SECOND ANNOUNCEMENT

The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

“Enriching the quality of life through innovative space programs”

11-14 December 2012, Kuala Lumpur, Malaysia

Dear Sir / Madam,

With reference to the 19th session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19), the holding of which was communicated to you in its First Announcement distributed earlier, we are pleased to forward you the Second Announcement as enclosed. As you will note, this Announcement contains further details of the scheduled meetings, including those of the four working groups, updated schedule of events and other important information, such as the registration, accommodation and visa requirements.

On behalf of the co-organizers, we should like to stress that your participation is very important for the success of the APRSAF-19. With your profound experience as well as your valuable thoughts and insights, we believe that the APRSAF-19 should be able to yield tangible results. We count on your support to also ensure a good representation of your organization, with many experts and managers of your organization to join us at the APRSAF-19.

In order to ensure that all the necessary arrangements are in time for the APRSAF-19, we would be grateful if you could register your participation no later than 31 October 2012 through the following web site: “https://secure.mediatelier.com/aprsaf19/registration.html”
Any additional information concerning the APRSAF-19 will be directly sent in due course to those who have registered and will be made available on our APRSAF website, “http://www.aprsaf.org/”.

We look forward to meeting you in Kuala Lumpur, Malaysia.

With warmest regards,

On behalf of the co-organizers of the APRSAF-19,

Prof. Datin Paduka Dr. Khatijah Bt. Mohd. Yusoff
Deputy Secretary General (Science)
Ministry of Science, Technology and Innovation

Dr. Mustafa Din Subari
Director General
National Space Agency of Malaysia

Dr. Satoru Otake
Deputy Director General
Research and Development Bureau
Ministry of Education, Culture, Sports, Science and Technology

Dr. Keiji Tachikawa
President
Japan Aerospace Exploration Agency
The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)
“Enriching the quality of life through innovative space programs”
11-14 December 2012, Kuala Lumpur, Malaysia

Organizers
The 19th session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19) will be co-organized by the following organizations:

**Malaysia:** Ministry of Science, Technology and Innovation (MOSTI)
National Space Agency (ANGKASA)

**Japan:** Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Japan Aerospace Exploration Agency (JAXA)

APRSAF-19 will be also supported by Ministry of Foreign Affairs of Japan (MOFA)

Dates and Venue
Date: 11-14 December 2012
Venue: Berjaya Times Square Hotel
1 Jalan Imbi 55100 Kuala Lumpur, Malaysia
http://www.berjayahotel.com/kualalumpur/

Registration
Please visit the following registration site and complete your registration online **no later than 31 October 2012**
https://secure.mediatelier.com/aprsaf19/registration.html

Participation in the APRSAF-19 is free of charge.
Overall Schedule of APRSAF-19

<table>
<thead>
<tr>
<th>Dates</th>
<th>Event</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-14 December 2012</td>
<td>APRSAF-19</td>
<td>Berjaya Times Square Hotel</td>
</tr>
<tr>
<td>12 December 2012</td>
<td>Welcome Reception</td>
<td>Berjaya Times Square Hotel</td>
</tr>
<tr>
<td>14 December 2012</td>
<td>Cultural Tour</td>
<td>Putrajaya area</td>
</tr>
</tbody>
</table>

APRSAF-19 Side Events

<table>
<thead>
<tr>
<th>Dates</th>
<th>Event</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9 December 2012</td>
<td>Water Rocket Event</td>
<td>National Planetarium</td>
</tr>
<tr>
<td>10 December 2012</td>
<td>Colloquium on Astronomy from ISS Kibo</td>
<td>National Planetarium</td>
</tr>
<tr>
<td>10 December 2012</td>
<td>SAFE Workshop</td>
<td>Berjaya Times Square Hotel</td>
</tr>
<tr>
<td>11 December 2012</td>
<td>Kibo-ABC Workshop</td>
<td>Berjaya Times Square Hotel</td>
</tr>
<tr>
<td>11-14 December 2012</td>
<td>Poster Contest</td>
<td>Berjaya Times Square Hotel</td>
</tr>
<tr>
<td>11-14 December 2012</td>
<td>APRSAF-19 Exhibition</td>
<td>Berjaya Times Square Hotel</td>
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Tentative Program
The working group sessions will take place on 11 and 12 December 2012. Proposed outlines for the working groups as well as initiatives are in Appendix-A.

As for the overall program, please refer to Appendix-B.

Welcome Reception
A reception will be organized on Wednesday evening, 12 December 2012, to be jointly hosted by MOSTI, ANGKASA and MEXT to welcome the participants of the APRSAF-19. The exact time and venue of the reception will be announced in due course.

Cultural Tour
Destination: Putrajaya
Date: Friday, 14 December 2012
Time: 14:30 - 19:00
   15:00 - Departure from Berjaya Times Square Hotel to Putrajaya
   16:00 - Presentation by Putrajaya guided tour officer and refreshments
   17:00 - Guided tour around Putrajaya
   19:00 - Back to Berjaya Times Square Hotel
The tour will include visits to the following places:

Perdana Putra, Parks of Putrajaya, Seri Perdana, Melawati Palace, Mosques of Putrajaya, Putra Square, Bridges of Putrajaya, Putrajaya Lake, Putrajaya International Convention Centre (PICC), Pride of Putrajaya

Overview:
This cultural tour will bring us to Putrajaya, a model township that has been constructed with detailed planning, innovative urban design and great respect for the environment. It is a city with a vision that also promises to keep the nation's heritage for the country's present and future generations. Its beautifully landscaped roads and parks as well as modern buildings are clearly reflected in the theme "City in a Garden"

As for more details the Cultural Tour, please see Appendix-C

Visa
It is important for those participants from overseas to check their visa requirements for entry into Malaysia. The list of countries requiring visa is provided on the website of the Immigration Department of Malaysia at the following URL address:

However, in case of doubt, it is strongly recommended that you contact, as soon as you can, the Embassy or Consulate of Malaysia in your country to ascertain whether or not you require a visa and to check details of visa requirements, if any. Please note that it may take a few weeks to obtain a visa following the submission of visa application.

Please note that any cost involved in obtaining the visa should be borne by the participant concerned.

Any participant who requires an invitation letter from the local organization in Malaysia for visa application purposes should contact the following person:

Mr. Ahmad Ammar Bin Ahmad Termizi
Malaysia Space Centre, National Space Agency (ANGKASA)
Ministry of Science, Technology and Innovation
Lot 2233, Jalan Turi, Sungai Lang, 42700 Banting, Selangor, MALAYSIA
TEL: +60-3-3180-4377 Website URL : http://www.angkasa.gov.my
E-mail: aprsaf19@angkasa.gov.my
Accommodation
APRSAF participants can take advantage of special rates at Berjaya Times Square Hotel (venue of APRSAF-19).

