Recognizing the role of space technology and industry in addressing climate change as the overall theme of APRSAF-17,

Recognizing the importance of regional cooperation to cope with disaster management, environmental issues, capacity building, quality of human life, health, and other regional issues on the basis of utilization needs,

Hereby affirm that we, the participants of APRSAF-17,

[Sentinel Asia]
1. Welcome the new STEP2 system successfully started from April 2010, and steadily achieving satisfactory results concerning the issues to be addressed such as increasing the number of participant satellites and agencies, delivering value added data, increasing the kind of disasters to respond and improving the information access environment.
2. Welcome that National Applied Research Laboratories (NARL) initiated to provide image of Formosat-2 as a new data provider node and the number of Data Provider Node (DPN) increased to 5 organizations, and also 11 organizations started the activities as Data Analysis Node (DAN).
3. Confirm that providing images from regional servers were started in Mongolia, Nepal, Philippines, Taiwan, and Thailand. Additionally the rapid transferring of satellite data via WINDS is also confirmed.
4. Acknowledge that Sentinel Asia system operation trainings were held in Sri Lanka in February 2010 and in Thailand in July 2010.
5. Acknowledge that Asia Disaster Reduction Center (ADRC) is working well for a point of contact for emergency observation of Sentinel Asia and bridging with UNSPIDER as a Regional Support Office (RSO).
6. Acknowledge that the cooperation with the International Disaster Charter has been started and Sentinel Asia requested emergency observation to the International Disaster Charter for Indonesia Tsunami and Thailand flood and large number of analysis results were provided under the International Disaster Charter.
7. Welcome the reference of the promotion of utilization of Space Technology in the Road Map of “the 4th Asian Ministerial Conference on Disaster Risk Reduction” in October 2010 in Incheon.

[STAR Program (Satellite Technology for the Asia-Pacific Region Program)]

8. Confirm that engineers and researchers from 6 organizations (ANGKASA, GISTDA, ISRO, KARI, LAPAN, and VAST/STI) in Asia-Pacific Region participated in the STAR program which is hosted by JAXA, and is designing MicroSTAR and studying EO-STAR.

9. Confirm that the 2nd STAR Program Coordination Group meeting was held in Jakarta to review the results of conceptual designs of MicroSTAR.

10. Recognize that MEXT of Japan has launched a new enterprise for research on Earth observation and capacity building by micro-satellites, in cooperation with emerging countries in Asia-Pacific region. University International Formation Mission (UNIFORM), alliance of Japanese universities, was selected for the above enterprise.

11. Recognize that STAR program participants will join UNIFORM’s OJT to realize micro-satellites early.

[SAFE (Space Applications For Environment)]

12. Confirm the completion of two successful Vietnamese prototypings for forest and integrated water management, six ongoing prototypings and two new prototypings.

13. Recommend to expand SAFE prototypings including multiple country projects (regional projects) in addressing climate change issues.

14. Promote successful SAFE prototyping results with practical, operational users and the importance of knowledge sharing.

15. Exploring the opportunity to find international and/or regional funds to encourage the SAFE prototyping efforts - bridging to practical, operational uses in implementing countries.

[Earth Observation]

16. Welcome, endorse, and encourage Australia to pursue the proposal for a significant new APRSAF initiative in support of regional climate information needs – the APRSAF Regional Readiness Review for Key Climate Missions (Climate R³).
17. Encourage Australia and interested APRSAF participants to assemble a focus team to undertake Pilot Phase activities in 2011 and to bring a report on the way forward to APRSAF–18.

18. Confirm the role of satellite remote sensing for Measurement, Reporting and Verification (MRV) and current contributions by space agencies.

19. Recommend exploring opportunities for APRSAF participating countries to contribute earth observation payloads as technical demonstrators for Kibo/ISS.

20. Continue close communication between Space Environment Utilization WG and EO WG, including joint sessions, to create new ideas for ISS EO applications.

21. Endorse not-for-profit collaboration between APRSAF governmental agencies and private sector to promote disaster monitoring and outreach & educational activities.

[Communication Satellite Applications]

22. Agree to share the experiences and opportunities in order to expand the use of applications regarding tele-education, tele-medicine, disaster management and mitigation in the Asia-Pacific region.

23. Agree to discuss mechanisms for technology transfer with the aim of not only demonstration but also continuous use including possibilities for hosted payloads with appropriate planning with the active participation of private sector.

