



**APSCO**

ASIA-PACIFIC SPACE COOPERATION ORGANIZATION

**Role of APSCO  
in Space Cooperation in the Asia Pacific Region**



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- ***About the Organization***
- ***Cooperative Space Activities***
- ***International Communications***



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## *The Initial Proposition-1992*

In November 1992, *Asia-Pacific Workshop on Multilateral Cooperation in Space Technology and Applications* was held in Beijing.

**China, Pakistan and Thailand** proposed institutionalization of the mechanism which was agreed by the participants from 16 Asia-Pacific Countries.







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## *The Signing of Convention-2005*

After a lot of preparatory work, the *Signing Ceremony of APSCO Convention* was held in the Great Hall of the People, Beijing on 28<sup>th</sup> October 2005. 8 countries from Asia-Pacific Region signed the Convention, which included **Bangladesh, China, Indonesia, Iran, Mongolia, Pakistan, Peru and Thailand.**

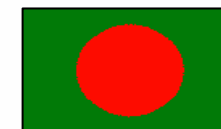




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On June 1st of **2006**, the representative of *the Government of Turkey* signed the APSCO Convention in Beijing.

9 Signatory Countries.







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## *The Establishment of APSCO-2008*

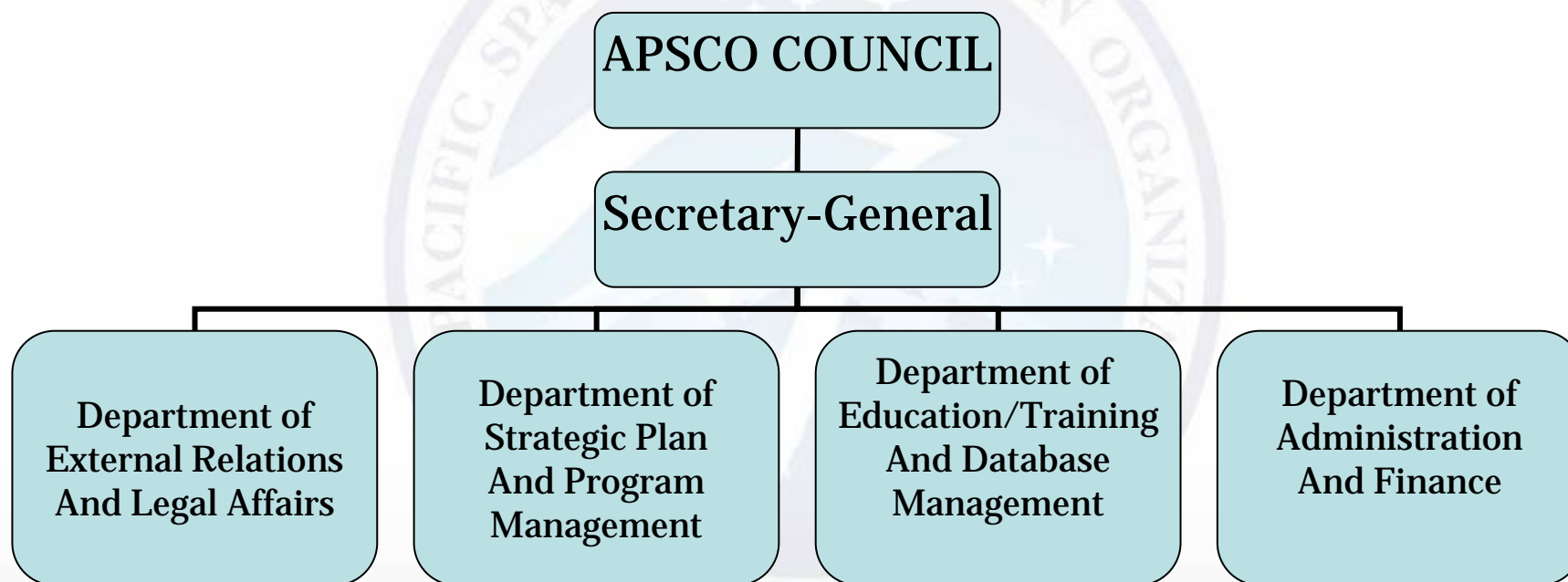
- On December 16th of 2008, the Inauguration Ceremony of APSCO was held in Beijing, China.





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## ***The Structure of APSCO***





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## The Chair-board of APSCO Council

**Chairman of the Council:** Mr. Khondaker M. Asaduzaman (Bangladesh),

**Vice-Chairmen of the Council:** Mr. Chen Qiufa (China),  
Mr. Hamid Fazeli (Iran).



Mr. Chen Qiufa (China).



Mr. Khondaker M. Asaduzaman (Bangladesh)



Mr. Hamid Fazeli (Iran)





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## The Secretariat



### **Secretary-General:**

Dr. Zhang Wei (China)



### **Director-General of Departments:**

Mr. Ahmad Talebzadeh (Iran)

Dr. Maqbool Ahmad Chaudhry  
(Pakistan)

Mr. Tsoodol Nyamkhuu  
(Mongolia)

Ms. Liu Xiaohong (China)



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## *Current Status of APSCO*

### **International Recognition**

APSCO has been granted a *permanent observer status* by the United Nations Committee on the Peaceful Uses of Outer Space (UN-COPUOS) in the 52nd Session of Committee meeting in Vienna, on 12 June 2009.

