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ASIA-PACIFIC SPACE COOPERATION ORGANIZATION

Ways and means of Coordinating space Activities and Institution Building

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November 2009, Tehran

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THE ORIGION OF APSCO

ABOUT THE CONVENTION

WAYS AND MEANS OF COOPRATION

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Asia Pacific Region

- *Diverse geological character*
- *Heavily populated region*
- *Vulnerable to natural disasters*
- *Demanding economic development*
- *Desiring space technology*

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- *Inter-governmental organization*
- *Host Government is China*
- *Cooperation in space domains*
- *Open to all countries in this region*
- *Equal footing*

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The Initial Stage

Since 1994, ***seven conferences on AP-MCSTA had been organized consecutively in Thailand, Pakistan, Republic of Korea, Bahrain, Iran and China.***

In 1994, ***as a result of those conferences, " The Memorandum of Understanding on the Development of Small Multi Mission Satellite (SMMS)" was signed in Bangkok, Thailand by six countries: China, Iran, Mongolia, Pakistan, Republic of Korea and Thailand.***

The Preparatory Stage

In the year 2001, ***the Secretariat of AP-MCSTA was formally established in Beijing according to the recommendations of the Seventh Conference on AP-MCSTA. The mandate of the Secretariat was to facilitate programs of multilateral space cooperation in the Asia-Pacific Region and to promote the institutionalization of AP-MCSTA.***

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The Preparatory Stage

In November 2003, ***official delegations from nine Asia-Pacific countries attended the Meeting of the Drafting Group of the Convention of Asia-Pacific Space Cooperation Organization (APSCO)in Beijing in which the text of the Convention was finalized.***

The Preparatory Stage

On October 28, 2005, ***the Signing Ceremony of APSCO Convention was held in the Great Hall of the People, Beijing. Eight countries in Asia-Pacific Region signed the Convention, which included Bangladesh, China, Indonesia, Iran, Mongolia, Pakistan, Peru and Thailand .***

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The Preparatory Stage

On October 29, 2005, the First Meeting of the Interim Council of APSCO was held in Beijing. According to the decisions of the Interim Council, three Ad Hoc Committees for Service Regulations, Financial Agreements and Program Planning, respectively were established. The secretariat of AP-MCSTA was also invited to work as the Interim Secretariat of the Interim Council.

The Preparatory Stage

On June 1st, 2006, representative of the Government of Turkey signed the APSCO Convention in Beijing; thus becoming the ninth Signatory State to the Convention.

The Preparatory Stage

From November 28 to 29, 2006, the Second Meeting of the Interim Council of Asia-Pacific Space Cooperation Organization (APSCO) was held in Beijing. 25 representatives from the Signatory States to APSCO Convention attended the meeting. Observers from Brazil, Mexico, Russian Federation and Sri Lanka also attended the meeting.

The Ratification Status of the APSCO Convention

No	States	Date of Signature	Date of deposit of the Instrument of Ratification
1	Bangladesh	28 October2005	14 September 2006
2	China	28 October 2005	30 June 2006
3	Iran	28 October 2005	28 Nov. 2006
4	Mongolia	28 October 2005	06 July 2006
5	Pakistan	28 October 2005	09 October 2006
6	Peru	28 October 2005	12 October 2006
7	Thailand	28 October 2005	15 April 2008
8	Indonesia	28 October 2005	
9	Turkey	01 June 2006	

(As of 31 December 2008)

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- ***The Milestone of the Establishment of APSCO***

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

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-On 16 December 2008, The First Meeting of the Council of APSCO was convened in Beijing, China. The ministerial representatives from nine Signatory States to the APSCO Convention, namely Bangladesh, China, Indonesia, Iran, Mongolia, Pakistan, Peru, Thailand and Turkey, along with their respective delegations participated in the Meeting.

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Overview of APSCO

- ***The Initial Stage***
  - ***proposed as AP-MCSTA In November 1992***
- ***The Preparatory Stage***
  - ***In 2001, the Secretariat of AP-MCSTA was established in Beijing***
  - ***On October 28, 2005, the Signing Ceremony of APSCO Convention was held in Beijing. Eight countries in Asia-Pacific Region signed the Convention, which included Bangladesh, China, Indonesia, Iran, Mongolia, Pakistan, Peru and Thailand***
  - ***On June 1, 2006, the representative of the Government of Turkey signed the APSCO Convention in Beijing***
- ***The Establishment of APSCO***
  - ***On 16 December 2008, the Inauguration Ceremony of APSCO was held in Beijing, which marked its formal start of operation.***
  - ***Delegates from all Signatory States, representatives from Argentina, Malaysia, the Philippines, Russia and Sri Lanka also attended the Ceremony***

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APSCO Structure

- *The Ministerial Council*
- *The Secretariat*

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Chairman Mr. Angsumal Sunalai (Thailand)

Vice Chairman Mr. Kamrul Hasan (Bangladesh)

Vice Chairman Dr. Sun Laiyan (China)

