
Report on APRSAF-15 in Hanoi & Ha long bay, Vietnam

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**Chu Ishida
Director, Space Cooperation Office for Asia Pacific Region
Japan Aerospace Exploration Agency (JAXA)**

Asia-Pacific Regional Space Agency Forum (APRSAF)

- Established in 1993 after the International Space Year to promote regional cooperation in space technology development and applications.
- Participating organizations include space agencies, government organizations, user agencies, regional and international organizations.

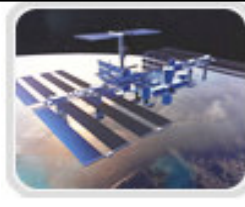
Working Groups



**Earth
Observation
WG**



**Communication
Satellite
Applications
WG**



**Space
Environment
Utilization
WG**



**Space
Education
And
Awareness
WG**



**“Sentinel Asia”
Disaster Management
Support System**



**“SAFE”
Space Applications
for Environment**



STAR

**“STAR”
Satellite Technology
for the Asia-Pacific
Region Program**

APRSAF-15

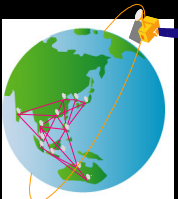
- Held for 9 to 12 December 2008 in Hanoi and Halong Bay, Vietnam, with main theme of “Space for Sustainable Development”
- Jointly organized by the MOST (Vietnam), VAST (Vietnam), MEXT (Japan), and JAXA (Japan)
- More than 200 participants from 20 countries and 6 regional and international organizations



APRSAF Project (1)- Sentinel Asia

Space-based disaster management support system

- **Confirm that STEP2 has been successfully evolving its activities such as an increase in the number of participating satellites, and provision of higher value-added data, and utilizing WINDS "KIZUNA".**
- **Welcome that in addition to JAXA and ISRO of STEP1, KARI and GISTDA have decided to provide satellite data for STEP2.**



Sentinel Asia in Step 2

**To establish a reliable Disaster
Management Support System**

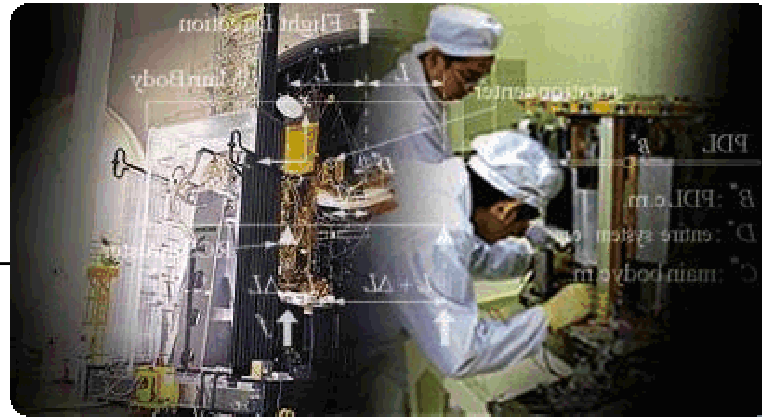


Joint Project Team (JPT)
59 organizations
(51 agencies from 20 countries
and 8 international organizations)