Berjaya Times Square Hotel (Hotel Map-1)
1, Jalan Imbi, 55100, Kuala Lumpur, Malaysia
http://www.berjayahotel.com/kualalumpur/

Single room: MYR350 nett (per person per night, including breakfast and internet)
Double room: MYR380 nett (per 2 persons per night, including breakfast and internet)

The above rates will be applied to those who have completed reservation by November 16. After completing the reservation, please access the following URL and fill out the required information.
URL: https://secure.mediatelier.com/aprsaf19/hotel.html

A booking form will be sent to you from Berjaya Times Square Hotel by e-mail. Please fill out the form by providing all required information and e-mail or fax it directly to the hotel which will confirm it through e-mail.

The following 4 hotels are located near the venue of APRSAF-19.
A. The Royale Bintang Hotel
   17-21, Jalan Bukit Bintang, Bukit Bintang, 55100, Kuala Lumpur
B. Melia Kuala Lumpur
   16, Jalan Imbi, 55100, Kuala Lumpur
   http://www.meliakualalumpur.com.my/
C. The Federal Kuala Lumpur
   35, Jalan Bukit Bintang, 55100, Kuala Lumpur
D. PARKROYAL Kuala Lumpur
   Jalan Sultan Ismail, 50250, Kuala Lumpur

Please note that each participant is responsible for making or cancelling room reservation directly with the hotel concerned. The APRSAF-19 Secretariat cannot take any responsibility associated with your room reservation.
International and Local Transportation
Please note that the participants are responsible for making arrangements and covering the cost for their international travel to and from Malaysia as well as for the local transportation, including the one between the airport and the hotel and between the venue of the APRSAF-19, Berjaya Times Square Hotel, and any other hotel. *Local transportation will not be provided by the co-organizers.*

Information on the access to and from the Kuala Lumpur International Airport is available on the following website: [http://www.klia.com.my/](http://www.klia.com.my/)

Insurance
Participants are highly recommended to arrange for their own overseas travel insurance. The organizers of the APRSAF-19 are unable to take any responsibility for making arrangements or covering the cost that might be incurred in association with any possible accident, injury and illness.
Points of Contact for APRSAF-19
Participants from Malaysia should contact the local point of contact mentioned below to obtain more information concerning their participation.

For participants from Malaysia:
If you have any inquiries concerning the APRSAF-19, please contact:
   Mr. Ahmad Ammar Bin Ahmad Termizi
   Malaysia Space Centre, National Space Agency (ANGKASA)
   Ministry of Science, Technology and Innovation
   Lot 2233, Jalan Turi, Sungai Lang, 42700 Banting, Selangor, MALAYSIA.
   TEL: +60-3-3180-4377   Website URL: http://www.angkasa.gov.my
   E-mail: aprsaf19@angkasa.gov.my

For participants from other countries:
If you have any inquiries concerning the APRSAF-19, please contact:
   Ms. Azusa Sakamoto, APRSAF-19 Secretariat
   c/o Japan Aerospace Exploration Agency (JAXA)
   Marunouchi Kitaguchi building,
   1-6-5 Marunouchi, Chiyoda-ku, Tokyo, 100-8260, JAPAN
   E-mail: aprsaf19@aprsaf.org   FAX: +81-3-6266-6908
APRSAF-19 Side Events

■ Water Rocket Event
Co-organizers: MOSTI, ANGKASA and JAXA
Date: 8-9 December 2012
Venue: National Planetarium
Lot 53, Jalan Perdana
50480 Kuala Lumpur, Malaysia
TEL: +60-3-2273-4303  FAX: +60-3-2273-5488
Website: www.angkasa.gov.my/planetarium

Water Rocket Event Launch Site:
SMK Putrajaya Presint 18(1)
Jalan P18, Presint 18, 62150 Putrajaya, Malaysia
TEL: +60-3-8890-5420  FAX: +60-3-8890-5421

Reference:
Rules for Launch Competition:

■ Poster Contest
Theme: “Friends in Space”
Co-organizers: MOSTI, ANGKASA and JAXA
Date: 11-14 December 2012
Venue: Berjaya Times Square Hotel

Contact for further information on the Poster Contest and the Water Rocket Event:
Ms. Yayoi Miyagawa, JAXA Space Education Center
E-mail: z-kokusai@edu.jaxa.jp

More information on the Water Rocket Event and Poster Contest will be made available in due course. Please check the APRSAF website (http://www.aprsaf.org) for any updates.
Colloquium on Astronomy from ISS Kibo
Date: 10 December 2012

Additional information to be provided in due course.

SAFE Workshop
Date: 10 December 2012
Venue: Berjaya Times Square Hotel
Reference: http://www.eorc.jaxa.jp/SAFE/

Contact for further information:
Mr. Tomoyuki Nukui
TEL: +81-50-3362-4116  FAX: +81-29-868-2961
E-mail: nukui.tomoyuki@jaxa.jp

Kibo-ABC (Asian Beneficial Collaboration through Kibo Utilization) Workshop
Date: 11 December 2012
Venue: Berjaya Times Square Hotel

Contact for further information:
Mr. Kazuhiro Miyazaki
TEL: +81-50-3362-6369  FAX: +81-29-868-3956
E-mail: miyazaki.kazuhiro@jaxa.jp

APRSAF-19 Exhibition
Date: 11 - 14 December 2012
Venue: Berjaya Times Square Hotel
Reference: Please see Appendix- D

To participate in APRSAF-19 Exhibition, please contact:
Mr. Ahmad Ammar Ahmad Termizi
TEL: +603-3180-4377  E-mail: aprsaf19@angkasa.gov.my

*As the number of booths that can be accommodated at the Exhibition is limited to 10, the participation is accepted on a first-come, first-served basis.
*Exhibitors must register for APRSAF-19 at https://secure.mediatelier.com/aprsaf19/registration.html (APRSAF registration is free.) .
Other matters
Further details concerning the program, registration and logistics of the APRSAF-19 will be made available in due course. Please check for any updates to be made available on APRSAF website at: http://www.aprsaf.org.