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APSCO Secretariat

Secretary General Dr. Wei Zhang

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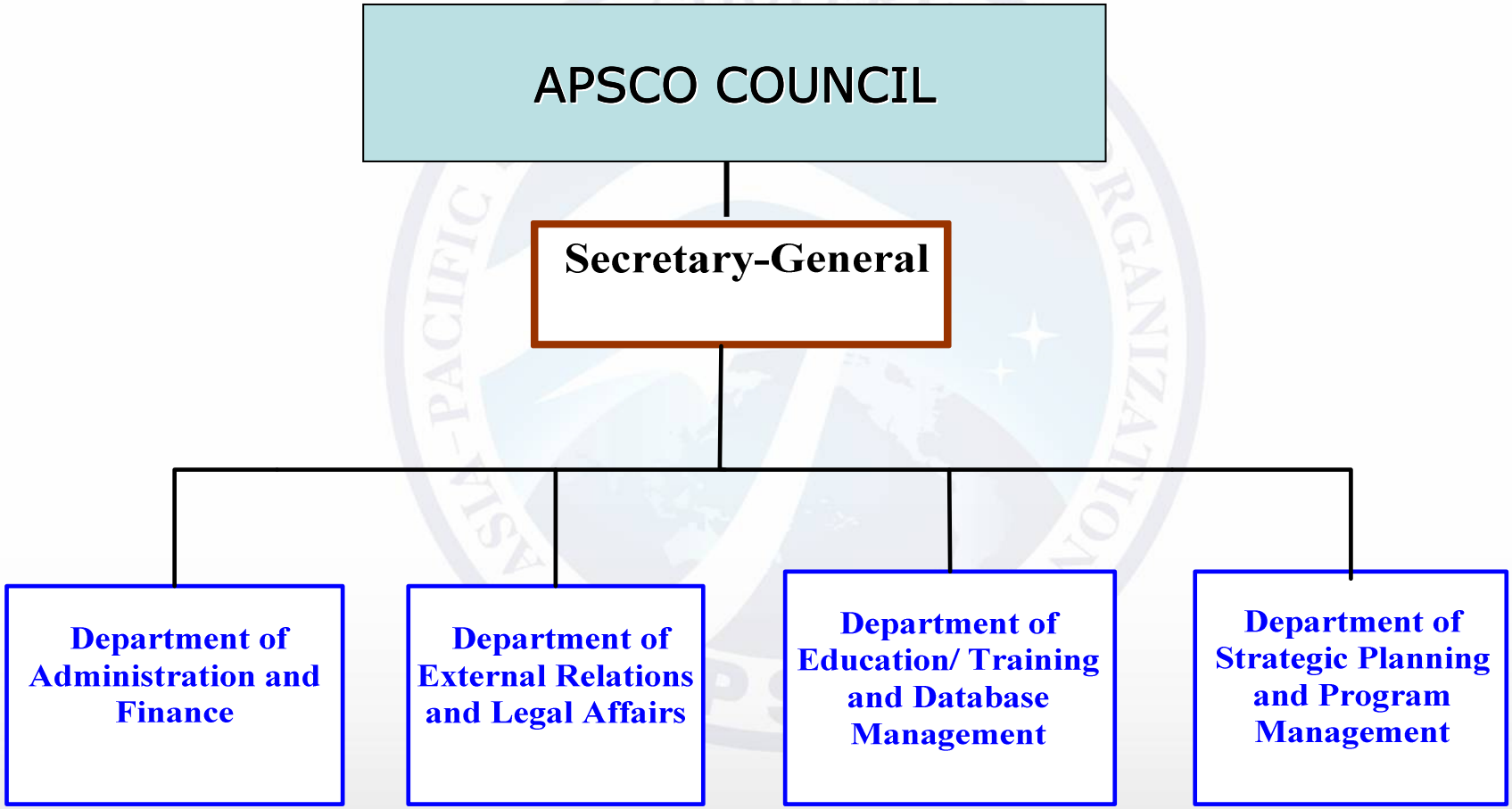
The Structure of APSCO :



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The Headquarter Building of APSCO in Beijing, China

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APSCO CONVENTION

- ***Main Points***
- ***Significance***
- ***Supplementary Instruments***

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The Objectives of the Organization

- ***Programs among Member States***
- ***To assist the Member States***
- ***Cooperation, Joint development and Sharing achievements***
- ***Enterprises and Institutions cooperation***
- ***Peaceful uses of the Outer Space***

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Industrial policy

- ***To meet the requirements in a cost-effective manner in activities.***
- ***To participate the tasks in the maximum possible extent for the industry of Member Stats***
- ***To participate the activities in an equitable manner with their investment or input***
- ***"Fair-return" is the corner stone of the Organization's industrial policy***
- ***Main goals: To develop in free competitive bidding, and to create the specializations necessary***

