

International Working Group on the use of satellite data for emergency mapping

JRC, Building 36, room 3

16.4.2012

9:30-10:00 Arrival of participants, welcome coffee
10:00-10:15 Welcome address (Delilah Al Kudhairy)
10:15-10:30 Meeting program and logistics (Jan Kucera)

Part 1: Introduction to existing mechanism

Each presentation should include: 1. how to trigger, 2. how to become AU, 3. who are the service providers (value adding entities), 4. who are the end users, 5. how the activation metadata are handled and stored, 6. existing issues 7. future outlook

10:30-11:00 International Charter (presenter: Brenda Jones)
11:00-11:30 GIO-EMS (presenter: Guido Lemoine)
11:30-12:00 SERVIR (presenter: Nate Smith)
12:00-12:30 Sentinel Asia (presenter: Jan Kucera on behalf of Masahiko Nagai)

12:30-13:30 Lunch (Piccola Mensa)

Part 2: Collaborative Platform (CP)

13:30-14:30 Motivation for CP, examples of the existing CP solutions (both non-public and public) and their future outlook

13:30-13:40 Why we need collaborative platform (presenter: Jan Kucera)
13:40-13:50 Example of CP: GDACS (presenter: tbd)

13:50-16:00 Discussion on CP technical parameters, activation metadata standards, automatic metadata harvesting, feeding metadata from existing platforms,

16:00-16:20 Coffee break

16:20-17:30 Discussion on CP set-up, hosting and sustainability

19:30 Joint dinner

17.4.2012

Part 3: Emergency Mapping Guidelines (EMG)

9:00-10:30 Motivation for EMG, examples of existing EMG and SOPs, discussion
9:00-9:15 GIO-EMS product portfoglio (presenter Marco Broglia)
9:15-9:30 SOP: Collaborative Spatial Assessment (CoSA) (presenter Cristina Corbane)
9:30-9:45 Accuracy and Usability of OpenStreetMap (Mayeul Kauffmann)
9:45-10:30 Discussion on EMG content (chapters)

10:30-10:50 Coffee break

10:50-12:30 Discussion on EMG content (chapters), setting the drafting team, setting the timeline.

12:30-13:30 Lunch (Piccola Mensa)

Part 4: Recommendation Report

13:30-15:00 Discussion on draft of recommendation report

15:00-15:20 Coffee break

Part 5: Joint Emergency Mapping Exercise (JEME)

15:20-17:00 Examples of previous exercises, definition of the type of disaster, area, type of mapping product, targeted end user. The JEME should ideally use EMG.

1. Introduction to existing mechanism

Introduction and important aspects of each mechanism (International Charter, Sentinel Asia, GIO-EMS etc.) should be presented by one representative. This will serve as introductory set of presentation for next topics.

2. Collaborative Platform

The Collaborative Platform (CP) should not replace the websites of the existing initiatives, but should complement them and use info from them. Additional information and data should be added to CP in harmonized way.

2.1 Data about Activation of Mechanism

Following parameters about the activation should be included and should be also available in gis and web-gis formats:

- a. event metadata (what, where, when, glide number and other disaster ids)
- b. satellite tasking metadata (AOI, time of tasking, type of sensor, requestor)
- c. satellite data reception metadata (footprint, acquisition time, cloud coverage)
- d. data and product availability (internet links) and their "openness" policy (not sharable, sharable within the limits, completely open)

2.2 Requirements

The sustainable setup and maintenance for hosting of CP have to be found. Can existing web portals be extended to CP if the IT infrastructure is already in place?

The stakeholders must be willing to enter the data to the CP (either manually or automatically from their existing systems). The time spent on data input must be minimized. The entering of metadata must be intuitive and as simple as possible.

2.3 Other content

- a. CP should include contact points of each stakeholder
- b. It should include relevant documents (Emergency Mapping Guidelines, SOPs, Best Practice, Standards)
- c. it should include harmonized gis elements (map templates, symbology, map terminology); they should be based on the existing standards as much as possible. These gis elements should be freely downloadable.

3. Emergency Mapping Guidelines

The Emergency Mapping Guidelines (EMG) will summarize the important aspects of emergency mapping using satellite data. The structure of the guidelines is suggested below.

3.1 Entities involved in satellite based emergency mapping

Names of organizations handling the mechanisms, contact points, geographic and thematic scope.
List of Authorized Users (AU) of the mechanisms (can their contacts be published?), procedures on how to become authorized user (whom to contact). The general user requirements should be included.
Short description of existing mechanisms should be included (with references to the websites). Activation flowcharts (or links to them) of the mechanisms should be detailed.

3.2 SOPs

We should try to implement communication via CP to mechanism's Standard Operating Procedures (SOPs), if they exist. If there is an example of existing "stable" SOPs, they can be included. Regarding the communication via CP, the following steps should be included in the case of mechanism activation: checking CP, communicate with other actors (if already engaged), inserting metadata into CP, update metadata/data/products in CP whenever possible.

3.3 Emergency mapping techniques

An overview of visual, semi-automatic and automatic interpretation techniques (including their accuracy) (the pool of scientific and technical literature, best practices described).

3.4 GIS standards

Emergency mapping products' portfolio (existing products' portfolio should be taken as start point).
Map standards (symbolology, legends, map descriptive information) should be based on existing mapping standards. The accuracy estimation should be added to the maps (the common practice of giving the information about the sensors from which the data are coming is not enough).
Adding to the products information on the context, intended use, requestor, and uncertainties of the analyses to enable the right use of products by the end users.

3.5 Targeted user needs

Development of a framework for user feedback and analysis of user requirements to adjust services to user needs.

3.6 Product validation

The best practices for product validation, limitation, practical considerations. Cooperative retrieval and collection of ground data.

4. Recommendation Report

The discussion over the first draft of the report, which should be recommended to the mechanism, agencies and the third parties involved in the topic. The first draft will be circulated in the second half of March, so that participants have enough time to come-up with comments and suggestion during the meeting.

5. Organization of joint emergency mapping exercise

The exercise should follow and test EMG. It should be the real case (e.g. the data coming from one mechanism should be provided to other groups –copyright issues needs to be solved). Exercise should be branded as research exercise.

Comparing the results of different groups (which might use the different sensors and different interpretation techniques) would be the main part of the exercise.

The "ground" data validation is desired.