

Fourteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-14)

Earth Observation Working Group(EO WG)

Concept Paper

The Earth Observation Working Group (EO WG) has been discussing many topics on Earth observation activities in the Asia-Pacific region, and providing good opportunities to study a global network of space-based systems to promote global environmental research, natural disaster mitigation and other practical data applications.

After the APRSAF-11 in 2004, the EO WG has begun to focus on natural disaster mitigation in this region, and space and disaster management organizations in the region discussed to strengthen collaboration by establishing a “Disaster Management Support System in the Asia-Pacific Region”. It was agreed to launch “Sentinel-Asia” project and the Joint Project Team (JPT) was established within the framework of APRSAF. Currently 50 organizations from 20 countries and 8 international organizations are promoting the SA activities and the 4th JPT meeting was held in the Philippines from September 5 to 7, 2007.

During the 4th JPT meeting, the status of the first step of the Sentinel-Asia (STEP-1), STEP-1’s findings, and the next step plan of the Sentinel-Asia (STEP-2 plan) were reviewed by its members. In addition, the Environment Sentinel Asia (eSA) which was proposed at the APRSAF-13 was also discussed as an effective tool of early disaster detection.

Based on the series of discussions, the concept of EO WG in the APRSAF-14 is as follows:

1. EO WG participants are expected to report their organizational activities including disaster and environment monitoring from space.
2. The Secretariat of JPT represented by JAXA will report the status of the Sentinel-Asia (SA). EO WG participants shall submit a Sentinel-Asia STEP-2 plan to the Plenary Session of the APRSAF-14 jointly with the Communication Satellite Applications (CSA) WG concerning the application of satellite communication systems for effective disaster management.
3. EO WG participants shall review the status of the Environmental Sentinel Asia, or eSA. As a background of eSA, Eco-Disaster would be focused on as an another type of disaster caused by global warming.
4. Satellite data applications such as satellite topo-map using the Advanced Land Observing Satellite (ALOS) and other applications will be introduced to promote wider spectra of applications in the region.

Reference: Recommendations from APRSAF-13 in 2006 in relation to EO WG

1. The Joint Project Team shall strengthen the Sentinel Asia activities and improve the operability of

the existing systems, taking into account the needs such as to enlarge the scope of the project to cover various types of disasters, to increase the number of Earth observation satellites involved and to implement dedicated training programs, expressed by the participants of APRSAF-13.

2. Earth Observation Working Group shall study the feasibility to establish a similar project in the environment field, based on the experience of Sentinel Asia project.