24. Recognize achievements of the WINDS satellite experiments promoted with the Asia-Pacific regional cooperation through the APRSAF.

25. Welcome the successful launch of the QZS–1 satellite and the establishment of the Multi GNSS demonstration campaign in the second Asia Oceania regional workshop on GNSS, and recommend the promotion of the Multi GNSS applications through the campaign with support of APRSAF.

[Space Education and Awareness]

26. Call upon APRSAF participating countries and international organizations to support space education activities to enrich youth development, and to take a leading role in activities on space education and awareness including educators’ training and development and distribution of educational materials.

27. Encourage further development of space education activities by analyzing and sharing results of activities, and by enhancing through cooperation with
the Asia–Pacific and world science centre community, other international organizations, etc.

28. Recommend that the advanced educational activities should be developed by sharing resources with other WGs, such as astronauts, ISS, satellite imagery, for the enhancement of educational opportunities and the improvement of quality.

[Space Environment Utilization]

29. Welcome the continued operation of Kibo/ISS beyond 2015 for full utilization of this unique facility with infinite potential.

30. Recommend to enhance Kibo/ISS utilization opportunities through the SEU WG task force, in science, education and outreach of space environment utilization, such as Asian Seed project, small payload, and “Try Zero G” activities in recognition of the successful cooperation activities including protein crystallization experiment and progress of bilateral feasibility study, which demonstrate the significance and potential of further Kibo/ISS cooperation.

31. Recommend to enhance ground–based microgravity activities such as drop tower experiments and parabolic flight, as these have relatively low thresholds to participation, in order to build capacity and prepare to develop on–orbit experiments.

32. Recommend implementing joint activities with SEAWG and EOWG to increase space environment utilization based on the success of the joint sessions with those two working groups.

[Special Address by ADB]

33. Recognize that Asian Development Bank (ADB) plays a key role in the sustainable development of Asian region and welcome opportunity of cooperation with ADB in applying space technologies for that purpose, including disaster management, urban development, agriculture, environment, water resource management, forest and transportation and infrastructure.

34. Welcome “The International Workshop on GIS and Space Technology for Sustainable Development of Asia” proposed by ADB to be held in the ADB Headquarters, Manila, the Republic of Philippines on February 21st through 22nd, 2011, and actively participate in the workshop and strongly encourage users, including potential ones, in countries to actively participate in the workshop.

35. Recommend ADB, through the workshop in collaboration with APRSAF
members, to promote discussion and compile participants’ requests on their focus areas and activities in using space technologies as well as specific requirements for space technologies.

[Climate Change Panel]
36. Appreciate the insightful Climate Change Panel discussion which emphasized importance of space technologies, international cooperation, data and information sharing, capacity building, continuity of observation systems and information, etc in addressing climate change issues.
37. Recognize the challenges and needs in connecting space technologies with in-country applications and systems, and in coordinating efforts on application activities among member agencies, recommending that this be a consideration of the Climate R³ study.

[Regional Capacity Building Programs]
38. Recommend that APRSAF secretariat build a portal site for capacity building programs on the APRSAF website to ensure easy access to menu, providers, and schedule of capacity building programs, and invite organizations which are also providing capacity building programs, to provide their information such as URL to APRSAF secretariat.
39. Welcome the establishment of UNIFORM and encourage young researchers and engineers of space organizations in Asia-Pacific region, to participate in the new framework in cooperation of STAR program and UNIFORM.
40. Welcome ISRO’s present activities concerning CSSTEAP.

[International Organizations]
41. Welcome presentations from ADB, APSCO and UNCOPUOS for information sharing among APRSAF participants.
42. Encourage the participation of the China National Space Agency (CNSA) in APRSAF, and ask the APRSAF Secretariat to invite CNSA to attend APRSAF-18.

[Reporting to UNCOPUOS]
43. Wish that the outcomes of APRSAF-17 be presented by the Chairman of UNCOPUOS at the meetings of the UNCOPUOS in 2011.
44. Recommend the Chairman of UNCOPUOS to present the outcomes of APRSAF–17 as regional cooperative structures to other regions such as via ‘The Space Conference of the Americas’ and African Leadership Conference on Space Science and Technology for Sustainable Development in order to promote inter-regional cooperation as mandated by UN General Assembly.

(End)