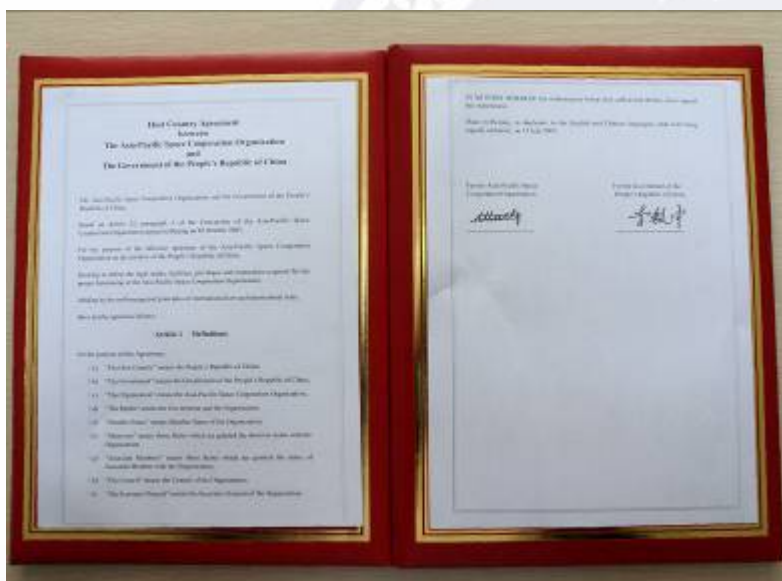




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## *Current Status of APSCO*

- **Host Country Agreement**



Dr. Zhang Wei, Secretary-General of APSCO and Mr. Li Yizhong, Minister of Ministry of Industry and Information Technology of China signed the **Host Country Agreement** on 15 July 2009 in Beijing, China.





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## Headquarters

In November 2009, APSCO moved into its new headquarters office building in Beijing, donated by Chinese Government.





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## **Member-States' Space Achievements Exhibition**



The Exhibition of Member States' Space Achievements was held at the APSCO Headquarter in December 2009.





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# The 1<sup>st</sup> Council Meeting of APSCO

## Beijing, December 17<sup>th</sup> -18<sup>th</sup>,2008







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## **The 2<sup>nd</sup> Council Meeting of APSCO**

**Beijing, December 17<sup>th</sup> -18<sup>th</sup>, 2009**





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## **The 3<sup>rd</sup> Council Meeting of APSCO**

**Beijing, September 16<sup>th</sup> -17<sup>th</sup>, 2010**







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## **The 4<sup>rd</sup> Council Meeting of APSCO**

**Pattaya, January 26<sup>th</sup> -27<sup>th</sup>, 2011**







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# The 5<sup>th</sup> Council Meeting of APSCO

## Beijing, September 7<sup>th</sup> -8<sup>th</sup> , 2011





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## ***Cooperative Space Activities***





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## Fields of Cooperation

### Article 6 of the APSCO Convention

- **Space technology** and its applications;
- **Earth observation**, disaster management, environmental protection, satellite communications and **satellite navigation and positioning**;
- **Space science research**;
- **Education, training** and exchange of scientists/technology;
- **Establishment of a central data bank** for development of programs of the organization and dissemination of technical and other information relating to the programs and activities of the Organization.
- **Other** cooperative programs agreed upon by the Member States.





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# Cooperative Activities

**Donation Ceremony of Receiving Stations of FY Satellite Data Broadcasting System (DVBS) to 7 Signatory States of APSCO by the Chinese Government held on 24 March 2006 in Beijing .**





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## Cooperative Activities

On September 6th of 2008, 30 delegates from 9 Signatory States witnessed the **Launch of the Environment and Natural Disaster Monitoring Satellite (HJ-A, also named as Small Multi-Mission Satellite )** at Taiyuan Launching Center.





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# Cooperative Activities

In December of 2008, the Commissioning of KABES/SMMS Receiving Station in Thailand.







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## Cooperative Activities

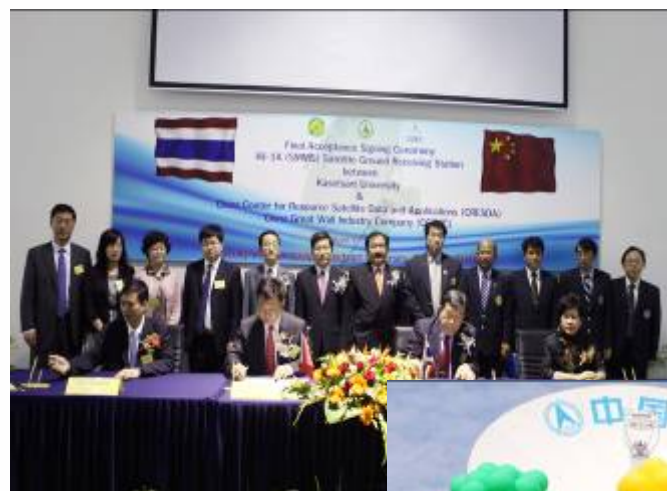


On 21 December 2009, under the Cooperation Framework of APSCO, Center for Resources Satellite Data and Applications (CRESDA) signed an agreement with the Government of Thailand, to build the Receiving Station of SMMS in Bangkok.



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## SMMS cooperation



On April 1st, 2011, the Opening Ceremony of SMMS (HJ-1A) Satellite Ground Receiving Station was held in Bangkok, Thailand.

Representatives from APSCO, MIT of China, CRESDA, MICT of Thailand attended.



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## APSCO Approved Projects

- (1) **Spatial Data Sharing Service Platform and Its Application Pilot Project;**
- (2) **APSCO Applied High Resolution Satellite;**
- (3) **Research on Atmospheric Effects on:**
  - (i) **Ka Band Rain Attenuation Modeling;**
  - (ii) **Ionosphere Modeling through Study of Radio Wave Propagation and Solar Activity;**
- (4) **Asia-Pacific Ground Based Optical Space Observation System;**
- (5) **Applications of Compatible Navigation Terminal System;**
- (6) **Geostationary Communication Satellite**
- (7) **Communication Satellites Applications**
- (8) **Small Student Satellites**
- (9) **Research on Determining Precursor Ionospheric Signatures of Earthquakes**
- (10) **Electromagnetic Satellite Payload for Earthquake Prediction**
- (11) **Education and Training Activities**





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# The feasibility study of projects by experts of MS





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## **APSCO Data Sharing Service Platform Project**

