Recognizing “enriching the quality of life through innovative space programs” as the overall theme of APRSAF-19,

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,

We, the participants of APRSAF-19;

<APRSAF Initiatives>

[Sentinel Asia]
1. Declare the successful completion of the Sentinel Asia Step 2 having achieving its goal by new participation of satellites such as KOMPSAT-1 (KARI), THEOS (GISTDA), FORMOSAT-2 (NARL), XSAT (CRISP) in addition to ALOS (JAXA) and IRS (ISRO) in Step 1; utilizing WINDS satellite communications to improve accessibility to information; organizing a new framework “Data Analysis Node (DAN)” to provide value-added products; initiating new working group of Glacial Lake Outburst Flood (GLOF) and Tsunami in addition to Wildfire and Flood in Step 1; and collaboration with the International Charter starting from October 2010;

2. Declare the launch of the final phase of Sentinel Asia starting from 2013 with the goal to expand activities to cover all the disaster management cycle—mitigation/preparedness phase, response phase and recovery phase—utilizing various and many satellites such as earth observation, communication and navigation satellites, under further collaboration for operation and human networking by the Joint Project Team;

[SAFE (Space Applications For Environment)]
3. Welcome the new Indonesian prototyping for assessment of Mangrove Forest Carbon Stock Monitoring, and recognize good progress of SAFE ongoing prototyping and completion of SAFE prototyping, especially Pakistan Meteorological Department (PMD) prototyping completion and interest of
donor agencies to move forward to implement operational use of SAFE prototyping;
4. Accept EOWG’s proposal to continue and promote SAFE prototyping and to promote results for practical use at stakeholders meetings and international conferences such as Asian Conference on Remote Sensing (ACRS), International Symposium on Space Technology and Science (ISTS), etc. to encourage donor agency interest;
5. Understand the necessity of EO data continuity in moving forward in the practical use of satellite data in support of EO WG participants’ earth observation satellite missions;

[Climate R³ (Regional Readiness Review for Key Climate Missions)]
6. Welcome the progress achieved through Climate R³ in promoting practical data coordination in an important climate change domain of priority interest to APRSAF participating countries;
7. Agree to explore the establishment of practical relationships in support of organizations such as the APEC Climate Center;
8. Recognize the potential of Australian proposed Continuity of Earth Observation Data for Asia-Pacific (CEOD–AP) study activity to: identify EO data requirements and priorities at the regional and national level; increase the understanding of regional EO data needs; support engagement of key regional and national stakeholder user agencies and frameworks; serve as a focus for EOWG coordination efforts;
9. Facilitate cooperation between Australia and the EOWG co-chairs in 2013 to progress the CEOD–AP activity, with a progress report to be provided to the annual mid-year EOWG meeting in preparation for APRSAF–20;

[Kibo–ABC (Asian Beneficial Collaboration through Kibo utilization)]
10. Encourage the Kibo–ABC members to actively contribute to the building of concrete plans of its three activities; the Try Zero G program, the Mini Drop Tower program and the Demonstration Missions for Kibo utilization (Space Seeds for Asian Future 2013);
11. Recommend the initiative to have its own website for information sharing and interactive works among members in order to promote its activities, and the Kibo–ABC secretariat to make a contribution to the establishment;
12. Recommend the initiative to hold its web based meetings, as appropriate, approximately once a month, when requests from members are made;
13. Recommend the initiative to hold the Kibo–ABC Workshops, at least once a year, on the occasion of annual session of APRSAF and to hold additional face to face meetings as needed;
14. Note that APRSAF congratulated the Malaysian students who won the first prize in the Malaysian Space Seeds program, which is a part of the Space Seeds for Asian Future program of the Kibo–ABC initiative, with recognition of the significance in this kind of collaborative program in Asia; the students expressed, at the plenary session, their appreciation to the APRSAF and their hope for the continuation of this program;

〈APRSAF Working Groups〉
[Earth Observation (EO)]
(General)
15. Agree to explore an annual mid-year meeting of the EOWG which will serve as an umbrella for regional space data coordination across a range of relevant initiatives and activities: SAFE, Climate R³, Sentinel Asia, the Global Forest Observation Initiative (GFOI), the intergovernmental Group on Earth Observation Global Agriculture Monitoring initiative (GEO–GLAM) (Asia RiCE), AWCI (Asia Water cycle Initiative), etc;
16. Recognize the necessity to promote the study and knowledge sharing to improve forecast activities for water related disaster and crop yield estimation;
(Integrated water resource management)
17. Agree to support knowledge sharing through promotion of information exchange of SAFE prototyping results such as the outcomes for the Cambodia and Pakistan projects;
(Agriculture and food security session)
18. Support to promote: results & knowledge sharing at APRSAF EOWG; practical application for agriculture and food security of knowledge to national/regional systems; outreach of successful results;
(Asia rice crop monitoring in GEO–GLAM working plan)
19. Welcome to encourage participation and support for the GEOGLAM Asia–RiCE initiative to improve coordination and regional identity of rice crop monitoring from space activities. Agree on EOWG’s activity to serve as the institutional home for Asia–RiCE initially to enhance a linkage of APRSAF participating countries’ rice crop monitoring with Asia–RiCE initiative in GEO GLAM;