APRSAF Project (2) – STAR Program **Small satellite cooperation program**

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

APRSAF Satellite Cooperation – STAR Program

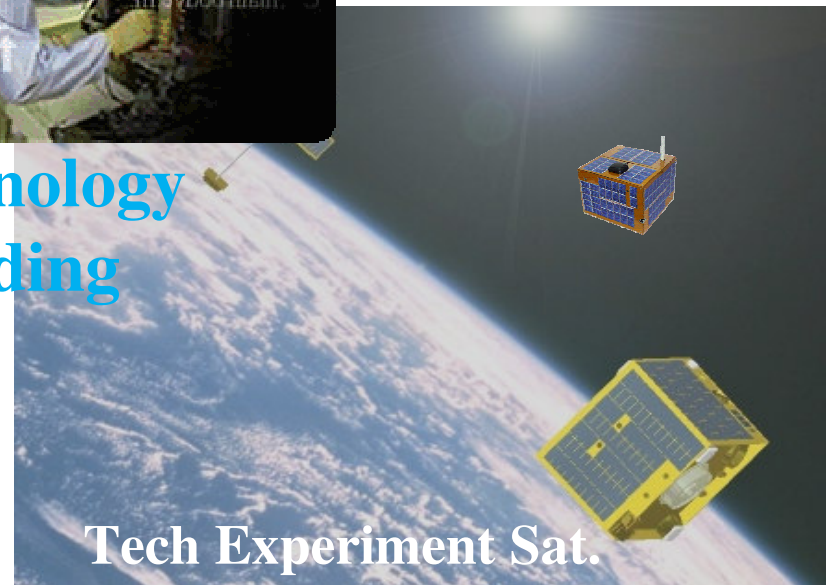


Satellite technology
capacity building



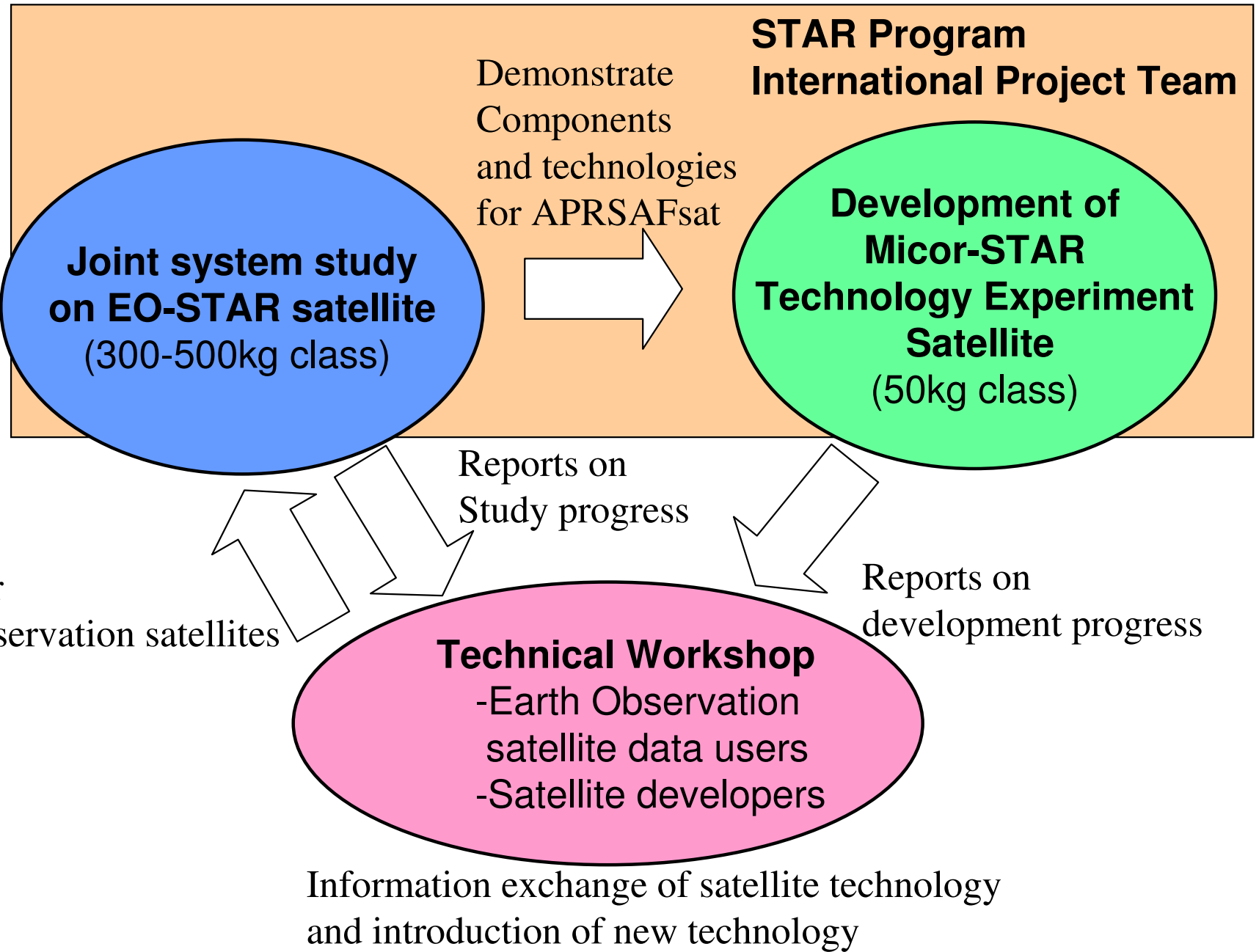
Earth Observation Sat.