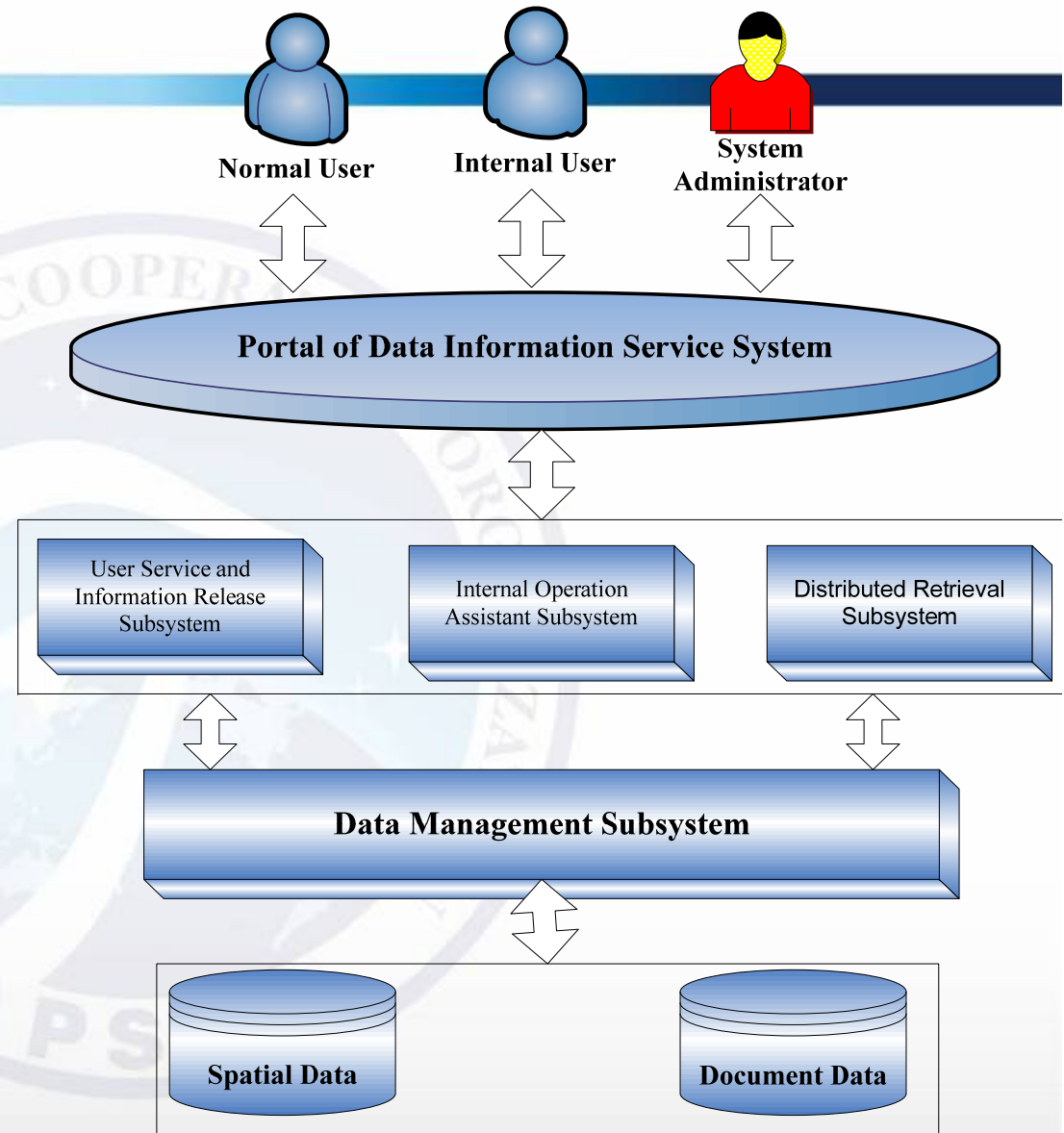
On 6 May 2011, APSCO Data Sharing Service Platform and its Application Pilot Project Contract Signing Ceremony was held at APSCO Headquarters.





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# Data Sharing Platform System Description

