



**16<sup>TH</sup>**  
**APRSAF**

Asia-Pacific Regional  
Space Agency Forum

September 15, 2009

## **FIRST ANNOUNCEMENT**

### **The 16th Session of the Asia-Pacific Regional Space Agency Forum** **(APRSAF-16)**

***“Space Applications: Contributions towards Human Safety and Security”***

**26-29 January 2010, Bangkok, Thailand**

Dear Sir/Madam,

We are pleased to inform you that the sixteenth session of the Asia-Pacific Regional Space Agency Forum (APRSAF-16) will be held from 26 to 29 January 2010 in Bangkok, Thailand. The APRSAF-16 will be jointly organized and co-sponsored by the Ministry of Science and Technology (MOST) of Thailand, the Geo-Informatics and Space Technology Development Agency (GISTDA), the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan and the Japan Aerospace Exploration Agency (JAXA).

On behalf of the APRSAF-16 organizers and on our own behalf, we invite you to join the APRSAF-16 to share your valuable experiences as well as your profound thoughts and insights. We also take the liberty of requesting for good participation in the APRSAF-16 from your organization as well.

While the APRSAF is designed to serve as an active forum to promote concrete cooperative activities to address common issues at the regional level with the aim to contribute toward solving problems not only of the Asia-Pacific region but also of the entire world as well as to exploit space technology development and utilization for sustainable development of countries in the Asia-Pacific region.

As usual, the APRSAF-16 is going to have the plenary session and sessions of the four working groups (WGs): Earth Observation (EO) WG, Communication Satellite Applications (CSA) WG, Space Education and Awareness (SEA) WG and Space Environment Utilization (SEU) WG.

Following the APRSAF-15 which was held in December 2008 in Hanoi & Ha Long Bay, Vietnam, the APRSAF-16 will also focus on Sentinel Asia (Disaster Management Support System in the Asia-Pacific Region), SAFE (Satellite Applications For Environment) and we will share the

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<http://www.aprsaf.org>

progress report on the STAR (Satellite Technology for the Asia-Pacific Region) program which was launched successfully this June. Additionally, the result of the GNSS (Global Navigation Satellite System) workshop, which will be held in Bangkok as well, will be presented in APRSAF-16.

Other themes of the APRSAF-16 will be: (1) Applications of space technology to tackle imminent regional (and global) environmental issues; (2) Further utilization of space to raise the standard of living of the people; (3) Utilization of a unique research environment in space to advance research and development; and (4) Education and awareness of space to provide better opportunities to the youth who would play a key role in space development and utilization in the future.

Further details of the APRSAF-16 will be sent to you in due course. We do hope that you will join us at the APRSAF-16 in January next year along with your colleagues.

With warmest regards,

APRSAF Secretariat

On behalf of the co-host organizations,



*Dr. Suchinda Chotipanich*

Dr. Suchinda Chotipanich  
Permanent Secretary  
Ministry of Science and Technology

*Dr. Darasri Dowreang*



Dr. Darasri Dowreang  
Acting Director  
Geo-Informatics and Space Technology Development Agency



*Koichi Morimoto*

Koichi Morimoto  
Deputy Director-General  
Research and Development Bureau  
Ministry of Education, Culture, Sports, Science and Technology



*Keiji Tachikawa*

Keiji Tachikawa  
President  
Japan Aerospace Exploration Agency

# **The 16<sup>th</sup> Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-16)**

**“Space Applications: Contributions towards Human Safety and Security”**

**26-29 January 2010, Bangkok, Thailand**

## **Background**

The Asia-Pacific Regional Space Agency Forum (APRSAF) was established in 1993 in response to the declaration adopted at the Asia Pacific International Space Year Conference (APIC) held in 1992, to enhance the development of each country's space program and to exchange views toward future cooperation in space activities in the Asia-Pacific region. The APRSAF has held fifteen annual meetings organized jointly by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan, Japan Aerospace Exploration Agency (JAXA) and co-host organizations of countries participating in the APRSAF, to discuss current space-related issues and possible cooperation among countries mainly in the region. The co-host countries have been Mongolia, Malaysia, the Republic of Korea, the Kingdom of Thailand, Australia, the Republic of Indonesia, India and Vietnam. APRSAF features to promote concrete regional cooperation on space-related matters through open and voluntary participation. To reflect a broad range of views and voices, the APRSAF intends to ensure wider participation of space agencies, government entities, regional and international organizations and institutions responsible for space applications.

