – in particular GMES EMS-Mapping (main focus on emergency response and early warning)

2. Ensure continuous information flow using COTS SatCom solutions

3. Integrate Telecom and/or SatNav alerting systems into EMS

4. Combine the above into a sustainable service, enhancing the emergency management capacity (especially GMES EMS)
Logic

• User requirements
  – Interaction with user community
  – Liaison with expert groups
    - Crowdsourcing communities
    - Service providers
    - Institutional stakeholders

• System architecture
  – Tailored to specific scenario definitions and user requirements

• Implementation
  – Focus on improvement of emergency response and early warning
  – Assess impact on preparedness and recovery phases

• Integration
  – 3ISACROWD platform offering pre-operational service
Impact

- Enhance the Emergency Management capacity (in particular Rush Mapping of GMES EMS)

- Promote synergies between European Space Programmes (GMES, Galileo, EGNOS)

- Provide end-users (CPs and crowd) with the required information in a seamlessly integrated, timely, secure and user-friendly fashion
“Two's company, three's a crowd”

Special thanks to UN-SPIDER

Happy to answer your questions

For more info feel free to catch up with me

mamais@spacetecpartners.eu