System Study of
EO-STAR satellite



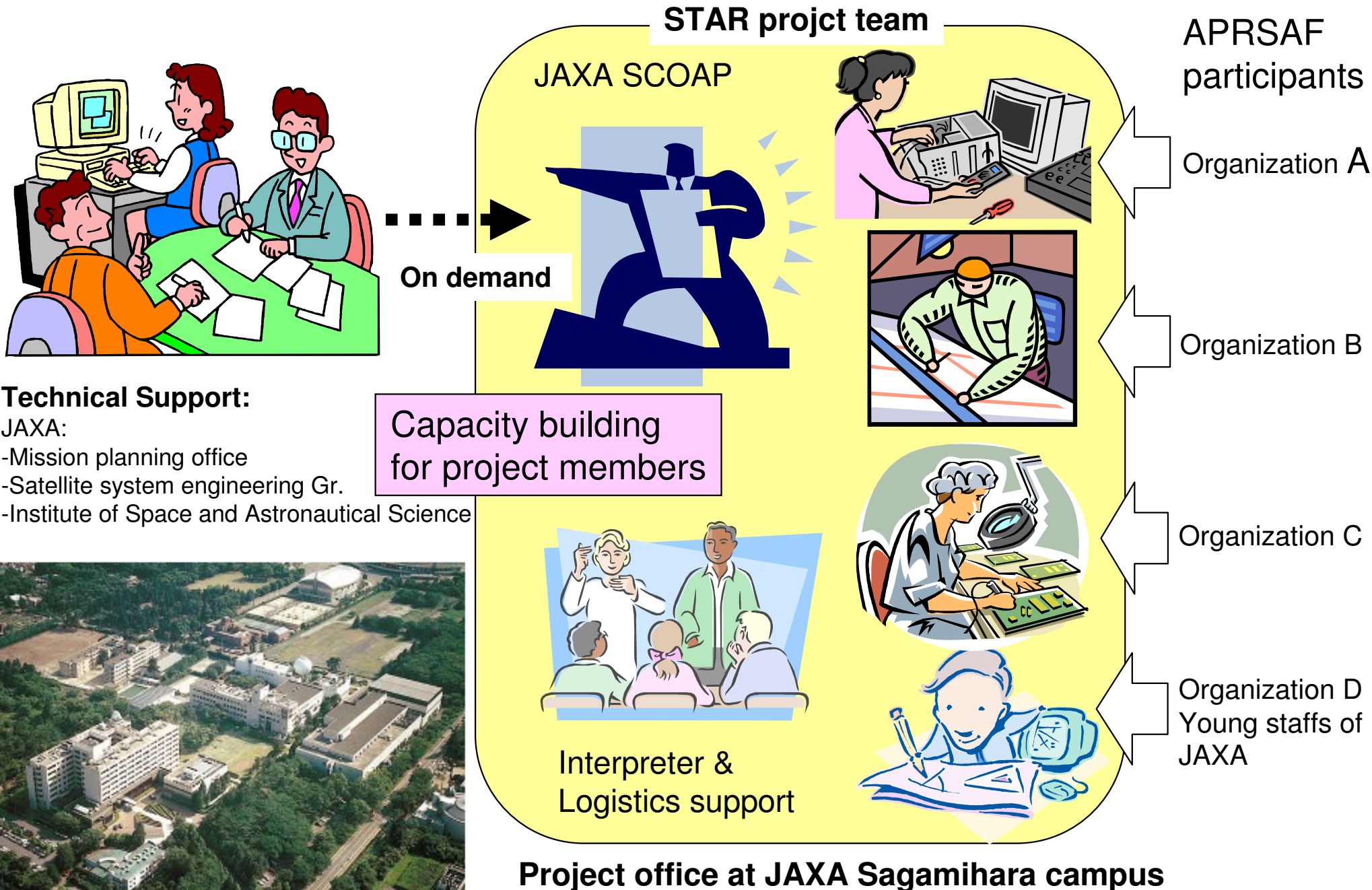
Tech Experiment Sat.