The 15th Session of the APRSAF (APRSAF-15) was convened under the main theme of “Space for Sustainable Development” with the aim to strengthen and enable the countries of the Asia-Pacific region to improve the quality of life of their people through enhanced use of space-based systems, activities and services. It was jointly organized by the Ministry of Science and Technology (MOST) of Vietnam, the Vietnam Academy of Science and Technology (VAST), MEXT and JAXA. The APRSAF-15 gathered more than 200 participants from 20 countries and 6 regional and international organizations. As the results of the discussions at the Plenary session and the four working groups (Earth Observation (EO), Communication Satellite Applications (CSA), Space Environment Utilization(SEU) and Space Education and Awareness (SEA)), the APRSAF-15 adopted the recommendations as shown in Appendix-A.

## **Objectives**

While the APRSAF has been an active forum to promote concrete cooperative activities to resolve common problems at the regional level, the APRSAF-16 will be held under the main theme of “Space Applications: Contributions towards Human Safety and Security” with the aim to contribute toward solving problems not only of the Asia-Pacific region but also of the entire world as well as to exploit space technology developed and utilization for sustainable development of countries in the Asia-Pacific region.

## **Plenary and Working Groups**

The Plenary session will take place in the third and fourth days of the APRSAF-16. In addition to the Plenary session, it is proposed to have parallel sessions of four working groups (WGs): Earth Observation (EO) WG, Communication Satellite Applications (CSA) WG, Space Education and Awareness (SEA) WG and Space Environment Utilization (SEU) WG in the first and second days of the APRSAF-16. The concept paper of each working group will be provided to you in due course.

At the Plenary session, a status report of the Sentinel Asia Project, SAFE (Satellite Applications For Environment), STAR (Satellite Technology for the Asia-Pacific Region) and GNSS (Global Navigation Satellite System) workshop will be presented.

Sentinel Asia, which was initiated as the first step to build a disaster risk management system in the Asia-Pacific region since the APRSAF-12, and now that entered into STEP2 Project.

SAFE was recommended in APRSAF-15 in 2008 as a platform for development of solution-oriented prototype systems for environmental monitoring, in particular to assess regional impacts of climate change. Its basic concept for future prototype activities is contributing to GEOSS.

STAR program was proposed in the APRSAF-14 as a new international cooperation scheme on small satellite development. The objective of this cooperation is to provide opportunities of capacity building on satellite development for space agency staffs in Asia-Pacific countries, to increase the number of available Earth observation satellites in this region and meet the needs of Earth observation in the future.

Additionally, the result of the GNSS workshop, which will be held in January 25, 2010 in Bangkok, Thailand, will be presented in APRSAF-16.

## **Expected Attendance**

Senior officials of relevant Ministries as well as heads and other representatives of space agencies, remote sensing agencies, and interested institutions from government, academy and industries including private sectors are very much welcome to participate in the APRSAF-16.

*\*Participants from Thailand are recommended to contact the Point of Contact of the GISTDA mentioned below to obtain more detailed information for participation.*

## **Tentative Program**

Please see Appendix-B.

## **Date and Location**

Date: 26 to 29 January 2010

Venue: Sofitel Centara Grand Bangkok

1695 Phaholyothin Road , Chatuchak, 10900 BANGKOK, THAILAND

<http://www.sofitel.com/gb/hotel-3432-sofitel-centara-grand-bangkok/index.shtml>

## **Others**

Further detailed information on the program, registration and logistics of the APRSAF-16 will be available in due course. Please visit the APRSAF website at: <http://www.aprsaf.org>.

## **Points of Contact**

### **For Participants from Thailand:**

If you have any inquires concerning the APRSAF-16, please feel free to contact:

Ms. Raksina Lekthanoo, Administrative Officer, International Relations  
The Government Complex, Bldg B, 6-7<sup>th</sup> Floor  
120 Moo 3, Chaeng Wattana Rd., Laksi, Bangkok 10120  
TEL: +66-2-141-4502, FAX:+66-2-143-9603, E-mail: [raksina@gistda.or.th](mailto:raksina@gistda.or.th)

### **For Participants from the countries except Thailand:**

If you have any inquires concerning the APRSAF-16, please feel free to contact:

Ms. Saori Ozawa, APRSAF-16 Secretariat  
Manunouchi Kitaguchi building,  
1-6-5 Marunouchi, Chiyoda-ku, Tokyo, 100-8260, JAPAN  
TEL:+81-50-3362-5880, FAX:+81-3-6266-6908 or E-mail: [aprsaf16@aprsaf.org](mailto:aprsaf16@aprsaf.org)