Attachments
Appendix A ............... Proposed outlines of the APRSAF working groups and initiatives
Appendix B ............... Tentative program
Appendix C ............... Cultural Tour
Appendix D ............... APRSAF-19 Exhibition
Appendix E ............... Recommendations adopted at APRSAF-18
Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

EO(Earth Observation)WG activities

Proposed Outline

1. The Scope/Objectives of EO WG activities

The EOWG has been exploring opportunities to expand the potential use of EO satellite data for disaster applications (Sentinel Asia) and the environment (SAFE: Space Application for Environment, and Climate R³: Regional Readiness Review for Key Climate Missions). The upcoming EOWG will focus on consulting work plan for the intergovernmental Group on Earth Observation (GEO) Global Agriculture Monitoring initiative (GEO-GLAM) in G20, sharing the progress of SAFE and Climate R³, and stimulating discussion on agriculture / food security, and water to start up new activities that respond to a wider spectrum of user requirements.

1) SAFE
SAFE workshop will be held on Day-0 of EO working group, on 10 December 2012. New proposal of SAFE prototype will be presented, reviewed by SAFE review board members and approved by SAFE workshop participants. SAFE on-going prototype activities will be also reported.

2) APRSAF Regional Readiness Review for Key Climate Missions (Climate R³) [Tentative]
Climate R³ was proposed by Australia as a major outcome of APRSAF-17 to determine the ability of APRSAF countries and institutions to benefit from the data and information which will be provided by selected climate-related satellite missions in coming years. In APRSAF-18, it has been adopted as an ongoing initiative of APRSAF.
Two workshops were held so far in this framework. The workshops brought together current and prospective data users from the Asia-Pacific region and data supply agencies from around the world including representatives from Japan, Thailand, Pakistan, Sri Lanka, Vietnam, Indonesia, Cambodia, Bangladesh, Laos,
Mongolia, India, Korea and Australia.
Following the results of the 2\textsuperscript{nd} workshop on 22-25th May in Perth, Climate R\textsuperscript{3} aims to establish a coordination function of satellite data request and usage in Asia-Pacific region related to the Global Forest Observation Initiative (GFOI) and GEO-GLAM, both are initiatives of the GEO. We will discuss the issue in the EOWG on 11-12 December 2012.

3) Work plan for the GEO-GLAM

4) Country Reports and Private Sectors
In this session, participating countries, private sectors, donor organizations and international organizations are kindly invited to contribute Country Reports about satellite data utilization by using earth observation satellite data. Of course, we welcome the presenters to include proposals for new activities for EO working group in the report.

*Please understand that we cannot provide time slots for all member countries because of the schedule. The co-chairs will lead the arrangements with the APRSAF secretariat.

2. The Results of EOWG Activities at APRSAF-18
See attached: APRSAF-18 adopted recommendations.

3. The Draft of the Agenda
1) Opening Session
2) Review of the Last EOWG in Singapore
3) EOWG Focus & Agenda Adoption
4) SAFE Initiative (Completing Report, Progress Report, and New proposal briefing)
5) Climate R\textsuperscript{3} Initiative
6) Discussing the work plan for the GEO-GLAM
7) Private Sector Initiatives (Agriculture / Food Security, and water)
8) Country Reports (Agriculture / Food Security, and Water)
9) Overall Discussions and the Way Forward
10) Conclusions of EOWG and Wrap-up
Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

CSA (Communications Satellite Application) WG activities

Proposed Outline

1. The scope/objectives of CSA WG activities

The CSA WG has been discussing many topics on satellite communications matters and has been providing good opportunities to exchange each country’s status report on, in particular, digital divide issues as well as the broadband service in the Asia-Pacific region. The CSA WG will share the experiences for realizing cooperation among countries in the region, regarding applications of satellite communications for tele-education, tele-medicine and disaster management, taking into account the needs to resolve the digital divide in the region. On the other hand, new satellite applications appeared and became available in last few years. The space-based automatic identification system (AIS), which is a new application of satellite communications, is one of the solutions of ship monitoring and the satellite-based Positioning, Navigation and Timing (PNT) is also one of the important satellite applications.

In consideration of the above situation and previous APRSAF-18 discussion, the outline of the CSA WG in the APRSAF-19 is as follows:

1) Sharing experiences and opportunities in order to diffuse the use of applications regarding tele-education, tele-medicine, disaster management and mitigation, and discussing new applications or concepts of the satellite communications

Until the previous meetings, many discussions have been made and useful information has been exchanged. In the last APRSAF-18, the CSA WG recognized the significance and effectiveness of satellite communications in the disaster relief and restoration activities, and shared the experiences learned from the recent activities. The CSA WG will discuss continuously these issues. Moreover, some new applications and efforts were planned, demonstrated and operated in the region. The CSA WG will also have more meaningful discussion
about mechanisms for technology transfer with the aim of not only demonstration but also continuous use, the CSA WG will continue these activities under the regional cooperation and aim to promote new applications or concepts of the satellite communications in the region with active participation of satellite operators.

2) Sharing the information of technical trend for ship monitoring

There are several kinds of ship monitoring system, such as the automatic identification system (AIS) in the coastal area, LRIT in ocean, and so on. A space-based AIS, which is a new application of satellite communication in the world and enables to expand the monitoring area from coastal area to ocean, is one of the solutions of ship monitoring. This trend was started by Europe and America several years ago, but now some countries in Asia-pacific region are performing this space-based AIS activity. In the last APRSAF-18, the CSA WG and the EO WG held the joint session titled "Share the information of technical trend for ship monitoring in the Pacific region". The CSA WG will promote this space-based AIS activity in the region.

3) Promotion for the activities on the Global Navigation Satellite System (GNSS)

The satellite-based Positioning, Navigation and Timing (PNT) becomes widely used in the Asia-Pacific countries. According to the recommendation of the APRSAF-15, the Asia Oceania regional workshop on Global Navigation Satellite Systems (GNSS) has been continuously held and the “Asia Oceania Multi-GNSS Demonstration Campaign” was successfully established. The summary of the 4th Asia Oceania Regional Workshop on the GNSS will be reported in this WG. The CSA WG will support relevant activities and encourage the expansion of the satellite-based PNT applications commencing with the QZS-1 satellite “MICHIKI”. Especially, the activities of the disaster mitigation and management working group in the campaign will be introduced, and the CSA WG will discuss potential utilization of these activities for the Sentinel Asia.
2. The result of CSA WG activities in APRSAF-18
   See the attached APRSAF-18 adopted recommendations.

