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ASIA-PACIFIC SPACE COOPERATION ORGANIZATION

THE ROLE AND LEGAL STATUS OF APSCO

NOVEMBER, 2014

Beijing China

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Outline

- The need for cooperation on space in Asia Pacific
- APSCO – Platform for cooperation
- Fundamental Legal Documents
- Legal Status and Structure of APSCO
- Cooperative Activities
- Funding
- IPR
- Industrial Policy
- Conclusion

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THE NEED FOR COOPERATION ON SPACE

- The change of space politics of space powers from competition to cooperation after Soviet Union breakdown
- High-tech, high risk, high investment and long period of return on space exploration and exploitation
- The international space legislation further promote the international cooperation in space.

"The outer space, including the Moon and other celestial bodies, there shall be freedom of scientific investigation, and all States shall facilitate and encourage international cooperation in such investigation." (Outer Space Treaty Article 1)

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THE NEED FOR COOPERATION ON SPACE IN ASIA PACIFIC

- Due to great geographical area and large amount of population world's largest commercial communications satellite quantity demanded area,
- Various natural disasters
- Rapid growth of cities and population needs constant urban planning
- Need for agricultural efficiency
- Tight Interdependency of economies

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THE NEED FOR COOPERATION ON SPACE IN ASIA PACIFIC

- Development of space technology should be put in a huge technical, financial and human resources
- There is a lack of budget, know-how and also human resources on the use of space technology in most of the Asia Pacific Countries
- Therefore pooling up of the finance and also technical know how and human resources are required

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Platform for Space Cooperation in Asia Pacific

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- Neutral regional intergovernmental organizations

- Aims to “make its due contribution to the prosperity of Asia Pacific region and peaceful use of outer space as a whole”.

- Objectives of APSCO according to Convention of the APSCO
  - promote and strengthen the multilateral cooperation
  - benefit the Member States in the region to conduct regional multilateral cooperation in space science, space technology and their peaceful applications
  - pooling up their technological, financial and human resources and also assist on building capacity on space technology
  - enable the member states to jointly develop their programs and activities relating to those fields.

The Initial Stage

a) 1992,11.
Workshop *on Multilateral Cooperation in Space Technology and Applications* was held in Beijing.

b) 2005,10,28.

8 countries signed the Convention:

Bangladesh
China
Indonesia
Iran
Mongolia
Pakistan
Peru
Thailand

The Initial Stage

c) 2006,6,1.

Turkey signed the APSCO Convention in Beijing.

Up to that time, APSCO has totally 9 Signatory Countries.

The Establishment of APSCO

- 2008,12,16,the Inauguration Ceremony of APSCO was held in Beijing.
- The APSCO has formally established.