## **APRSAF-16 Side Event**

### ■ **Asia-Oceania Regional Workshop on GNSS**

Date: January 25 to 26, 2010

Venue: Sofitel Centara Grand Bangkok

\*Further detailed information will be released in due course <http://www.multignss.asia/>

\*Please contact for further information at [Email: IS-QZSS@jaxa.jp](mailto:IS-QZSS@jaxa.jp)

#### **Contact for further information**

Mr. Satoshi Kogure, JAXA QZSS project team

Tel: +81-29-868-5511 Fax: +81-29-868-5975

[Email: IS-QZSS@jaxa.jp](mailto:IS-QZSS@jaxa.jp)

### ■ **APRSAF-16 Poster Contest**

Theme: "Our Universe - Great Discoveries"

Co-organizers: GISTDA and JAXA

Date: During the sessions of APRSAF-16

Venue: Sofitel Centara Grand Bangkok

Reference: [http://www.aprsaf.org/data/aprsaf16\\_data/PC-A&R\\_Version-17Jun09\\_.pdf](http://www.aprsaf.org/data/aprsaf16_data/PC-A&R_Version-17Jun09_.pdf)

### ■ **APRSAF-16 Water Rocket Event**

Local Organizer: National Science Museum (NSM) of Thailand

Co-organizer: JAXA

Date: January 23 to 24, 2010

Venue: NSM, Bangkok, Thailand

Reference: [http://www.aprsaf.org/data/aprsaf16\\_data/Water\\_Rocket\\_Event-Outline\\_FINAL.pdf](http://www.aprsaf.org/data/aprsaf16_data/Water_Rocket_Event-Outline_FINAL.pdf)

#### **Contact for further information (Poster contest & Water Rocket Event)**

Ms. Emiko Ando, JAXA Space Education Center

Tel: +81-42-759-8752 Fax: +81-42-759-8612

[Email: aprsaf-16@edu.jaxa.jp](mailto:aprsaf-16@edu.jaxa.jp)

**Recommendations of the fifteenth session of  
The Asia-Pacific Regional Space Agency Forum (APRSAF-15)  
"Space for Sustainable Development"  
9-12 December 2008  
Hanoi and Ha Long Bay, Vietnam**

Recognizing that the use of space technology and its applications substantively contribute to sustainable development, by improving the quality of life and bringing other benefits to humanity in the Asia-Pacific region,

Recognizing the importance of regional cooperation to cope with disaster risk reduction, climate change adaptation, capacity building and other regional issues,

Hereby affirm that we, the participants of APRSAF-15,

[Sentinel Asia]

1. Confirm with satisfaction that STEP2 JPT with JAXA as its secretariat has been successfully evolving its activities such as an increase in the number of participating satellites, and the provision of higher value added data, and utilizing WINDS "KIZUNA";
2. Welcome that in addition to JAXA and ISRO of STEP1, KARI and GISTDA have decided to provide EO data for STEP2;
3. Look forward to further utilization of Sentinel Asia;

[APRSAF Satellite]

4. Agree on the name of APRSAF satellite cooperation as "Satellite Technology for the Asia-Pacific Region (STAR) Program";
5. Welcome the start of an international project team of the STAR program consisting of JAXA and other participating agencies at JAXA Sagami-hara campus, starting from April 2009;
6. Encourage the organizations concerned to provide launch opportunities for the Micro-STAR satellite, operation resources of ground stations, and necessary instruments;

[Earth Observation/SAFE]

7. Recommend that Space Application for Environment (SAFE) as a platform for development of solution-oriented prototype systems for environmental monitoring, in particular to assess regional impacts of climate change;
8. Appreciate the early success of SAFE prototyping (Land use monitoring and water resource management) in Vietnam, and recommend to extend to other countries and other themes;
9. Agree on the SAFE basic concept for future prototype activities contributing to GEOSS;

10. Encourage more participation from the science community as well as the private sector affiliates to support space agency initiatives;

11. Agree to hold the first SAFE workshop in Pattaya, Thailand in May 2009, hosted by GISTDA;

[Communication satellite applications]

12. Agree to further promote the Asia-Pacific regional cooperation through the Communication Satellite Applications Working Group (CSA WG) by sharing the experiences and working on the creation of the new application for tele-education, tele-medicine and disaster management, which are expected as suitable applications of the satellite communication;

13. Pursue to cooperate in the field of the Global Navigation Satellite System (GNSS) in the Asia-Pacific region, and organize a workshop to discuss the future possibility of the joint development and experiments of GNSS applications in the region;