3. The Draft of Agenda

   1) Opening of the session
   2) Adoption of the agenda
   3) General introduction and guidance of CSAWG
   4) Presentations of communications satellite systems and applications
      a. Communications Satellite Systems
      b. Current Status in Asia Pacific Region
   5) Activity reports of communications satellite applications
      a. Study report
      b. Country report
      c. General Discussion
   6) Activity reports of ship monitoring (Space-based AIS)
   7) Activity reports of the Multi GNSS
      ① Report of 4th Asia Oceania Regional Workshop on the GNSS
      ② Introduction of the disaster mitigation and management working group in the “Asia Oceania Multi-GNSS Demonstration Campaign”
      ③ Study report
      ④ General Discussion
   8) Overall discussion and future work
   9) Closing of the session
Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

**SEA (Space Education and Awareness) WG activities**

**Proposed Outline**

1. Background and Objectives of SEA WG activities

   Space has been an important part of human civilization. Throughout the human history, the quest for knowledge of the universe has led humankind to learn more about where they have come from, where they stand and to expand their imagination about where they are going.

   Activities in space have increasingly become an essential, integral part of our human life. Benefits derived from space applications have transformed the way we look at our environment and our planet, the way we communicate and interact with each other and the way we move from one place to another, dramatically increasing the safety, security, accuracy, predictability and convenience in our daily lives.

   In spite of the growing evidences of the usefulness of space science and technology for society, the appreciation by the general public of their importance is still limited. Efforts should continue to increase public awareness of the usefulness and importance of space science and technology. Applications of space science enhance the quality of our lives and support sustainable development of our society.

   For young people, space activities provide a source of interest, imagination and inspiration. Attractive space educational materials can spark intellectual flames in the minds of young people not only in science and technology but also in many other aspects of human activities. Effectively used, examples of the past achievements and efforts to overcome challenges in the use and exploration of outer space can motivate young people to pursue excellence in whatever they do and help them understand how important, and how rewarding, it is to work together with many others to serve the society.
It is with such conviction that the SEA WG was established at the 8th session of APRSAF, in July 2001, with the aim of: i) effectively using space materials to enhance education for young people; ii) providing education and training opportunities for young people in space science and technology; iii) contributing to enhancing mutual understanding among countries in the region through exchange opportunities for young people; and iv) increasing public awareness of the societal benefits and importance of space activities.

2. The Results of SEA WG Activities at APRSAF-18
   See the attached APRSAF-18 adopted recommendations.

3. The Draft of the Agenda
   (1) Opening of the session
   (2) Adoption of the agenda
   (3) General exchange of views on space education and raising awareness
   (4) Joint educational activities for primary, secondary and tertiary school students and teachers
      a. Water rocket activities
      b. Poster contest
      c. Space education forum and seminar
      d. Other activities
   (5) Ways and means to exchange space education materials effectively using IT technologies
   (6) Cooperation with international science community network
   (7) Ways and means to utilize achievements of other WGs for education
   (8) Other matters
      i) Review of the outcomes of the work of the Working Group and possibilities of revising its terms of reference and developing a plan of action
      ii) Other matters

   ¹ For more details of the work to be conducted during APRSAF-19, please refer to “Provisional Agenda” of the Working Group (document APRSAF19/SEA-WG/2012) to be issued.
Appendix A

Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

SEU (Space Environment Utilization) WG activities

Proposed Outline

1. The scope /objectives of Space Environment utilization WG activities

Various kinds of outcomes from International Space Station (ISS) have been reported by the ISS Partner Space Agencies. ISS utilization is not only for space development, but involves every field of human activities including science, technology, education and culture. The purpose of this Working Group is to develop ways of sharing these values of the ISS with Asian countries through the cooperation on ISS utilization.

The assembly of the entire ISS had been completed and the Japanese Experiment Module “Kibo” of ISS is now fully operational. Some new capabilities such as fish experiment facility and small satellite deployment system are being added to Kibo Module. The space environment utilization activities are evolved continuously and further cooperation among Asia-Pacific countries is becoming increasingly important.

Kibo is open for collaboration among Asian countries and actually several collaborative activities have started. A series of protein crystallization experiments which have been conducted by Malaysia (ANGKASA) and Japan (JAXA) since 2009 is a good example of the collaborations. A joint conceptual study between Korea (KARI) and Japan (JAXA) for new experimental equipment and a feasibility study between Indonesia (LAPAN) and Japan (JAXA) are in good progress. It is expected that such activities will expand through regional cooperation in the APRSAF.

In order to create these collaborations in ISS/Kibo utilization among Asian countries, SEUWG decided to launch a new initiative at the last session of APRSAF meeting. Various kinds of outreach and promotion activities to gain the basic experience required for implementing space environment utilization are being done in this initiative. The name of the initiative is “Kibo-ABC”, Asian Beneficial Collaboration through Kibo utilization. The activities in this initiative such as the space seed project, scientific demonstration for students on ISS/Kibo, and small drop tower experiment
seminars in Asia will be reported by participating countries in the Kibo-ABC to the SEUWG.

Another good promotion activity is micro-gravity experiment through parabolic air flight in Japan. It started in 2006 and has been providing opportunities for Asian students to experience microgravity experiments. These opportunities not only help them to learn about microgravity science but also motivate them to develop their own scientific capabilities. The seventh series of parabolic flights is scheduled in December, 2012.

In this WG, we will discuss how we can promote and improve these activities and how we can enhance its effectiveness, etc.

2. The results of Space Environment Utilization WG activities in APRSAF-18
   See the attached APRSAF-18 conclusion and recommendations.

3. The Draft Agenda
   1) Status report on the APRSAF-18 recommendations and actions.
   2) Status report related to ISS program
   3) Status report of WG activities
      a) Protein Crystal Growth Experiment
      b) Joint Conceptual Study between KARI and JAXA
      c) Feasibility Study between LAPAN and JAXA
      d) Results of “Space Seed for Asian Future 2010”
      e) Status of Student Parabolic Flight Experiment
      f) lesson learned
   4) Status report of Kibo-ABC initiative activities
   5) Others
Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

Sentinel Asia

Proposed Outline

1. The scope /objectives of Sentinel Asia

The Sentinel Asia (SA) was established in 2005 as a collaboration between space agencies and disaster management agencies under the APRSAF initiative, applying remote sensing and Web-GIS technology to assist disaster management in the Asia-Pacific region. A step-by-step approach for implementation of this dissemination system was adopted, and SA Step1 (2006-2007) has achieved its overall goals, serving as a good demonstration project to share disaster-related information obtained by several earth observation satellites. SA has moved to Step2 from 2008, enhancing and strengthening its activities based on lessons obtained by Step1.

At APRSAF-18 held in Singapore in December 2011, the recommendation on the launch of the final phase Step3 of Sentinel Asia starting from 2013 and its concept were adopted.