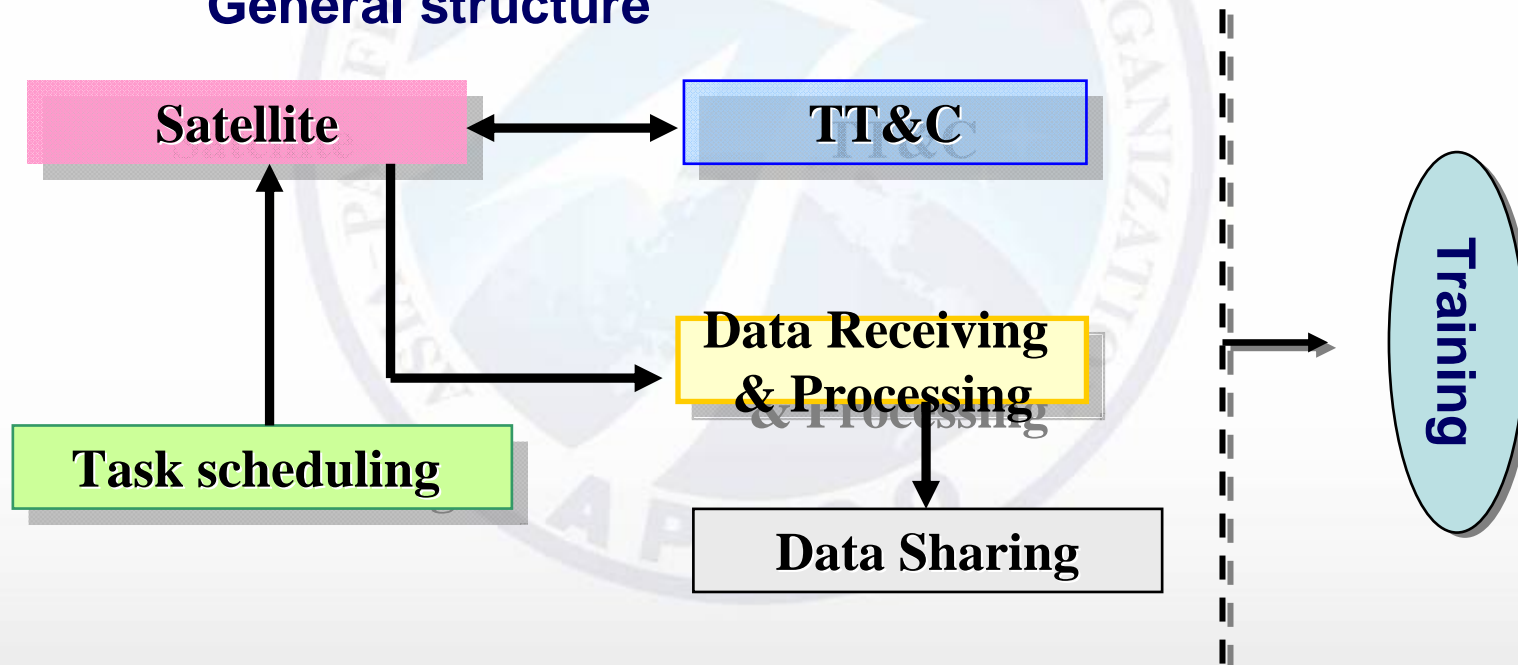






**Payload**  
Primary: 2/8mPan/MSI+16mWFI  
Optional: 30mHSI

## General structure



# APOSOS Network Distribution of Observatory Stations





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## Education and Training Activities

- Training Course on **Remote Sensing Technology and Applications** held in May 2005 in Beijing .
- Training Course on **Satellite Technology and Spacecraft Project Management** held in June 2005 in Beijing.
- Training Course on **Reception Stations of FY Satellite Data Broadcasting System** held in July 2006 in Beijing.
- Training Course on **Space Technology Applications** held in 2007 in Peru.
- **Nine-Month Master Program on Space Technology Applications** held from 10 July 2006 to 10 April 2007 in Beijing.





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**Training Course on:  
Data Processing and Applications on Remote Sensing Satellites  
May 11-22, 2009, Beijing**





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## Training Course on GNSS and its Applications

June 4-22, 2010, Beijing

Co-sponsored by Ministry of Industry and Information Technology (MIIT) of China  
organized by Peking University







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## Education and Training Activities

Master Program on Space Technology Application  
(MASTA 2008, 2010 and 2011)  
for APSCO Member States  
supported by Beihang University







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## Symposiums

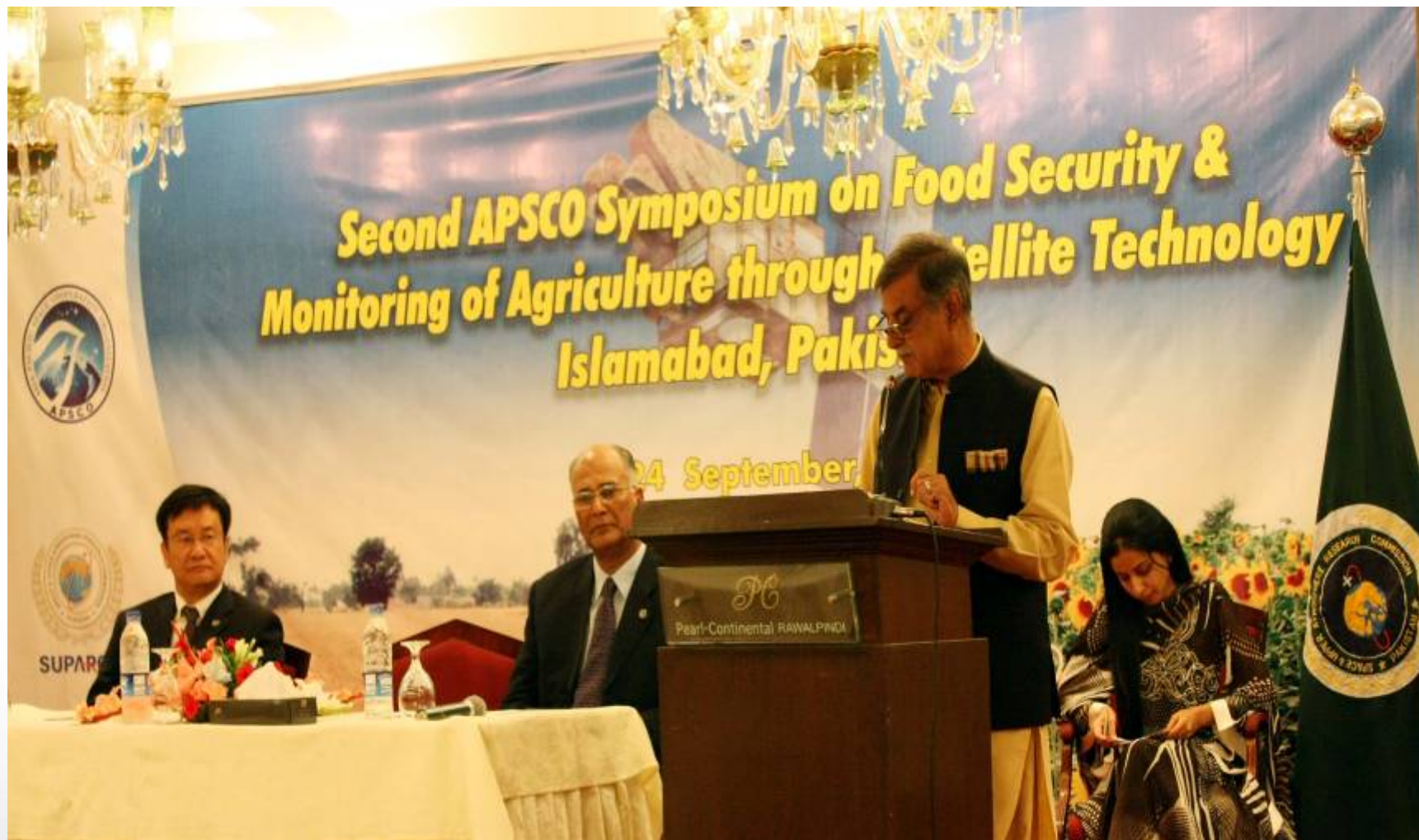
### The First International Symposium on Space Cooperation for the Asia-Pacific Region July 20-24, 2009, Thailand





