

**Twentieth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-20)**

***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-19  
See the attached APRSAF-19 adopted recommendations.
3. The Draft of the Agenda<sup>1</sup>
  - (1) Opening of the session
  - (2) Adoption of the agenda
  - (3) General exchange of views on space education and raising awareness: Country Report
  - (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 other international organizations and agencies
  - (7) Current methods in spreading space education domestically including its obstacles and ways to overcome them
  - (8) Other matters
    - i) Distance learning systems using satellite
    - ii) SEA WG promotion DVD with sample teaching materials
    - iii) Other matters

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<sup>1</sup> For more details of the work to be conducted during APRSAF-20, please refer to “Provisional Agenda” of the Working Group (document APRSAF20/SEA-WG/2013) to be issued.

*The Twentieth Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-20)*

*Space Education and Awareness Working Group*

*(3 – 4 December 2013, Hanoi, Vietnam)*

**Provisional 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 and secondary 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 other international organizations and agencies
7. Current Methods in spreading space education domestically including its obstacles and ways to overcome them
8. Other matters
  - a. Distance learning system using satellite broadcast
  - b. SEA WG promotion DVD with sample teaching materials
  - c. Other matters

Co-Chairs: Nguyen Thanh Thuy (University of Engineering and Technology, Vietnam)  
Takashi Kubota (Japan Aerospace Exploration Agency, Japan)

| <i>Date</i>                           | <i>Time</i>     | <i>Agenda Item(s)</i> |  |
|---------------------------------------|-----------------|-----------------------|--|
| <Day 1><br><br>3 December,<br>Tuesday | 09:00-<br>10:30 | 1.                    | Opening of the session <ul style="list-style-type: none"> <li>• Remarks by the Co-Chairs</li> <li>• Self Introduction by each participants</li> </ul> <p>Group Photo</p>   |
|                                       |                 | 2.                    | Adoption of the agenda   |
|                                       |                 | 3.                    | General exchange of views on space education and raising awareness<br>(10 min. per one presentation) <ul style="list-style-type: none"> <li>• F. R. Sarker (Bangladesh)<br/>“Celebration of World Space Week-2013 in Bangladesh”</li> <li>• E. Hirohama (Japan)<br/>“Current status of JAXA Space Education Activities”</li> <li>• S. Ock (Korea)<br/>“KARI Education Activities 2014 International Space Camp”</li> <li>• T.K. Jong (Malaysia)<br/>“Space Science Education in Malaysia”</li> <li>• K. R. Adhikary (Nepal)<br/>“Space Education Awareness Activities in Nepal 2013”</li> <li>• R. Sese (Philippines)<br/>“Integrating Space Science to the Basic Education Curriculum”</li> </ul> |
|                                       | 10:30-<br>10:45 | <i>Coffee Break</i>   |  |
| <Day 1>                               | 10:45-<br>12:30 | 3.                    | General exchange of views on space education and raising awareness<br>(10 min. per one presentation) <ul style="list-style-type: none"> <li>• E. Tan (Singapore)<br/>“An overview of Singapore's Talent Development &amp; Education programmes”</li> <li>• S. Tantiphanwadi (Thailand)<br/>“Space Education Awareness at NSTDA”</li> <li>• G. Nguyen (Vietnam)<br/>“Space Education in Vietnam ”</li> </ul>  |
|                                       |                 | 4.                    | Joint educational activities for primary and secondary school students and teachers  |
|                                       |                 | 4-a.                  | Water rocket event <ul style="list-style-type: none"> <li>• Briefing by the Secretariat of the Working Group</li> <li>• Results of APRSAF-20 Water Rocket Event<br/>G. Nguyen (Vietnam)</li> <li>• Briefing by the Secretariat of the Working Group on Advanced category of Water Rocket Competition.<br/>T. Okano (Secretariat)</li> <li>• Discussion <ul style="list-style-type: none"> <li>➢ Next APRSAF Water Rocket Event</li> </ul> </li> </ul>  |
|                                       |                 | 4-b.                  | Poster contest <ul style="list-style-type: none"> <li>• Briefing and preparation for the APRSAF Poster Contest<br/>T. Okano (Secretariat)</li> </ul>   |