The Establishment of APSCO

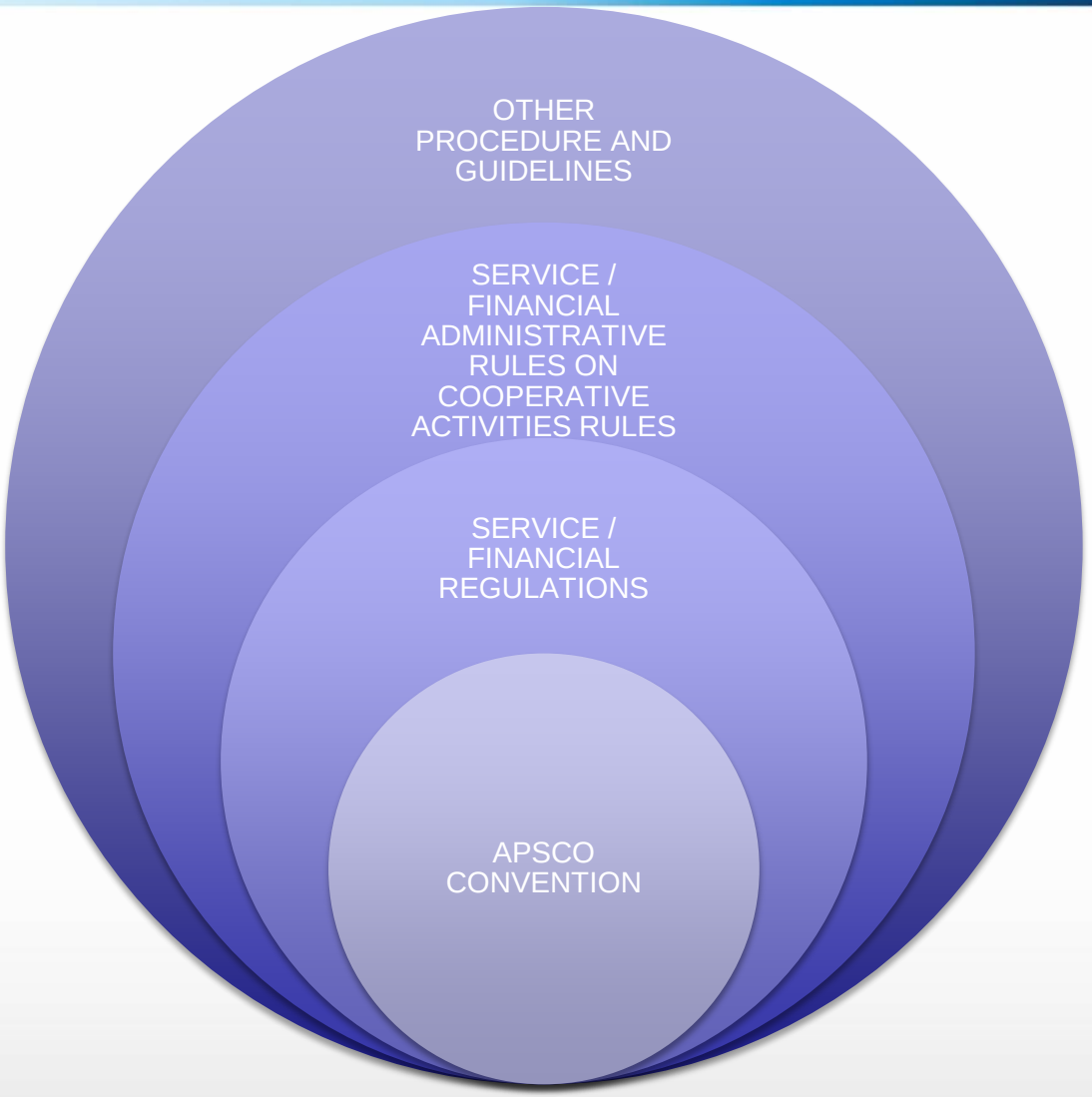
•The Host Country Agreement was signed between APSCO and Chinese Government on 15 July 2009 in Beijing.

The Headquarters Building

In November of 2009, APSCO moved into its new Headquarters Office Building which is located in Beijing and donated by the Chinese Government.

Fundamental Legal Documents of APSCO

Legal Documents of APSCO



Legal Documents of APSCO

APSCO CONVENTION

- 11 Chapters & 35 Articles
- Refers to the Objectives, Industrial Policy, Fields of Cooperation, Types of Activities, Organs and Responsibilities of the Organs, Financials, IPRs and etc.

SERVICE AND FINANCIAL REGULATIONS

- These regulations are laid down according to Article-10 and Article-15 of the APSCO Convention.
- It stipulates the organizational structure, departmental functions and authorities, staffing, basic service conditions and relevant rights and obligations of APSCO Secretariat.

SERVICE, ADMINISTRATIVE AND FINANCIAL RULES

- For the purposes of strengthening service, administrative and financial management regulations, improving the use efficiency of funds, facilitate the management of cooperative projects and promoting the development of APSCO

Legal Status and Structure of APSCO

Legal Status and of APSCO

APSCO Convention Article – 3 LEGAL STATUS

"The Organization shall be an inter-governmental organization. It shall be a non-profit independent body with full international legal status."

- APSCO was certificated by the UN as a Multilateral International Organization in 2009.

