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Santiago  
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# Task Group 3

## Remote Sensing

## Progress report

## **Task Group 3 Remote Sensing**

### **Objectives**

Provide an overview of which UN organization has what type of very high-resolution imagery over which areas.

Provide with satellite imagery purchasing agreements that ensures easy ordering, rapid access and reduced cost to data.

Expand the range and objectives for the Charter to better comply with UN requirements.

### **Task Group Membership**

The Task Group has 34 members and 5 partners and is headed by Mr. Alain Retiere (UNITAR-UNOSAT) with the assistance of Mr. Einar Bjorgo (UNITAR-UNOSAT).

Due to serious spam-problems with the Task Group e-mail listserv ([rs@ungiwg.org](mailto:rs@ungiwg.org)), the Task Group managers were not able to use this valuable tool as an information channel, nor to add new requests for membership. The managers were overwhelmed with spam from the listserv, which has been communicated to the UNGIWG Secretariat. This issue needs to be quickly solved.

### **List of Tasks**

During the sixth plenary meeting in October 2005 several issues were raised and suggested solved. These are identified below together with the activities stemming from the 2005 suggestions.

Focal points for each organization for updating the UNGIWG VHR meta-database – only some organizations have provided focal points for this. It is suggested that the default focal point for each organization is the official UNGWIG designated officer or her/his alternate.

Development of data Grid solutions for the humanitarian community – A prototype PC based and mobile phone based solution for uploading, processing and downloading satellite imagery for humanitarian purposes to/from the Grid was recently presented at the international Enabling Grids for E-scienceE (EGEE) conference in Geneva by CERN and UNOSAT. This promising technology provides supercomputing capacity to users with slow internet connection speeds and very large storage capacity, highly useful for satellite imagery. This activity will continue in 2007 and the Task Group manager encourages interested UNGWIG members to help test out the tools.

It was in 2005 suggested to create a User Focus Group to bring together UN agencies and partners that work with humanitarian response, risk reduction and disaster management to work together to take advantage in a more effective way the existing and planned initiatives that are making available space-based technology solutions to support such activities. The first User Focus Group meeting took place in Geneva in January, moderated by UNITAR. Representatives from UN OCHA, UNHCR, UNEP, UNOSAT and IFRC gave presentations and a range of organizations participated at the meeting.

A consolidated list of priority areas of interest for anticipated archive data collection and programming, as suggested during the last plenary meeting, has not materialized during 2006. However, IASC lists have proved to be of good use for data mining and anticipating imagery purchase.

In addition, GeoNetwork has become the *de facto* common standard for metadata management of satellite imagery within the UN. FAO has set the standard also for satellite imagery metadata and sharing with GeoNetwork. UN OCHA and other organizations are giving access to imagery using GeoNetwork. UNOSAT is currently converting metadata

compliant with GeoNetwork on the Grid, and will likely have online access to a GeoNetwork server for the benefit of the UN and its partners during 2007.

The International Charter on Space and Major Disasters has been triggered by the UN six times so far in 2006. Five of these activations were by UN OCHA, one by WFP. Each time UNOSAT was the interface between the UN and the Charter, ensuring imagery and maps were delivered to field users. However, due to the status of the UNGWIG e-mail list, notifications to the Task Group on Charter activations could not be systematically carried out. UN OCHA and UNOSAT teamed to take on information sessions to UN OCHA desks on the benefits of remote sensing imagery for their work. These information sessions were held over a period of several weeks.

VHR satellite imagery became important as common baseline data and for damage assessments during for example the Middle East Crisis and Yogyakarta earthquake in 2006. Several UN organizations used imagery, and due to specially negotiated agreements, UNOSAT was able to share purchased images with UN actors, both pre- and post-disaster imagery. In addition, resulting damage assessments were shared in vector format for easy integration into various organizations' GIS. UNOSAT is also working to ensure satellite imagery information is properly managed as part of the cluster approach and is a member of the Early Recovery cluster.

### **Recommendations for 2007**

- Ensure database on VHR satellite imagery focal points is updated
- Agree within UNGWIG which geographic areas should be targeted for data mining to improve preparedness
- Continue data sharing through GeoNetwork
- Continue advocating for purchasing imagery through agreements with data vendors that ensures sharing among UN organizations
- Continue data Grid developments and have UNGWIG members test applications
- Awareness raising of the opportunities free data from the Charter brings and mechanisms which are in place to ensure imagery derived maps are disseminated on a timely basis to field users
- Make practical use of the Stream project in developing and automating image processing algorithms, especially for newly available sensors, with the objective to improve UN humanitarian and development capacities
- Make practical use of the Preview project, which provides access to a wide range of remote sensing imagery, mostly acquired through the Charter, in order to improve earth observation products for the UN community