Micro-STAR development



APRSAF satellite cooperation – STAR Program

International Project Office for STAR Program



STAR Progam Technical Workshop

- 1st Workshop was held in October 2008 in Bangkok, Thailand
- Needs survey for Earth Observation satellites



Needs survey
in APRSAF participant countries



Workshops
Sat data User : Requirements and priority
Sat Developer: Constrains of design

Input to
EO-STAR
system study

- Progress report of STAR project team
- Information exchange of satellite technology standards and introduction of new technology

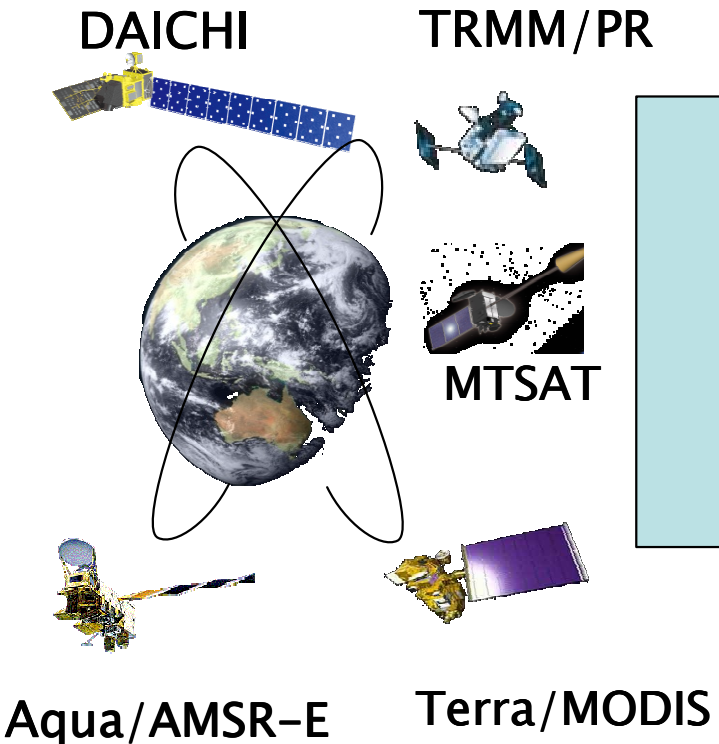
Earth Observation WG/SAFE

■ **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.**

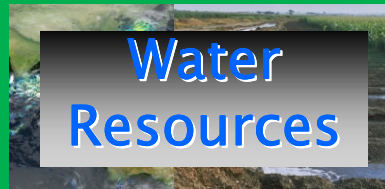
■ **Appreciate the early success of SAFE prototyping (Land use monitoring and water resource management) in Vietnam, and recommend to extend to other countries and other themes.**

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

SAFE (Space Applications For Environment)