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# Symposiums





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# Symposiums







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## **More activities in near future**

- Development Plan for Cooperative Activities of APSCO
- Training and Education Center of APSCO
- Asia-Pacific Research Center of Space Law
- UN/ESCAP Secretariat of Drought and Flood Disaster Early Warning Program



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## **International Communications**





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## APSCO Orientation Tour

- On 12 January 2009, 13 relevant countries' diplomats were invited for a visit of APSCO facilities and briefing.
- Ambassador of Bangladesh, Columbia and Ukraine honored this event.
- Diplomats from Japan, Korea, Brazil also attended the event.
- All countries are welcome to join APSCO and its activities!

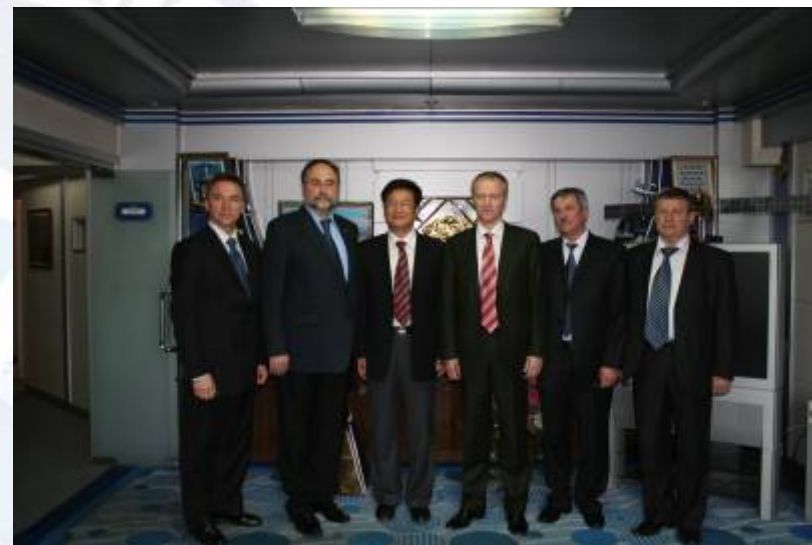






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## International Communications



Ukraine National Space Agency Delegation headed by Mr. O. Zinchenko visited APSCO, on 14 April 2009.



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## International Communications

During June 13-14, 2009, Dr. Zhang Wei paid a visit to SUPARCO in Pakistan.





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## International Communications



On 1st September 2009, LAPAN  
Delegation from Indonesia visited  
APSCO.



Technical visits arranged by  
APSCO.

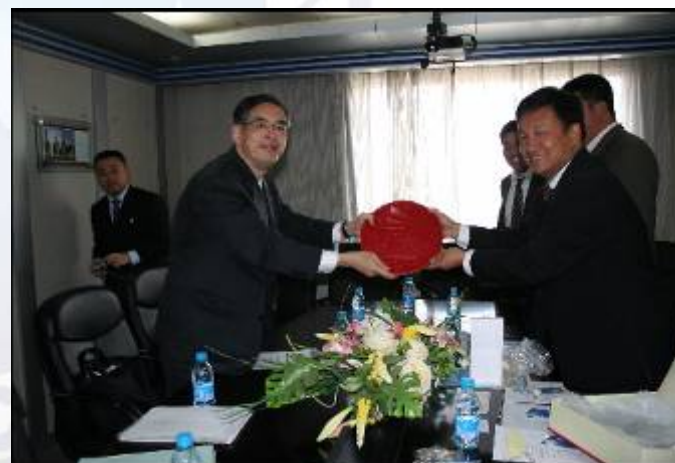




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## International Communications

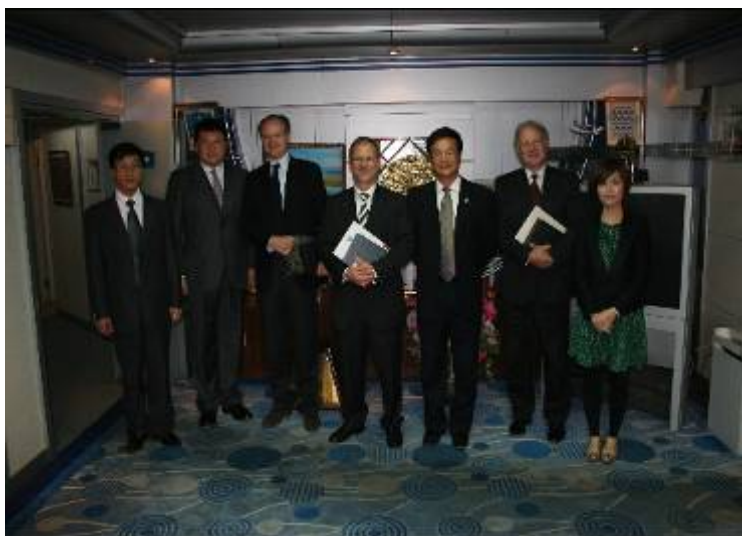
On October 19 of 2009, APSCO received a delegation from JAXA, which was headed by Vice President Mr. Yukihide Hayashi.





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## International Communications



On 29 October 2009, ESA Deputy Director General for Earth Observation and Director of ESRIN Dr. Liebig visited APSCO





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During November 8-11, 2009, Dr. Zhang Wei attended UN/APSCO/IRAN workshop on Space Law “Role of Space Law in the Development and Strengthening of International and Regional Cooperation of States in the Peaceful Exploration and Use of Outer Space” in Tehran.