At APRSAF-19, it will be provided with Step3 implementation plan and introduction of new activities.

2. The result of Sentinel Asia activities at APRSAF-18

   See the attached APRSAF-18 adopted recommendations.

3. The Draft of the Agenda

   1) Report on results of Step2 and Step3 implementation plan
   2) Emergency observation report
   3) Introduction of activities in mitigation and preparedness phase
      3-1) Newly established Tsunami Working Group report
      3-2) TBD
SAFE (Space Applications For Environment)

Proposed Outline

1. The Scope/Objectives of SAFE activities

SAFE (Space Applications For Environment) is a voluntary initiative for environmental monitoring, endorsed at APRSAF-15. This session aims to report the current activities of SAFE, including the discussion of the EOWG.

1) SAFE Workshop

SAFE workshop will be held on Day-0 of EOWG, on 10 December 2012. New proposal of SAFE prototype will be presented, reviewed by SAFE review board members and approved by SAFE workshop participants. SAFE members also will report on the status of on-going prototype activities and the result of prototyping, which are finishing their prototype activities at the APRSAF-19.

2) SAFE Initiative Report in EOWG

The SAFE secretariat will report on current SAFE updates on Day 1 of EOWG; on 11 December 2012, in particular, new SAFE prototype activities, ongoing SAFE prototype activities, and successful story of SAFE prototype activities, and will ask participants of the EOWG to discuss about the promotion of SAFE prototype activities and its successful results to participating entities through knowledge transfer and capacity building.

3) Announcement of the 5th SAFE Workshop

The SAFE secretariat will announce the next SAFE Workshop, called “the 5th SAFE Workshop”.

Appendix A

Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)
2. The result of SAFE activities in APRSAF-18
   See attached: APRSAF-18 adopted recommendations.

3. The Draft of the Agenda
   [SAFE Workshop]
   1) Review of the 4th SAFE Workshop Outcomes
   2) Presentation on new prototype proposals
   3) Report from On-going Prototypes
      a. Water resource management (Pakistan)
      b. Fishery monitoring (Sri Lanka)
      c. Fishery management (Thailand)
      d. Forest change assessment (Vietnam)
      e. Mapping and Detecting Wetlands (Sri Lanka)
      f. Assessment of drought impact on rice production (Indonesia)
      g. Water and Flood Security (Cambodia)
      h. Investigation of sedimentation process and stability (Bangladesh)
   4) Review Board Meeting Report

   [SAFE Initiative Report in EOWG]
   1) SAFE Progress Report including Review of 4th SAFE Workshop
   2) On-going Report
   3) Completing Report
   4) New Proposal Briefing
   5) Review Board Results

   [SAFE Initiative Report in Plenary Session]
   1) Summary of the 4th SAFE Work Shop
   2) Report of the result on the workshop in APRSAF-19
   3) Announcement of the Next workshop
Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

Climate R³ (Regional Readiness Review for Key Climate Missions)

Proposed Outline

1. The Scope/Objectives of Climate R³ activities

Climate R³ (Regional Readiness Review for Key Climate Missions) was proposed by Australia as a major outcome of APRSAF-17 to determine the ability of APRSAF countries and institutions to benefit from the data and information which will be provided by selected climate-related satellite missions in coming years. At APRSAF-18, it was adopted as an ongoing initiative of APRSAF.

Two Climate R³ workshops have been held so far. The workshop discussions have focused on bringing together current and prospective data users from the Asia-Pacific region and data supply agencies from around the world. The workshops have involved participants from Australia, Bangladesh, Cambodia, India, Indonesia, Japan, Korea, Laos, Mongolia, Pakistan, Sri Lanka, Thailand, and Vietnam.

Following the 2nd workshop held in Perth in May 2012, Climate R³ is considering how to facilitate and coordinate greater involvement by the Asia-Pacific region in global activities, such as the Global Forest Observation Initiative (GFOI) and the GEO Global Agriculture Monitoring Initiative (GEO-GLAM), both are initiatives of the intergovernmental Group on Earth Observation (GEO). This discussion will take place as part of the EOWG on 11-12 December 2012.

At the plenary of APRSAF-19, Climate R³ will report on its current activities, including the outcome of the 2nd workshop and the discussions in the EOWG.

2. The result of Climate R³ activities in APRSAF-18

See attached: APRSAF-18 adopted recommendations.

3. The Draft of the Agenda
1) Review of the 2nd Climate R³ Workshop Outcomes
2) Presentation on proposals from the discussion in EOWG
Appendix A

Nineteenth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

Kibo-ABC (Asian Beneficial Collaboration through Kibo utilization)

Proposed Outline

1. The background and objective of Kibo-ABC initiative
The International Space Station (ISS) and its Japanese Experiment Module, “Kibo” provide an extraordinary environment, which provokes scientific interest among young students and the general public, as well as their application in scientific research and technological development. Recognizing the significance of optimally exploiting this unique facility for the benefit of all in the Asia-Pacific region, members of the Space Environment Utilization Working Group (SEU WG) under the Asia-Pacific Regional Space Agency Forum (APRSAF) agreed to launch an initiative.

The SEU WG, which plans to optimize the collaboration of “Kibo” utilization, has been discussing the ways to facilitate the effective joint utilization of the space environment since APRSAF-12. At APRSAF-18, launching an initiative was proposed to further promote related activities and enlarge membership.

The initiative aims to share the significances and values which Kibo/ISS brings to human beings and promote the establishment of Kibo utilization collaboration projects in the region.

2. The aim of the first workshop
   a) The strategy and plan of the Kibo-ABC initiative will be discussed among the members.
   b) Status of the current activities in the first year of this initiative will be reported by each members.
   c) Recruit the new members to this initiative.