The current Chair-board of APSCO Council

Chairman of the Council: Mr. Xu Dazhe (China)
Deputy Minister of Industry and Information Technology (MIIT)
Administrator of China National Space Administration (CNSA)

TWO Vice Chairmen of the Council:

Dr. HAMID FAZELI
Deputy President
Iranian Space Agency, Iran

Mr. ENKHBOLD ZURGAANJIN
Information Technology, Post and Telecommunication Authority(ITPTA), Mongolia

Current Structure of APSCO

COUNCIL OF APSCO

- Responsibilities of Council (Article 12 of APSCO Council)
  - Define and approve the policy, including Rules, Regulations, Laws to be followed by the Organization in pursuit of its objectives;
  - Approval of Rules of Procedure; annual reports and working plans of the Organization; cooperative programs and their financial budgets; proportion of the financial contribution of the Member States and annual budget of the Organization; five-year budget plan, annual expenditure and financial statement for the Organization; audit report.
  - Approve accession, deprival and termination of membership, and make decisions on admission of Observers and Associate Members
  - Appoint SG

- The Council shall meet as and when required but at least once annually

- The participation of the official delegates from a two-thirds majority of all Member States shall be necessary to form a quorum at any meeting of the Council.

Current Structure of APSCO

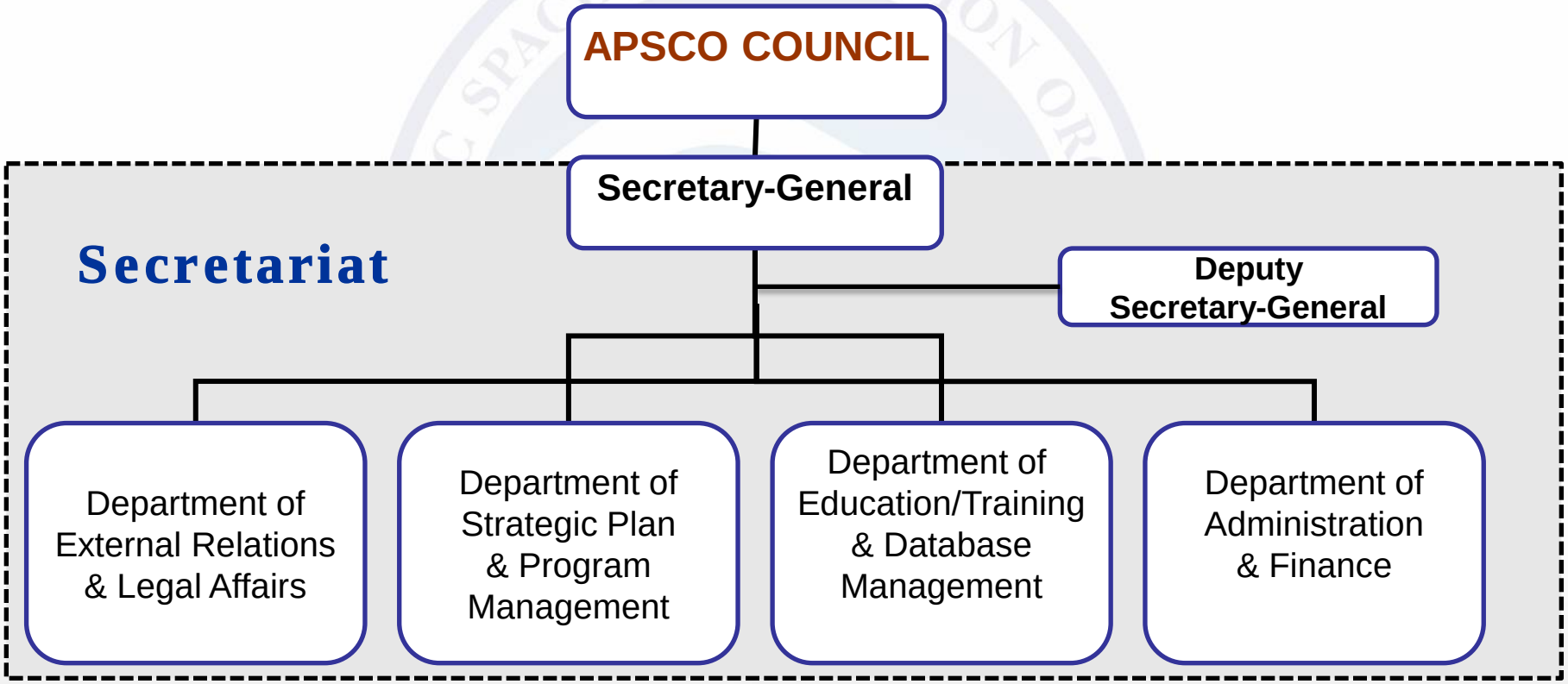
COUNCIL OF APSCO

- Each Member State of the Council have one vote; (Article 14 of APSCO Council)

- All the decisions are made unanimously. (Article 14 of APSCO Council)

Current Structure of APSCO

According to the Service Rules of APSCO Article 2, the APSCO Secretariat has four Departments working under the order of APSCO Council.



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Current Structure of APSCO

The Secretariat

Secretary-General:

Mr. Celal Unver(Turkey)

Deputy Secretary-General:

Dr.Li Xinjun(China)

Director-General of ER/LA
Mr. Murat Yasar Bayrak(Turkey)

Director-General of SP/PM
Dr. Maqbool Ahmed Chaudhry (Pakistan)

Director-General of F/A

Ms. Sun Qing(China)

Director-General of ET/DB

Mr. Tsoodol Nyamkhuu (Mongolia)

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SECRETARIAT

- Secretary General (SG) selected for term of 5 years
- Deputy SG, Director Generals (DG) and Deputy DGs assigned for terms of 1-3 years
- DGs and DDGs are considered as international staff and representatives of member states
- 16 local staff spread among all departments

Cooperative Activities