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## International Communications

APSCO Delegation visited LAPAN,  
Indonesia during December 1-6,  
2009.





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## **APSCO meets with UN-ESCAP**



On February 1, 2010, Mr. Xuan Zengpei, Director of ICT and Disaster Risk Reduction Division of United Nations Economic and Social Commission for Asia and the Pacific (UN/ESCAP) and Mr. Wu Guoxiang, Chief of Space Application Section of ICT (UN-ESCAP) visited APSCO.



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## APSCO Delegation Visits South America

During March 2010, APSCO delegation visited Peru, Chile and Brazil respectively and held discussions with government officials and space authorities of these countries on membership and possible participation of these countries to join APSCO projects.



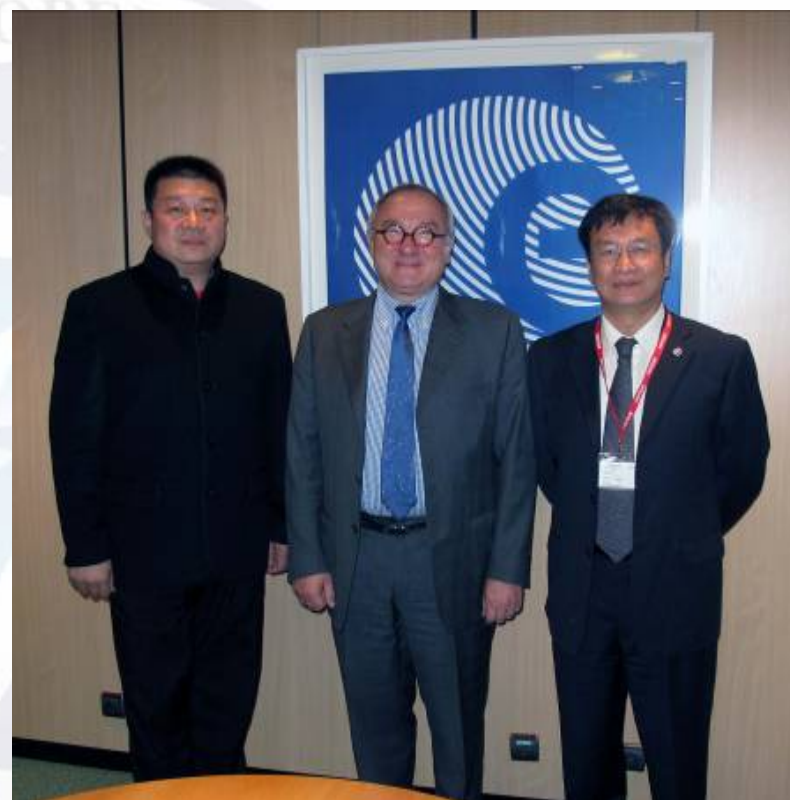




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## International Communications

- On 24th of September, 2010, APSCO delegation visited ESA Headquarters and met with the ESA Director General Mr. Jean-Jacques Dordain.





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## MEET WITH NASA



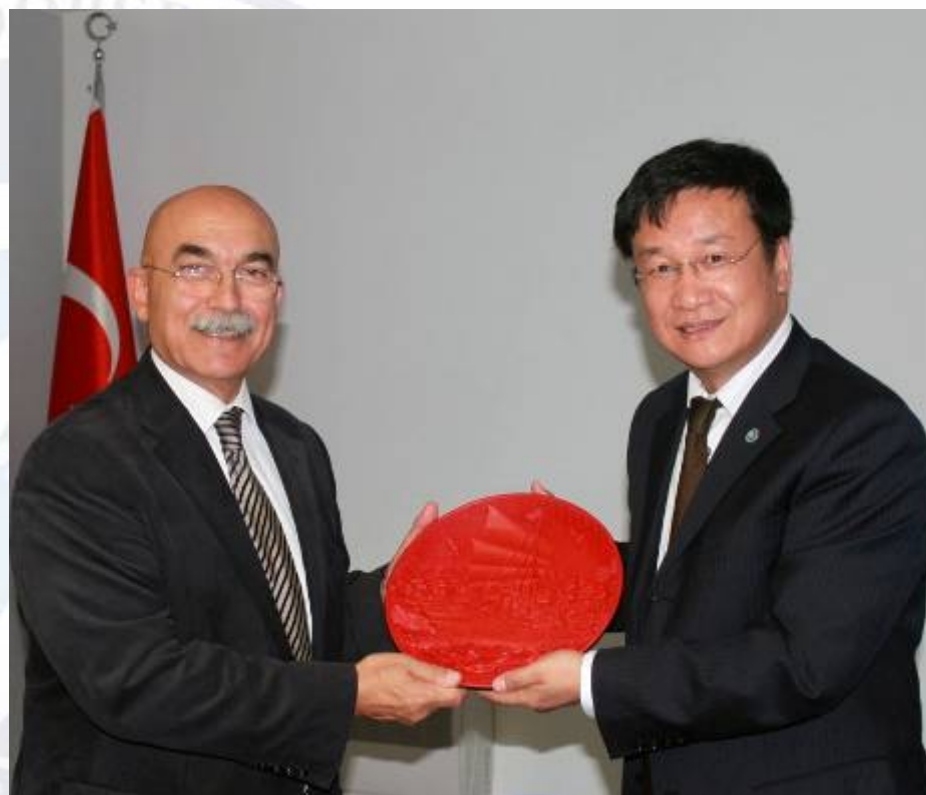
The International Astronautic Federation (IAF) Congress of 2010 was held in Prague, Czech Republic during September 27 to October 1.



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## International Communications

During October 2010 APSCO delegation visited TUBITAK UZAY, TUBITAK and Istanbul Technical University in Turkey.







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## International Communications

During October 2010  
APSCO delegation paid a  
visit to National Space  
Agency of Ukraine and  
YUZHNOYE in Ukraine.





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## International Communications



The Federal Space Agency of Russia Representatives from Beijing Office visited APSCO on 25<sup>th</sup> October 2010.