[Space Education and Awareness (SEA)]
20. Encourage to enhance space education for youth development through continuous activities, such as workshops for teachers and children, implementing poster contest and water rocket events, and, introducing advanced programs;
21. Encourage to promote awareness of space education by sharing and applying information on space education materials and tools, through all means
including internet and social network services with all groups and organizations involved in space education activities;

[Space Environment Utilization (SEU)]
22. Congratulate the establishment of the Kibo–ABC initiative, welcome the launch of its activities, and encourage the new participation from SEUWG in the initiative;
23. Encourage SEUWG participants to promote the awareness of Kibo–ABC and encourage more participation in the initiative to enhance its effectiveness and benefit;
24. Recommend SEUWG to consider the ways to share the outcomes and know-how which have been obtained and will be obtained through the SEUWG activities, such as the parabolic flight experiments for students;
25. Recommend SEUWG to communicate and cooperate with SEAWG to contribute to the improvement of the existing educational materials by reflecting the accumulated experiences on microgravity utilization;
26. Encourage the SEUWG participants to utilize the framework of the Zero-gravity Instrument Project of Human Space Technology Initiative (HSTI) of the United Nations for the Space Seeds for Asian Future (SSAF) 2013 program of Kibo–ABC;
27. Recommend SEUWG to hold a Workshop specialized in Asian space environment utilization, which is to share the results and outcomes achieved, organized by Kibo–ABC initiative, in 2014;

[Communication Satellite Applications (CSA)]
28. Encourage more active interactions with the aim of expansion of the space-based Automatic Identification System (AIS) for ship monitoring;
29. Welcome the feasibility study on the idea of “Multidisciplinary Space-based Services” activity;
30. Encourage to share information and experience in order to enhance the new applications of communications and navigation satellites in the Asia-Pacific region;
31. Look forward to the sustainable deployment of the Multi-GNSS (Global Navigation Satellite Systems) Demonstration Campaign and the Multi-GNSS Joint Experiments in the Asia Pacific region;

<APRSAF Supporting Programs and Activities>
[Asia Oceania Multi-GNSS Demonstration Campaign]
32. Welcome the active progress such as the endorsement of additional Multi-GNSS Joint Experiments by Multi-GNSS Asia (MGA) which is an
international organization to promote the Multi–GNSS Demonstration Campaign and encourage organizations in Asia and the Pacific region to participate in the MGA;

[UNIFORM (University International Formation Mission)]
33. Confirm that the Satellite Technology for the Asia–Pacific Region Program (STAR program) was successfully completed and succeeded to the UNIFORM project. This year, the UNIFORM project accepted 6 engineers and researchers from 3 organizations in Vietnam and Brazil;
34. Recognize that one of the main missions of the UNIFORM is wild fire detection; the 1st UNIFORM satellite will be launched in 2013, and development of the 2nd UNIFORM satellite will be started in 2014;
35. Encourage young engineers and researchers in the Asia and the Pacific region who are interested in developing micro satellites to join the UNIFORM;
36. Encourage new participants to contribute to the UNIFORM activities to develop the satellites and the ground station network;

[Panel Discussion: “Enriching the quality of life through innovative space programs”]
37. Note with satisfaction that a panel discussion with the participation of heads of space agencies in Asia and the Pacific was held as part of the plenary to address the theme of APRSAF-19,”Enriching the quality of life through innovative space programs”;
38. Recognize the need to make further efforts to yield more benefits of space science and technology and their applications to address the needs of ordinary people and to make such benefits more visible for the general public by, among other things, increasing the engagement of the public and more involving industry in such application development;
39. Encourage space agencies and space–related entities in the region to collect, compile and share successful stories giving societal benefits resulting from space programs, especially those contributing towards enriching the quality of life of the people;

[Towards enhanced operation of APRSAF]
40. Note with satisfaction that the Task Force, established following the recommendation by APRSAF–18, to consider the continuous success of APRSAF and ways and means to make APRSAF more dynamic, had presented its report including its recommendations;
41. Endorse the recommendation of the Task Force for implementation immediately following APRSAF–19 to establish an Executive Committee to
uphold principles, shape the agenda and help achieve objectives and implement decisions of APRSAF; the Executive Committee shall consist of two categories of members: (a) up to five members from the immediate past, present and confirmed future co-organizers of APRSAF; and (b) a representative of each working group, who would serve a maximum term of 4 years; the membership of the Executive Committee shall be confirmed at the APRSAF annual plenary; and

42. Agree in principle with the proposals of the Task Force for implementation immediately following APRSAF-19 to introduce a set of guidelines for initiatives, including the process to submit, review and endorse proposals for new initiatives, to determine the venues of APRSAF annual sessions two sessions in advance, and to invite eminent researchers or high-skilled experts to deliver lectures at APRSAF annual sessions.

End