3. The Draft of the Agenda
   1) Initiative activity, strategy and plan
   2) Status report of 1/2sec-μG program
   3) Status report and solicitation of “Try Zero G”, scientific demonstration
program
4) Plan and preparation status report of the new mission to demonstrate the utilization of “Kibo”
5) Possibility of other new activities
6) Others
## Tentative Program

The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

*~Enriching the quality of life through innovative space programs ~*

11-14 December, 2012
Berjaya Times Square Hotel Malaysia

<Day 0>  10 December, Monday
Workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Schedule</th>
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<tbody>
<tr>
<td>9:00-10:30</td>
<td>SAFE Workshop</td>
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<tr>
<td></td>
<td>(A. Earth Observation Working Group)</td>
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<tr>
<td>10:30-10:45</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>10:45-12:00</td>
<td>SAFE Workshop</td>
</tr>
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<td></td>
<td>(A. Earth Observation Working Group)</td>
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<tr>
<td>12:00-13:00</td>
<td>Lunch</td>
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<tr>
<td>13:00-15:00</td>
<td>SAFE Workshop</td>
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<td>(A. Earth Observation Working Group)</td>
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<tr>
<td>15:00-15:15</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>15:15-17:00</td>
<td>SAFE Workshop</td>
</tr>
<tr>
<td></td>
<td>(A. Earth Observation Working Group)</td>
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### Tentative Program

The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

*~Enriching the quality of life through innovative space programs ~*

11-14 December, 2012

Berjaya Times Square Hotel, Malaysia

**<Day 1> 11 December, Tuesday**

**Workshop & Working Group Session**

<table>
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<tr>
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<tbody>
<tr>
<td>9:00-10:45</td>
<td>Co-chairs: Assoc Prof Dr Abdul Rashid Bin Mohamed, President of Malaysian Remote Sensing Society (MRSS)</td>
<td>Co-chairs: Prof. Ir. Dr Ahmad Faizal Bin Mohd. Zain Fellow, Academy of Sciences Malaysia (AMS), University Malaysia Pahang</td>
<td>Co-chairs: Ms. Azreena Ahmad Director of Education and Space Science Division, National Planetarium, National Space Agency (ANGKASA)</td>
<td>Kibo-ABC Workshop (D. Space Environment Utilization Working Group)</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>Coffee Break</td>
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<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
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<tr>
<td>15:00-15:15</td>
<td>Coffee Break</td>
<td></td>
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</tr>
<tr>
<td>15:15-17:00</td>
<td>A. Earth Observation Working Group</td>
<td>B. Communication Satellite Applications Working Group</td>
<td>C. Space Education &amp; Awareness Working Group</td>
<td>D. Space Environment Utilization Working Group</td>
</tr>
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</table>
## Tentative Program

**The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)**

*~Enriching the quality of life through innovative space programs~*

11-14 December, 2012

Berjaya Times Square Hotel Malaysia

**<Day 2> 12 December, Wednesday**

**Working Group Session**

<table>
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<tr>
<th>Time</th>
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<th>Co-chairs</th>
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<tr>
<td>9:00-10:45</td>
<td>A. Earth Observation Working Group</td>
<td>Co-chairs: Assoc Prof Dr Abdul Rashid Bin Mohamed, President of Malaysian Remote Sensing Society (MRSS) and Dr. Shinichi Sobue, Manager, Earth Observation Research Center, JAXA</td>
</tr>
<tr>
<td>10:45-11:00</td>
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</tr>
<tr>
<td>11:00-12:30</td>
<td>A. Earth Observation Working Group</td>
<td>Co-chairs: Ms. Azreena Ahmad, Director of Education and Space Science Division, National Planetarium, National Space Agency (ANGKASA) and Mr. Hiroki Kohhata, Manager, Space Applications Program Systems Engineering Office, JAXA</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
<td></td>
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<tr>
<td>13:30-15:00</td>
<td>A. Earth Observation Working Group</td>
<td>Co-chairs: Atsuya Ono, Director, Space Environment Utilization Office for Asia (KUOA), Space Environment Utilization Center, JAXA and Dr. Takashi Kubota, Professor, Department of Spacecraft Engineering, Institute of Space and Astronautical Science(ISAS)/Space Education Center, JAXA</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>15:15-17:00</td>
<td>A. Earth Observation Working Group</td>
<td>Co-chairs: Prof. Dr. Mohd Alauddin Mohd Ali, Director of Space Science Institute, The National University of Malaysia (UKM) and Mr. Shigeki Kamigaichi, Director, Kibo Utilization Office for Asia (KUOA), Space Environment Utilization Center, JAXA</td>
</tr>
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</table>

**RECEPTION**
### Tentative Program
The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

~Enriching the quality of life through innovative space programs~

11-14 December, 2012
Berjaya Times Square Hotel Malaysia

*<Day 3> 13 December, Thursday*  
Plenary

**General Co-Chairs**

Malaysia: Dr. Mustafa Din Subari  
Director General, National Space Agency of Malaysia (ANGKASA)

Japan: Dr. Satoru Otake  
Deputy Director General, Research and Development Bureau,  
Ministry of Education, Culture, Sports, Science and Technology (MEXT)

### Morning Session: 9:00-12:10

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
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<tr>
<td>9:00-9:10</td>
<td>Opening remarks by General Co-chairs</td>
<td>MALAYSIA</td>
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<td></td>
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<td>JAPAN</td>
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<tr>
<td>9:10-9:30</td>
<td>Key note addresses by Co-organizers</td>
<td>JAPAN</td>
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<tr>
<td>9:30-9:45</td>
<td>Photo Session</td>
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<tr>
<td>9:45-10:00</td>
<td>Coffee Break</td>
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<tr>
<td>10:00-10:10</td>
<td>Summary of APRSAF-18</td>
<td>SINGAPORE</td>
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<tr>
<td>10:10-12:10</td>
<td>Country reports (15 min. each)</td>
<td></td>
</tr>
<tr>
<td>12:10-13:00</td>
<td>Lunch</td>
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### Tentative Program

**The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)**

*~Enriching the quality of life through innovative space programs ~*

11-14 December, 2012

Berjaya Times Square Hotel Malaysia

**<Day 3> 13 December, Thursday**

Plenary

General Co-Chairs

**Malaysia:** Dr. Mustafa Din Subari  
Director General, National Space Agency of Malaysia (ANGKASA)

**Japan:** Dr. Satoru Otake  
Deputy Director General, Research and Development Bureau,  
Ministry of Education, Culture, Sports, Science and Technology (MEXT)

### Afternoon Session: 13:00-17:00

<table>
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<th>Time</th>
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<td>13:00-13:30</td>
<td>Country reports (15 min. each)</td>
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<tr>
<td>13:30-15:00</td>
<td>Special Session (TBD)</td>
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<td>15:00-15:15</td>
<td>Coffee Break</td>
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<tr>
<td>15:15-17:15</td>
<td>Reports on Initiatives</td>
<td>Sentinel Asia: Disaster Management Support System in the Asia-Pacific Region</td>
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<tr>
<td></td>
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<td>SAFE: Space Applications For Environment</td>
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<td>Climate R3: The Regional Readiness Review for Key Climate Missions</td>
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<td></td>
<td>Kibo-ABC: Asian Beneficial Collaboration through Kibo Utilization</td>
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<td>15:35-15:55</td>
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<td>University International Formation Mission (UNIFORM)</td>
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<td>16:35-16:55</td>
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<td>Summary of the 4th Asia Oceania Regional Workshop on GNSS</td>
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## Tentative Program

