Space Applications Working Group (SAWG)

Concept Note

1. Scope and Objectives of SAWG Activities
After the 20th anniversary of the APRSAF, the Space Applications Working Group (SAWG) was formed, and its first meeting was held at the APRSAF-21 in Tokyo in December 2014. Part of the motivation for forming the SAWG was to foster enhanced cooperation with local operational agencies in each country, as well as with development aid agencies and international organizations, through promotion of the sustainable operation of space applications. During the 2014 meeting in Tokyo, it was decided to establish an ad-hoc task team to explore a potential new initiative involving synergistic applications of geostationary orbit (GEO) and low Earth orbit (LEO) satellites. This decision was motivated by the launch of Himawari-8, the first new-generation meteorological GEO satellite. Representatives and experts from existing initiatives, including Sentinel Asia and Space Applications for Environment (SAFE), also outlined their plans to better serve end users. At the next APRSAF-23 session in Manila, the Philippines, we would like to share the progress of the SAWG and its key initiatives, and to discuss further steps for sharing solutions through employing synergies among key space technologies.

1) Sentinel Asia
Sentinel Asia is an international collaboration among space agencies, disaster management agencies, and international agencies to apply remote sensing and Web-GIS technologies to support disaster management in the Asia-Pacific region. Sentinel Asia has been successfully operated through the voluntary contributions of Asia-Pacific members since its launch in 2006. During 2006 and 2012, data dissemination system to support disaster management agencies as a backbone of the Sentinel Asia has been established as step 1 and step 2. In 2013, the APRSAF-19 approved Sentinel Asia to proceed to step 3 to cover whole disaster cycles with the contributions of multiple space applications, and the number of the members has increased to almost 100 organizations from 25 Asia-Pacific countries. At the APRSAF-21 in Tokyo, to further contribute to disaster management for disaster-prone Asia-Pacific countries, three strategic pillars for the evolution of Sentinel Asia were endorsed: strategic management, end-user-oriented activities, and cooperative promotion. The Steering Committee for strategic management of Sentinel Asia was formed in 2015, and the Sentinel Asia success story about landslide early earning activity using space technology will be reported at the SAWG meeting.
2) SAFE (Space Applications for Environment)
SAFE is a voluntary initiative to encourage long-term environmental monitoring to better understand environmental changes. The SAFE workshop will be held on Day 0 of the SAWG (November 14, 2016). During this workshop, current SAFE prototype leads will report on the status of their prototype activities and the results of their prototyping efforts, as well as the follow up activities of SAFE prototypes. New proposals will be presented, discussed by participants, and reviewed by the review board for potential launch of new SAFE prototypes. Reports will be made and discussions of SAFE updates will be held at the SAWG meeting.

3) Ad-hoc team for GEO/LEO synergy
After the successful completion of the Climate R3 Initiative in the area of climate monitoring, an ad-hoc task team was formed, based on an APRSAF-21 recommendation, to discuss a potential new initiative in synergistic applications of GEO/LEO satellites. The task team organized workshops in Brisbane and Tokyo to share the latest results of Himawari-8 data utilization and to discuss potential contributions to resolve societal issues. At the SAWG meeting, the ad-hoc team will report the results of the Tokyo workshop and invite all participants to discuss the demonstration projects such as monitoring forest/bush fires, haze and ocean color, and SST to prepare to launch this potential new initiative at the APRSAF.

4) Thematic sessions
The application fields of disaster, agriculture, water resources, and forest monitoring are the prioritized social-benefit areas of the SAWG and SAFE framework in collaboration with the Multi-GNSS community and international donor agencies. We will focus on discussing these areas in thematic sessions in which representatives of participating countries are invited to contribute by presenting their utilizations of satellite data. However, we do not intend to limit our discussions to these areas, and presentations proposing new activities for the SAWG, especially those critical for participating countries, are also welcome. The SAWG also appreciates the sharing of experience, results of regional cooperation in satellite data utilization, capacity building, and so forth. In addition, we would like to invite representatives of the Philippines, as the host country, to organize a special session for their priority areas, such as disaster monitoring.

2. Results of SAWG Activities at APRSAF-22
See Recommendations adopted at the APRSAF-22:
http://www.aprsaf.org/annual_meetings/aprsaf22/recommend.php

3. Draft Agenda
1) Opening session
2) Review of the last SAWG meeting in Bali
3) Host country special session
4) Reports from initiatives and activities
   - Sentinel Asia Initiative
   - SAFE Initiative
   - Ad-hoc task team for GEO/LEO synergistic applications
   - Multi GNSS session
   - International donor session

5) Thematic sessions
   - Disaster, agriculture, and forest monitoring
   - GEO/LEO satellites: synergistic applications

6) Overall discussions and determining the way forward

7) Conclusions and recommendations of the SAWG