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## UN-OOSA Director Visited APSCO

Dr Mazlan Othman, Director, UN-Office for Outer Space Affairs visited the APSCO Headquarter on 9<sup>th</sup>, Nov, 2010 and met with Secretary General and International Staffs of APSCO and discussed future cooperation.

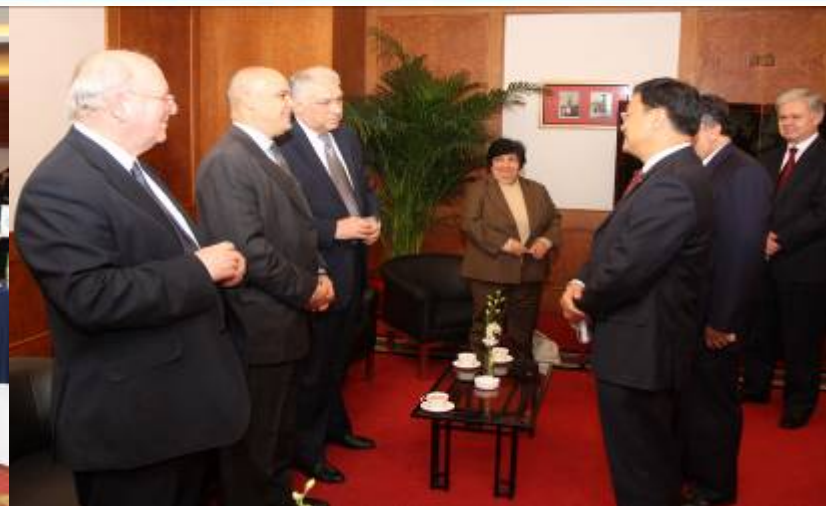






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## APSCO 2011 New Year Reception

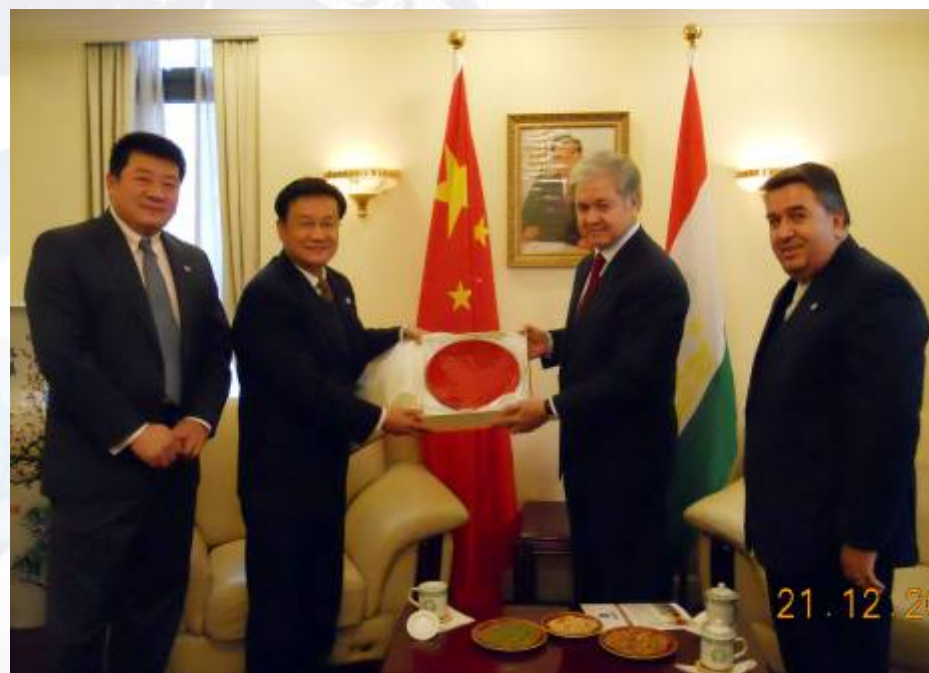




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## APSCO Visited Tajikistan Embassy

- On December 21, 2010, APSCO visited Tajikistan Ambassador in Beijing.





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## Leiden University visits APSCO



On January 12, 2011,  
Prof. Tanja Masson-  
Zwaan, President of  
International Institute of  
Space Law and Deputy  
President of School of law  
of Leiden University,  
visited APSCO  
Headquarters in Beijing.





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## Minister of MIIT of China Visits APSCO Headquarter

On February 17, 2011 H.E. Miao Wei, Minister of Industry and Information Technology (MIIT) of China visited APSCO and greeted APSCO Staff.

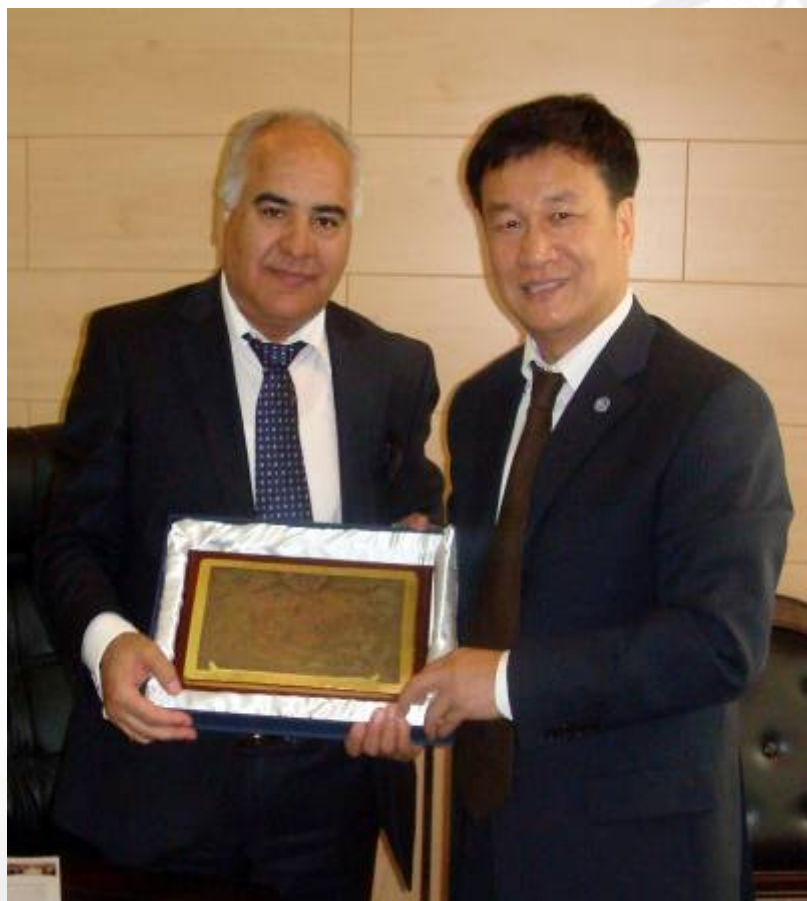
As the host country, Chinese Government will fulfill its due obligations in a highly responsible way and provide more supports to assist the smooth operation of APSCO