| <i>Date</i>            | <i>Time</i>     | <i>Agenda Item(s)</i>  |
|------------------------|-----------------|--|
| 3 December,<br>Tuesday |                 | <ul style="list-style-type: none"> <li>• Discussion <ul style="list-style-type: none"> <li>➢ Next poster Contest Theme</li> <li>➢ Possible development of a calendar for 2014</li> </ul> </li> </ul>   |
|                        | 12:30-<br>13:30 | <i>Lunch</i>   |
|                        | 13:30-<br>15:30 | <p>4. Joint educational activities for primary and secondary school students and teachers</p> <p>4-c. Space education forum and seminar</p> <ul style="list-style-type: none"> <li>• APRSAF Space education seminar 2013 Cambodia<br/>C. Chin (Cambodia)</li> <li>• Discussion</li> </ul> <p>4-d. Other activities</p> <ul style="list-style-type: none"> <li>• S. Ock (Korea)<br/>“2014 International Space Camp”</li> <li>• Discussion</li> </ul> <p>5. Ways and means to exchange space education materials effectively using IT technologies</p> <ul style="list-style-type: none"> <li>• I. Christie (Australia)<br/>“Serious Games for Science Education”</li> <li>• T.K. Jong (Malaysia)<br/>“ANGKASA Online Space Science Education Portal”</li> <li>• Discussion</li> </ul> |
|                        | 15:30-<br>15:45 | <i>Coffee/tea break</i>  |
|                        | 15:45-<br>17:00 | <p>6. Cooperation with other international organizations and agencies</p> <ul style="list-style-type: none"> <li>• Y. Miyagawa (Japan)<br/>“Cooperation with JICA”</li> <li>• K. Sasaki on behalf of M. Ochiai (UN OOSA)<br/>“Discover the Effects of Gravity on Plants – United Nations Zero-Gravity Instrument Project”</li> <li>• Discussion</li> </ul> <p>7. Current methods in spreading space education domestically including its obstacles and ways to overcome them</p> <ul style="list-style-type: none"> <li>• A. Hidayat (Indonesia)<br/>“Space Education Activities and Challenges in Indonesia”</li> <li>• A. Siraj (Pakistan)<br/>“Space Education and Awareness in Pakistan”</li> <li>• Discussion</li> </ul>  |

| <i>Date</i>  | <i>Time</i> | <i>Agenda Item(s)</i>   |   |
|--|-------------|-------------------------|---|
| <b>&lt;Day 2&gt;</b><br><br><b>4 December, Wednesday</b> | 09:00-10:30 | 8.                      | Other matters   |
|  |             | 8-a.                    | i) Distance learning systems using satellite <ul style="list-style-type: none"> <li>• S. Duke (Thailand)<br/>“TBA”</li> <li>• Discussion</li> </ul>   |
|  |             | 8-b.                    | ii) SEA WG promotion DVD with sample teaching materials <ul style="list-style-type: none"> <li>• Y. Miyagawa (Secretariat)</li> <li>• Discussion</li> </ul>   |
|  |             | 8-c.                    | iii) Other matters (10min max/each presentation) <ul style="list-style-type: none"> <li>• M. Afroz (Bangladesh)<br/>"Space science and Astronomy 2013 and First High Altitude Balloon Launch from Bangladesh"</li> <li>• S. Cahyaningsih (Indonesia)<br/>“Fun and Interactive Space Education Through Science Center in Indonesia”</li> <li>• G. Belforte (Italy)<br/>“Report on the Summer School of the G-NAVIS Project”</li> <li>• H. Akiyama (Japan)<br/>“Asia-Pacific cansat competition”</li> <li>• Y. Hasegawa (Japan)<br/>“A unique story of educational-cultural space mission”</li> </ul> |
|  | 10:30-10:45 | <i>Coffee/tea break</i> |   |
|  | 10:45-12:30 | 8-c.                    | iii) Other matters (10min max/each presentation) <ul style="list-style-type: none"> <li>• A. Yasuda (Japan)<br/>“The summer school on GNSS in Tokyo”</li> <li>• H. Yatomi (Japan)<br/>“ARGOS for Education”</li> <li>• M. Tunku (Malaysia)<br/>“Capacity building programs and efforts for space policy and law researches in Malaysia”</li> <li>• Y. Muraki (SGAC)<br/>“SEA Activities of Space Generation Advisory Council in Asia-Pacific Region”</li> <li>• G. Chen (Thailand)<br/>“Thailand’s National Paper Plane Competition: basic inspiration towards aeronautic education”</li> </ul>     |
|  | 12:00       | ☆                       | <ul style="list-style-type: none"> <li>• Joint Session with SEU, Kibo-ABC and SEA WG: Astronaut Furukawa (Japan)<br/>“Try Zero G - the first step to experiment your dream in space!”<br/>**This special session is subject to change.</li> </ul>   |
|  | 12:30-13:30 | <i>Lunch</i>            |   |

| <i>Date</i>                                     | <i>Time</i>      | <i>Agenda Item(s)</i>   |
|---|------------------|---|
| <Day 2><br><br><b>4 December,<br/>Wednesday</b> | 13:30 –<br>17:00 | <p>4. Joint educational activities for primary and secondary school students and teachers</p> <p>4-a. Water rocket event</p> <ul style="list-style-type: none"> <li>• Report from the Advanced Water Rocket Committee.<br/>T. Okano (Secretariat)</li> </ul> <p>4-b. Poster contest</p> <ul style="list-style-type: none"> <li>• Report by the Secretariat of the Working Group on the results of the selection of winners<br/>T. Okano (Japan)</li> <li>• Review and approval of the results<br/>Award Ceremony</li> </ul> <p>Observations and recommendations</p> <ul style="list-style-type: none"> <li>• Review of the draft and discussion</li> </ul> <p>Adoption of the conclusions and recommendations of the Working Group</p> <p>(※15:30-15:45 Coffee Break)</p> |