[Space education and awareness]

14. Call upon all countries that participate in APRSAF to support the efforts made and activities undertaken through APRSAF to enhance the understanding among young people at all education levels and school teachers of space science and technology and their applications as well as their links with our lives;

15. Agree that the regional space education efforts undertaken by APRSAF should continue to expand to include various activities and to contribute to global initiatives undertaken in areas relating to space education and awareness increase, such as the celebration of the World Space Week each year and the International Year of Astronomy, in 2009;

16. Agree that it is important to promote inter-regional cooperation with other regions such as Latin America and Africa by, among other things, sharing concrete examples of the successful, joint regional initiatives undertaken by APRSAF in the area of space education;

[Space Environment Utilization]

17. Appreciate the realized opportunity to utilize the Japanese Experiment Module (JEM) "KIBO" and confirm to promote concrete activities towards the joint utilization, continue to share and update information multilaterally on space environment utilization status, and to seek promising areas of steady and productive cooperation among Asia-Pacific countries such as parabolic flight experiments and ISRO's capsule recovery experiment;

18. Encourage to further promote bilateral cooperation activities clarified through APRSAF initiatives;

[UNCOPUOS]

19. Wish that the outcomes of the APRSAF-15 will be presented by the Chairman of UNCOPUOS at the meetings of the UNCOPUOS as well as its Scientific and Technical Subcommittee at their meetings in 2009.

20. Recommend the Chairman of UNCOPUOS presents the outcomes of APRSAF-15 as regional cooperative structures to other region such as Latin America and Africa in order to promote inter-regional cooperation as mandated by UN General Assembly.

***The Tentative Program of the 16th Session of  
the Asia Pacific Regional Space Agency Forum (APRSAF-16)***

*~ Main Theme :Space Applications : Contributions towards Human Safety and Security ~*

*26-29 January 2009*

*Sofitel Centara Grand Bangkok, Bangkok, Thailand*

*as of 15 September, 2009*

***Day 1 - 26 January***

**[Registration : 09:30-10:00]**

**[Working Group Session : 10:00-16:00]**

	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
10:00-11:00	[Co-chairs] Dr. Takashi Moriyama Fellow, Earth Observation Research Center, JAXA  Dr. Darasri Dowreang Deputy Director, GISTDA	[Co-chairs] Mr Hiroki Kohhata Senior Engineer, Satellite Applications and Promotion Center, JAXA  Dr. Arnon Tubtiang Senior Executive Vice President of Core Network Telephone Organization of Thailand (TOT)	[Co-chairs] Dr. Takashi Kubota Professor, Department of Spacecraft Engineering, JAXA/ISAS  Dr.Surachai Rattanasermpong Deputy Director,GISTDA	[Co-Chairs] Mr. Tetsuo Tanaka Director, Space Environment Utilization Center, JAXA  Dr. Saran Poshychinda Deputy Director National Astronomical Research Institute of Thailand (NARIT)
11:00-11:15	<b>Break</b>			
11:15-12:30	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
12:30-13:30	<b>Lunch : hosted by GISTDA</b>			
13:30-15:00	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
15:00-15:15	<b>Break</b>			
15:15-16:00	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>

Coffee service:11:00-12:00, 15:00-16:00

***The Tentative Program of the 16th Session of  
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***~ Main Theme :Space Applications : Contributions towards Human Safety and Security ~***

***26-29 January 2009***

***Sofitel Centara Grand Bangkok, Bangkok, Thailand***

*as of 15 September, 2009*

***Day 2 - 27 January***

**[Registration : 09:00-09:30]**

**[Working Group Session : 09:30-16:00]**

	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
<b>09:30-10:30</b>	[Co-chairs] Dr. Takashi Moriyama Fellow, Earth Observation Research Center, JAXA  Dr. Darasri Dowreang Deputy Director, GISTDA	[Co-chairs] Mr Hiroki Kohhata Senior Engineer, Satellite Applications and Promotion Center, JAXA  Dr. Arnon Tubtiang Senior Executive Vice President of Core Network Telephone Organization of Thailand (TOT)	[Co-chairs] Dr. Takashi Kubota Professor, Department of Spacecraft Engineering, JAXA/ISAS  Dr.Surachai Rattanasermpong Deputy Director,GISTDA	[Co-Chairs] Mr. Tetsuo Tanaka Director, Space Environment Utilization Center, JAXA  Dr. Saran Poshychinda Deputy Director National Astronomical Research Institute of Thailand (NARIT)
<b>10:30-10:50</b>	<b>Break</b>			
<b>10:50-12:30</b>	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
<b>12:30-13:30</b>	<b>Lunch : hosted by GISTDA</b>			
<b>13:30-14:30</b>	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
<b>14:30-14:50</b>	<b>Break</b>			
<b>14:50-16:00</b>	<b>A. Earth Observation W.G</b>	<b>B. Communication Satellite Applications W.G.</b>	<b>C. Space Education &amp; Awareness W.G</b>	<b>D. Space Environment Utilization W.G.</b>
<b>18:00-20:00</b>	<b>Reception hosted by MEXT</b>			