The 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)

*~Enriching the quality of life through innovative space programs~*

11-14 December, 2012

Berjaya Times Square Hotel Malaysia

<Day 4> 14 December, Friday

Plenary

### General Co-Chairs

- **Malaysia:** Dr. Mustafa Din Subari  
  Director General, National Space Agency of Malaysia (ANGKASA)
- **Japan:** Dr. Satoru Otake  
  Deputy Director General, Research and Development Bureau,  
  Ministry of Education, Culture, Sports, Science and Technology (MEXT)

### Closing Plenary: 9:00-13:00

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<th>Speaker</th>
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<tr>
<td>9:00-10:00</td>
<td>Remarks by international organizations</td>
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<td>10:00-11:20</td>
<td>Summary reports by Working Groups</td>
<td>Earth Observation Working Group</td>
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<td>Communication Satellite Applications Working Group</td>
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<td>Space Education &amp; Awareness Working Group</td>
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<td></td>
<td></td>
<td>Space Environment Utilization Working Group</td>
</tr>
<tr>
<td>11:20-11:35</td>
<td>Summary report by APRSAF Task Force</td>
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<td>11:35-11:55</td>
<td>Coffee Break</td>
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<tr>
<td>11:55-12:40</td>
<td>Adoption of Recommendations of APRSAF-19</td>
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<tr>
<td>12:40-12:50</td>
<td>Announcement of APRSAF-20</td>
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<td>12:50-13:00</td>
<td>Closing remarks</td>
<td>JAPAN</td>
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<td>MALAYSIA</td>
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<tr>
<td>14:30</td>
<td>Lunch</td>
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<tr>
<td></td>
<td>Cultural Tour</td>
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</tbody>
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Appendix C

PUTRAJAYA

10 TOURISM ICONS

Perdana Putra
Overlooking the Putrajaya Lake, Putra Mosque and Putra Square, this six-storey natural stone clad office complex comprises of the Prime Minister's office, the office of the Deputy Prime Minister and Chief Secretary to the Government. The design incorporates elements of Islamic Mogul architecture in its green-glazed onion-shaped roof.

Parks of Putrajaya
Putrajaya is home to 12 unique parks. Among the top three are the Botanical Gardens, Wetland Park and the Agriculture Heritage Park. The Botanical Garden extending over 93 hectares of land is the largest in the country. Wetland Park is the first and largest constructed freshwater wetlands in the tropics. The Agriculture Heritage Park is where you can learn more about Malaysia's commercial agriculture such as oil palm, rubber and cocoa.

Seri Perdana
Seri Perdana is the residence of the Prime Minister as well as the venue for receiving dignitaries for official state functions and banquets. It shares similar architectural features as the Perdana Putra, in the green dome, structure and Islamic design.

Melawati Palace
Built on the highest vantage point in Putrajaya is the Melawati Palace, a retreat for His Royal Highness Yang di-Pertuan Agong. Designed by an architect from the Terengganu Royal House, it is the second official residence of the King after the Istana Negara in Kuala Lumpur.

Mosques of Putrajaya
There are two main mosques in the city, the Putra Mosque and the Tuanku Mizan Zainal Abidin Mosque. The pink-domed Putra Mosque is constructed of rose-tinted granite, housing up to 15,000 worshippers. The second mosque is named after the 13th Yang di-Pertuan Agong and is impressive with its steel facade.

Putrajaya Square
The 300-metre circular Putra Square has concentric stars representing the states of Malaysia and is adorned with light and water features. Flanked by the Putra Mosque, Perdana Putra, Putra Bridge and the Promenade, the square is a popular spot for tourists, family picnics and outings on weekends.

Bridges of Putrajaya
There are eight signature bridges in Putrajaya of various sizes, design and importance. The Putra Bridge is one of the most important, connecting the Government Precinct and the Mixed Development Precinct. The Putrajaya Cruise fleet is also stationed below this bridge while the upper level forms part of the Boulevard. Other bridges include the Seri Gemilang Bridge, Seri Wawasan Bridge and Seri Saujana Bridge.

Putrajaya Lake
A vast 650 hectare man-made lake, Putrajaya Lake was designed to be a climate moderator for the city. It offers a place for recreation and watersports. Another option is the Lake Cruise with its 65-foot dining cruise boat or the 'Donlang Sayang', a romantic small sampan.

Putrajaya International Convention Centre (PICC)
The PICC is a landmark of Putrajaya inspired by the shape of the eye of the 'penang perak', a silver Malay royal belt buckle. The roof is said to be designed similar to the shape of a folded origami.

Pride of Putrajaya
The architectural style of the city is definitely a source of the nation's pride, as can be seen in the International standards of design and construction of the city structure. Among the distinctive buildings are the Ministry of Finance complex with a crescent-shaped tower and a series of arches forming Islamic motifs. Another notable structure is the futurist entrance arch of the Perbadanan Putrajaya complex, the body managing the administration of the Federal Territory of Putrajaya.

About Putrajaya
Putrajaya is a model township that has been constructed with detailed planning, innovative urban design and great respect for the environment. It is a city with a vision that also promises to keep the nation's heritage for the country's present and future generations. Its beautifully landscaped roads and parks as well as modern buildings are clearly reflected in the theme "City in a Garden".

For more information, please contact:
Public Relations Division
Corporate Services Department
Perbadanan Putrajaya
No.24 Jalan Persiaran Putrajaya, Precinct 3
62275 Putrajaya, Malaysia
Tel : (6) 03-8837 7033
Fax : (6) 03-8837 5610
Website : www.pp.gov.my
PPonline : (6) 03-8837 3000

2
Dear Exhibitor,

INVITATION TO APRSAF-19 EXHIBITION

On behalf of the Local Organizing Committee of the 19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19), we would like to invite your organisation to participate in APRSAF-19 Exhibition as an Exhibitor.

The details of APRSAF-19 Exhibition are as follow:

Date : 11-14 December 2012
Time : 9.00 am – 5.00 pm
Venue : Berjaya Times Square Hotel, Kuala Lumpur
Exhibition fee : USD900

To participate, please contact Mr. Ahmad Ammar Ahmad Termizi through phone at +603 3180 4377 or through email at <aprsaf19@angkasa.gov.my>

Participation is accepted on a ‘first-come, first-served basis’ because we can only accommodate a maximum number of ten (10) booths. Please apply before 31st October 2012.