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## **APSCO visited Tajikistan**



Invited by the President of the Academy of Sciences of the Republic of Tajikistan Prof. Mamadsho ILOLOV, the delegation of APSCO headed by Dr. Zhang Wei, visited Tajikistan from May 14th to 19th, 2011.



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## **APSCO delegation visited KAZCOSMOS**



From June 28-29, 2011 APSCO delegation visited National Space Agency of Kazakhstan (KAZCOSMOS) and held constructive discussion with its Chairman and former Cosmonaut Mr. Mussabayev Talgat Amanggeldyevich. Both sides expressed willingness in future cooperation and exchanges.





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## **APSCO in 2011 IAF Congress**



APSCO exhibited its major events in the most prominent space event, the IAF Congress in October 2011. APSCO became better known to the space community of the world.



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## APSCO visited Malaysia



3 member delegations of APSCO visited Malaysia ANGKASA and National Remote Sensing Agency from October 17 to 19, 2011.



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## **APSCO Delegation Attended the Reception in Turkish Embassy**



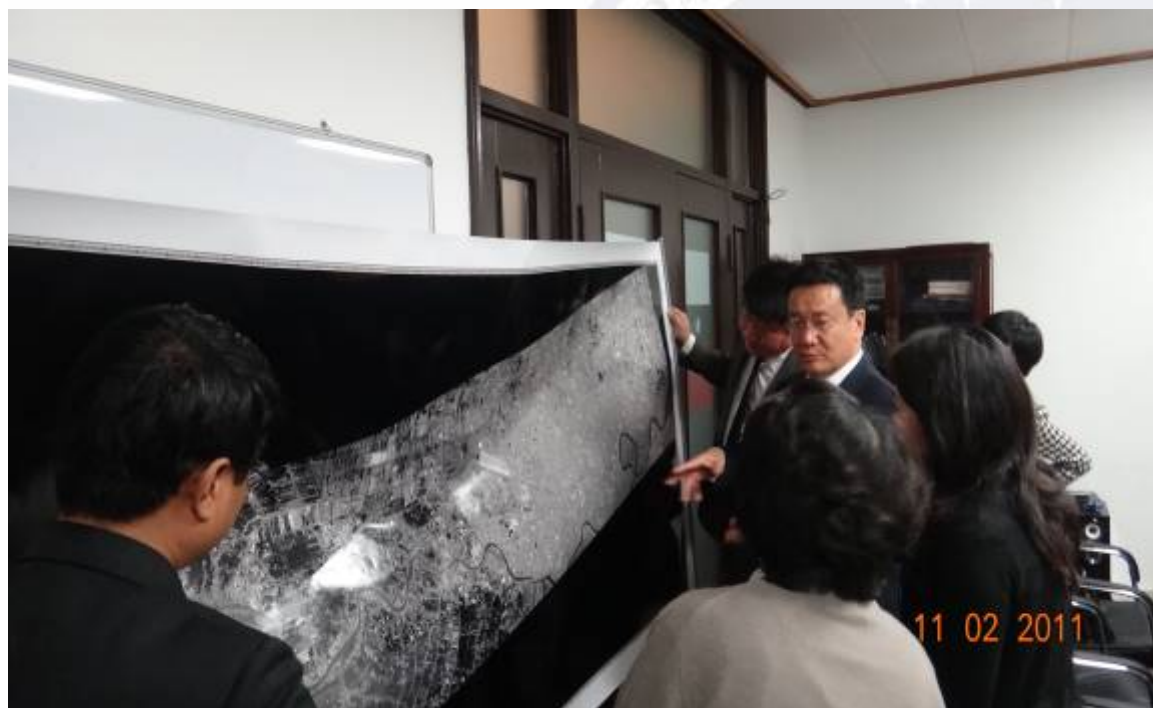
On 28th October, 2011, APSCO delegation participated in the Reception hosted by the Embassy of the Republic of Turkey . During this Reception, Dr. Zhang Wei, the Secretary-General of APSCO, presented the image map of the city of Van which was taken by BJ-1 Satellite shortly after the earthquake in Turkey. This image was also sent to the Civil Affairs Department of the Republic of Turkey via internet for the purpose of disaster relief.





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## **APSCO Presented Post-Flood Image to the Royal Government of Thailand**



On November 2nd 2011, APSCO delegation visited the Royal Thai Embassy in Beijing. During his visit, Dr. Zhang Wei presented the satellite post-flood image of disaster-affected area to the Royal Government of Thailand, being taken by BJ-1 Satellite



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## Organization Expansion



- Regional space agency;
- Region oriented space programs for social and economical benefit;
- Member country capacity building and data sharing;
- Pooling of human and financial resource;
- Sharing of infrastructure and avoid duplications;
- Supplement to other regional mechanisms such as APEC, SCO, APRSAF, ASEAN and ESCAP;
- All countries in Asia Pacific are invited to join APSCO!



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***Thank You!***

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