Coffee service:10:30-11:30, 14:30-15:30

***The Tentative Program of the 16th Session of  
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***~ Main Theme :Space Applications : Contributions towards Human Safety and Security ~***

***26-29 January 2009***

***Sofitel Centara Grand Bangkok, Bangkok, Thailand***

*as of 15 September, 2009*

***Day 3 - 28 January***

**General Co-Chairs**

**Thailand:Dr.Chaivat Toskulkao, Deputy Permanent Secretary, Ministry of Science and Technology (MOST)**

**Japan:Prof.Hiroki Matsuo, Chairman,Space Activities Commission (SAC) / MEXT**

**[Registration : 08:30-09:00]**

**[Plenary Session : 09:00-12:15]**

<b>Time</b>	<b>Title</b>	<b>Speaker</b>
<b>09:00-09:15</b>	<b>Opening Remarks</b>	<b>Ministry of Science and Technology (MOST) THAILAND</b>
		<b>MEXT JAPAN</b>
<b>09:15-09:25</b>	<b>Key Note Address</b>	<b>MOST/Thailand</b>
<b>09:25-09:35</b>	<b>Key Note Address</b>	<b>MEXT/Japan</b>
<b>09:35-09:55</b>	<b>Summary of APRSAF-15 and Country Report</b>	<b>VAST/Vietnam</b>
<b>09:55-10:45</b>	<b>Photo Session &amp; Coffee Break</b>	
<b>10:45-11:00</b>	<b>Country Report</b>	
<b>11:00-11:15</b>	<b>Country Report</b>	
<b>11:15-11:30</b>	<b>Country Report</b>	
<b>11:30-11:45</b>	<b>Country Report</b>	
<b>11:45-12:00</b>	<b>Country Report</b>	
<b>12:00-12:15</b>	<b>Country Report</b>	
<b>12:15-13:30</b>	<b>Lunch : hosted by GISTDA</b>	

***The Tentative Program of the 16th Session of  
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***26-29 January 2009***

***Sofitel Centara Grand Bangkok, Bangkok, Thailand***

*as of 15 September, 2009*

***Day 3 - 28 January***

**[Plenary Session : 13:30-17:30]**

Time	Title		Speaker
13:30-17:30	Report Session	13:30-15:30	Sentinel Asia
		15:30-16:15	STAR
		16:15-17:00	SAFE
		17:00-17:30	GNSS
18:00-20:00	Reception hosted by GISTDA		

***The Tentative Program of the 16th Session of  
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***26-29 January 2009***

***Sofitel Centara Grand Bangkok, Bangkok, Thailand***

***as of 15 September, 2009***

***Day 4 - 29 January***

**[Closing Plenary : 09:00-12:00]**

09:00-09:05	<b>Greeting</b>	<b>Strategic HQ for Space Policy(Japan)</b>
09:05-09:20	<b>Country Report</b>	
09:20-09:35	<b>Speech by International Organization</b>	
09:35-09:50	<b>Speech by International Organization</b>	
09:35-09:50	<b>Speech by International Organization</b>	
10:05-10:20	<b>Presentation of Summary Report</b>	<b>Earth Observation WG</b>
10:20-10:35		<b>Communication Satellite Applications WG</b>
10:35-10:50		<b>Space Education &amp; Awareness WG</b>
10:50-11:05		<b>Space Environment Utilization WG</b>
11:05-11:20	<b>Coffee Break</b>	
11:20-12:00	<b>Adoption of Recommendations of APRSAF-16</b>	
12:00-12:10	<b>Announcement of APRSAF-17</b>	
12:10-12:20	<b>Closing Remarks</b>	<b>Dr.Chaivat Toskulkao</b> Deputy Permanent Secretary, Ministry of Science and Technology <b>THAILAND</b>
		<b>Prof. Hiroki Matsuo</b> Chairman, Space Activities Commission / MEXT <b>JAPAN</b>
<b>PM</b>	<b>Option: Technical Tour (TBC)</b>	