For more information, please see the appendices attached or feel free to email us at <aprsaf19@angkasa.gov.my>.

Your interest in this exhibition is highly appreciated. Thank you!

Best regards,

APRSAF-19 Local Organizing Committee
SERVICES AND EQUIPMENTS PROVIDED

The exhibition fee of **USD900** covers all the following items:

1) Space rental

2) Installation and dismantling of 3m x 3m Standard Shell Scheme Booth

3) 1 x Pifex Information Table

4) 2 x White Floding Chairs

5) 1 x Basket

6) 2 x Fluorescent Light

7) 1 x 13 Amp Power Point
APPENDIX 2

FLOOR PLAN OF APRSAF-19 EXHIBITION
EXHIBITION BOOTH DESIGN
Recommendations of the Eighteenth Session of
the Asia-Pacific Regional Space Agency Forum (APRSAF-18)
“A regional collaboration for tomorrow’s environment”
6-9 December 2011 in Singapore

Recognizing a regional collaboration for tomorrow’s environment as the overall theme of APRSAF-18,

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-18;

<APRSAF Initiatives>

[Sentinel Asia]
1. Welcome the launch of the final phase Step-3 of Sentinel Asia starting from 2013 with the concept; to promote further collaboration for Sentinel Asia operation; to expand preparedness and mitigation phase by Working Group activities for Tsunami, Flood, Glacial Lake Outburst Flood (GLOF), and Wildfire; and others.

2. Expect that lessons learned from emergency operations such as the Great East Japan Earthquake will be shared and utilized through Sentinel Asia activities and others.

[SAFE (Space Applications For Environment)]
3. Affirm the revision of SAFE Terms of Reference (TOR) to hold a stakeholder meeting to confirm, share and transfer the outcome of prototypes towards the operational use and to add the rule of SAFE prototype suspension/termination. (recognize the success stories)

4. Welcome the new Sri Lankan prototyping for mapping and change detection of wetlands, and promote knowledge sharing about the two successfully completed prototypings.
5. Confirm that 16 engineers and researchers from 6 organizations (ANGKASA, GISTDA, ISRO, KARI, LAPAN, and VAST/STI) in Asia and the Pacific region have participated in the STAR program hosted by JAXA since the STAR Program started.

6. Recognize that engineers and researchers in Asia and the Pacific region participated in the UNIFORM through the STAR Program, and capacity building by micro satellite development is shifting from the STAR Program to the UNIFORM smoothly.

7. Encourage young engineers and researchers who are interested in micro satellite development in Asia and the Pacific region to join the UNIFORM.

8. Encourage participation in the satellite development and the ground station network of the UNIFORM and utilization of the earth observation data taken by the UNIFORM satellites.

9. Confirm that the APRSAF Regional Readiness Review for Key Climate Missions (Climate R3) has been adopted as an ongoing initiative of APRSAF.

10. Recognize the importance of tackling water issues induced by climate change using space technology in Asia and the Pacific region; and encourage planning of a technical session in the 2nd Asia-Pacific Water Forum next year (in consultation with UN Secretary-General’s Advisory Board on Water and Sanitation (UNSGAB) and other related entities) in order to promote the application of space technology to water issues and knowledge sharing.

11. Encourage the inclusion of rice crop monitoring in Asia within the GEO Global Agricultural Monitoring (GEO-GLAM) Initiative Work Plan.
[Communication Satellite Applications]

12. Recognize the significance and effectiveness of satellite communications in the disaster relief and restoration activities, and share the experiences learned from the recent activities.

13. Encourage more active interactions among space agencies, research institutions and private sectors with the aim of expansion of the communications satellite applications and researches including the space-based Automatic Identification System (AIS) for maritime activities.

14. Welcome the sound progress of the Multi-GNSS demonstration campaign such as the adoption of the first Multi-GNSS joint experiments including the QZS-1 satellite “MICHIBIKI” utilization, and look forward to the further deployment of the Multi-GNSS joint experiments in Asia and the Pacific region.

[Space Education and Awareness]

15. Encourage to enhance space education for youth development through continuous activities, such as collaboration with other working groups, enriching educational materials and tools, and implementing poster contest and water rocket competitions.

16. Encourage to promote awareness of space education by collaborating with all groups and organizations involved in space education activities and to share information on space education materials and tools through all means including internet and social media.

[Space Environment Utilization]

17. Confirm to launch the new initiative in order to promote the utilization of Kibo/ISS.

18. Recommend to enhance the efforts to create new cooperative projects through the new initiative in science, education and outreach of the space environment utilization, taking into account the progress of the cooperative activities such as the protein crystallization experiment, the Space Seeds for Asian Future (SSAF) 2010-2011, the parabolic flight micro-gravity experiments, the bilateral feasibility studies and the Try Zero G experimental demonstrations.
19. Recommend the agencies participated in the SSAF project started last year to continue their efforts to complete the project by making the best use of the seeds returned from space.

20. Recommend to enhance Earth observation of natural disasters and environment from ISS, sharing its importance through the joint session held by SEUWG, SEAWG and EOWG.

<APRSAF Supporting Programs and Activities>
[Asia Oceania Multi-GNSS Demonstration Campaign]
21. Welcome the establishment of the 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.

[Special Event: “Asians in Space: Achievements of Human Spaceflight in Asian Countries”]
22. Welcome that the event, hosted by APRSAF and Association of Space Explorers (ASE), took place in the 50th milestone year of human spaceflight in Asia.

23. Recognize that the expansion of space development and utilization and the accomplishment by Asian astronauts have mutually contributed to each other.

24. Recommend to ASE to consider jointly organizing similar events with APRSAF in the future, starting from APRSAF-19.

<Other Topics>
[International Organizations]
25. Welcome presentations from UNESCAP, UNCOPUOS, ASEAN-SCOSA and IAF that recognized the contribution from APRSAF, and hope that they will continuously participate in APRSAF to share further information.

[Reporting to UNCOPUOS]
26. Wish that the outcomes of APRSAF-18 be presented by the Chairman of UNCOPUOS at the meetings of the UNCOPUOS and others in 2012.
[Towards enhanced operation of APRSAF]

27. Note with satisfaction the success of APRSAF as shown by the growing number of participants from more countries and by the results of APRSAF Initiatives and other joint activities.

28. Endorse the establishment of a task force, consisting of organizations having experience with APRSAF sessions, to consider the continuous success of APRSAF and ways and means to make APRSAF more dynamic, with a view to making recommendations to APRSAF-19.