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FIELDS OF COOPERATIVE ACTIVITIES - (APSCO CONVENTION Article 6)

1. Space technology and programs of its applications;

2. Earth observation, disaster management, environmental protection, satellite communications and satellite navigation and positioning;

3. Space science research;

4. Education, training and exchange of scientists / technologists;

5. 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.

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TYPES OF COOPERATIVE ACTIVITIES - (APSCO CONVENTION Article 7)

BASIC

- Fundamental research
- Applications of matured space technology
- Education and training activities
- Funded by the secretariat budget

OPTIONAL

- Includes all the areas above
- Funded with principle of return on investment

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Programs & Projects of APSCO

Areas	Project	Current Status
Space Technology	APSCO Applied High Resolution Satellite Project (APRS)	Preparation for Implementation
	APSCO Geo-Telecommunication Satellite and its Application	Feasibility Study
	Electromagnetic Satellite Payload for Earthquake Prediction	Feasibility Study
Space Science	Development of Asia-Pacific Ground-Based Optical Space Objects Observation System (APOSOS)	Implementation Phase
	Research on Atmospheric Effects on – Ka Band Rain Attenuation Modeling and – Ionospheric Modeling through Study of Radio Wave Propagation and Solar Activity	Preparation for Implementation
	Research on Determining Precursor Ionospheric Signatures of Earthquakes by Ground Based Ionospheric Sounding	Preparation for Implementation
Space Application	Data Sharing Service Platform and Its Application Pilot Project	Implementation Phase
	Applications of Compatible Navigation Terminal System	Implementation Phase
	Communication Satellite Applications Project	Implementation Phase
Training	Establishment of the Education and Training Center of APSCO	Implementation Phase
	APSCO Small Student Satellites joint development among Universities of MS	Feasibility Study

Education and Training Activities

Six strategies for APSCO E&T activities:

1. Short Training Program:

a) 20 trainings

b) 400 trainees

c) 32 *countries in the Asia Pacific region*

2. Degree Education Program:

a) Master & Ph.D. program in cooperation with BUAA of China

b) Cooperation with ISU for Master degree study

3. Distance Education Program:

a) Education Training Center/Network (ETC/N) established among 8 Member States

b) Aimed at sharing educational resources in the Member States and to get benefited from each others strengths