Datasets For Environmental Monitoring



Datasets provided by Partner agencies In Asia-Pacific

Social Benefits in Asia-Pacific



Water



Weather



Ecosystems



Energy



Climate



Health



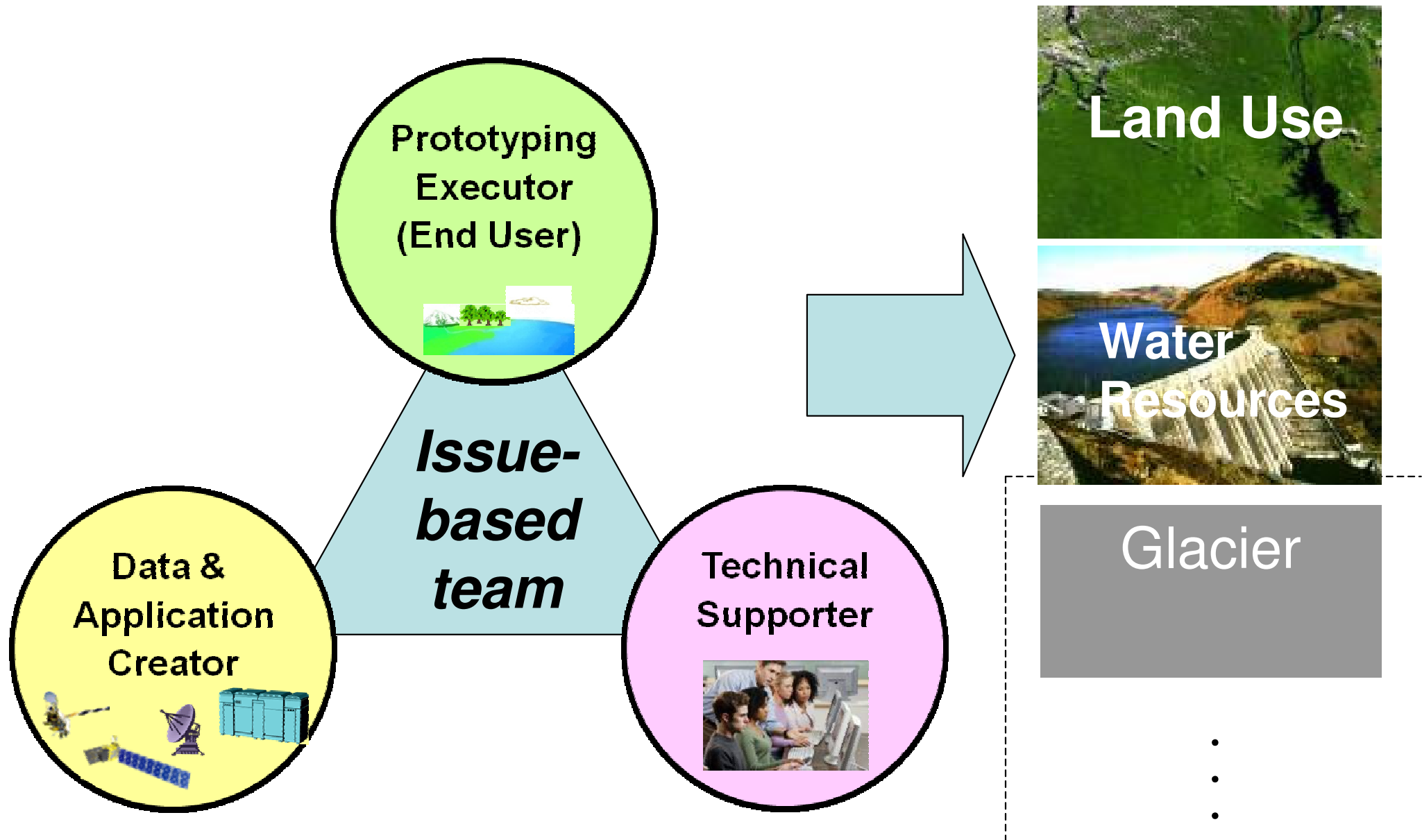
Agriculture



Biodiversity

Prototyping activity

For better application to practical operation, SAFE will encourage the prototyping activities by issue-based team building.



Communications Satellites Applications WG

■ Agree to promote sharing the experiences and working on the creation of the new application for tele-education, tele-medicine and disaster management

■ 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 Environment Utilization WG

■ Appreciate the realized opportunity to utilize the Japanese Experiment Module (JEM) "KIBO" 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.

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



Space Education and Awareness WG

- Support activities to enhance the understanding among young people and school teachers of space science and technology and their applications;
- Contribute to global initiatives, such as the celebration of the World Space Week each year and the International Year of Astronomy in 2009;
- Promote cooperation with other regions such as Latin America and Africa by sharing concrete examples of the successful, joint regional initiatives undertaken by APRSAF



Side Events

Poster Contest



Water Rocket Event



Conclusions

- **APRSAF is an unique forum for space agencies and user agencies in the Asia-Pacific gather to discuss regional cooperation for space technology development and applications.**
- **It aims at strengthening partnership among space agencies and user agencies in the region.**
- **It has reoriented its activities toward concrete projects, such as Sentinel Asia, STAR program and SAFE. More projects are coming in the near future.**
- **APRSAF is a voluntary forum and needs initiatives of participating agencies.**
- **APRSAF-16 will be held in Thailand in early 2010 hosted by GISTDA.**

**Thank you
for
your attention.**