Education and Training Activities

4. Space Education Development Program

a) Student Small Satellite (SSS) Project

5. International Education Cooperation Development Program

a) Exchange of Scientists and Technologists

b) APSCO Annual International Symposium

c) 5 Annual Symposiums organized in the Member States

6. Establishment of the Central Databank

a) APSCO Data-sharing Service Platform (DSS)

Degree Education Program

2010-2013(Master)

Sl.	Year	Specialization	Participants	Organizer and Sponsors
1	MASTA 2012	Global Navigation Satellite System (GNSS)	15 from MS	APSCO & BUAA & CSC
2	MASTA 2011	Satellite Communications (SATCOM)	13 from MS and 1 from Laos	APSCO & BUAA & CSC
3	MASTA 2010	Remote Sensing and Geo-information System (RS & GIS)	12 from MS	APSCO & BUAA & CSC

2013 (Master & PhD)

Sl.	Year	Specialization	Participants	Remarks
1	MASTA 2013	Remote Sensing and Geo-information System (RS & GIS)	10 from MS	Bangladesh-4, Indonesia-1, Iran-4, Mongolia-4, Pakistan-4, Peru-3, Thailand-4 and Srilamka-1
2	MASTA 2013	Global Navigation Satellite System (GNSS)	10 from MS	
3	DOCSTA 2013	Space Technology and Applications	5 from MS	

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Short Training Program

Sl.	Name	Duration & Location	Participants	Organizers
1	APSCO Training Course on "Small/Micro Satellite Development"	10-20 September 2013 in Ulaanbaatar, Mongolia.	APSCO MS	APSCO & ITPTA
2	APSCO Training Course on "Flood and Drought Monitoring through using Space Technology"	23-31 October, 2013, Beijing, China.	APSCO MS	APSCO & UN-SPIDER
3	Basic Operation Training of APSCO Education and Training Centre/Network	3 days Beijing, China	APSCO MS	APSCO

International Symposium

• Symposium

• **First**:Space Cooperation for the Asia-Pacific Region(July, 2009, Thailand)

• **Second**:Food Security and Monitoring of Agriculture trough Satellite Technology(September, 2010, Pakistan)

• **Third**:Earthquake monitoring and early warning by using space technology
and its applications(September, 2011, Beijing)

• **Fourth:**Communication satellite Technology and Applications(November, 2012, Indonesia)

• **Fifth**:Satellite Remote Sensing (RS) and Geographic Information System (GIS) Development in the Asia-Pacific Region(October.2013, Turkey)

Funding

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Funding

- The budget of cooperative programs, project and education/training activities are provided by the member states
- The contribution rate of each member state is calculated and fixed for 3 years of term according to GDP and GDPP.
- There is a ceiling of 18 percent and floor of 3 percent.
- The budget of the secretariat is distributed among the member states according to the percentages
- The use of the funds are audited by an Audit Committee every year and reported to the council

IPR

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IPR

- Regulated by the Article-22
- Intellectual property rights owned by APSCO.
- Guidelines and procedure for use of inventions, products, technical data or techniques as well as other background intellectual properties owned by the APSCO and Member States are adopted by the Council through the Administrative Rules on Cooperative Activities
- APSCO abides by international conventions concerning protection of intellectual properties.

INDUSTRIAL POLICY

INDUSTRIAL POLICY

- Goals of industrial policy

a) Development of competitive Asia-Pacific industry by resorting to free competitive bidding;

b) Spreading of the relevant technologies among the Member States in order to create the specializations necessary for the Organization's programs and activities.

- APSCO Convention obliges the Council to devise industrial policy in cost affective manner

- Gives the priority to the space industry of the member states for the participation in the cooperative activities

- Obliges APSCO ensuring of participation of all Member States in equitable manner with respect to the financial investment and technological input.

CONCLUSION

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CONCLUSION

- Intergovernmental organization with a full legal body
- Sustainable structure based on commitment instead of voluntariness.
- Full protection of the rights and investments of the Member States
- Equal representation
- Equal rights on the governance of the organization for all Member States

ALL ASIA PACIFIC COUNTRIES ARE INVITED

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THANK YOU

FOR YOUR ATTENTION !