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Fields and Activities

- ***Fields of Cooperation***

  Technology, Application, Science research, Education and Training, Data Bank

- ***Activities:***

  Basic activities

  Optional activities

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Membership and Contribution

- ***Membership (Article 9)***
  Member, Observer, Associate Member
- ***Financial arrangement (Article 18)***
  Contribution: up to 18% of budget
  Voluntary grants from Member stats
  Donation/subsidies from organizations
  Income from Services

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Significance of the Convention

- ***Peaceful exploitation of new space technology for the common prosperity of member stats;***
- ***Pooling of limited resources of States parties in this field of activities;***
- ***Improvement of the capability of Member states in space science, space technology and its application for the common benefits of those Stats***
- ***Supporting the international cooperation in the world wide from the regional development***

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Supplementary Instruments

- ***The Rules of Procedure of the Council***
- ***The Financial Regulations***
- ***The Service Regulations***
- ***The Host Country Agreement: Privileges and immunities***
- ***Others***

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Ways and Means of Coordinating Space Activities

- ***Program based coordination***
- ***Application based coordination***
- ***Institutionalized based Coordination***

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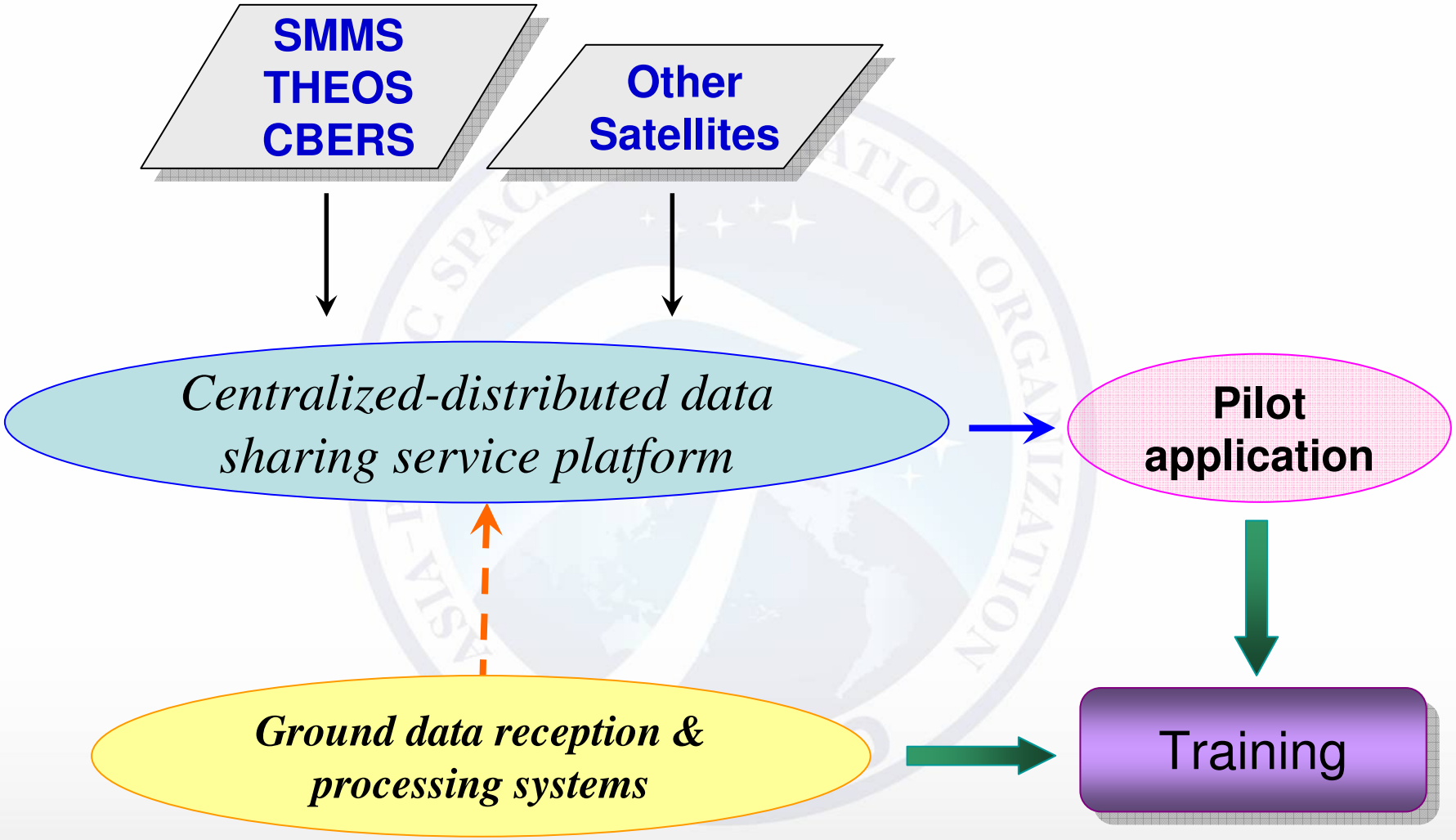
Milestone Events & Related Activities

Space Cooperation - SMMS

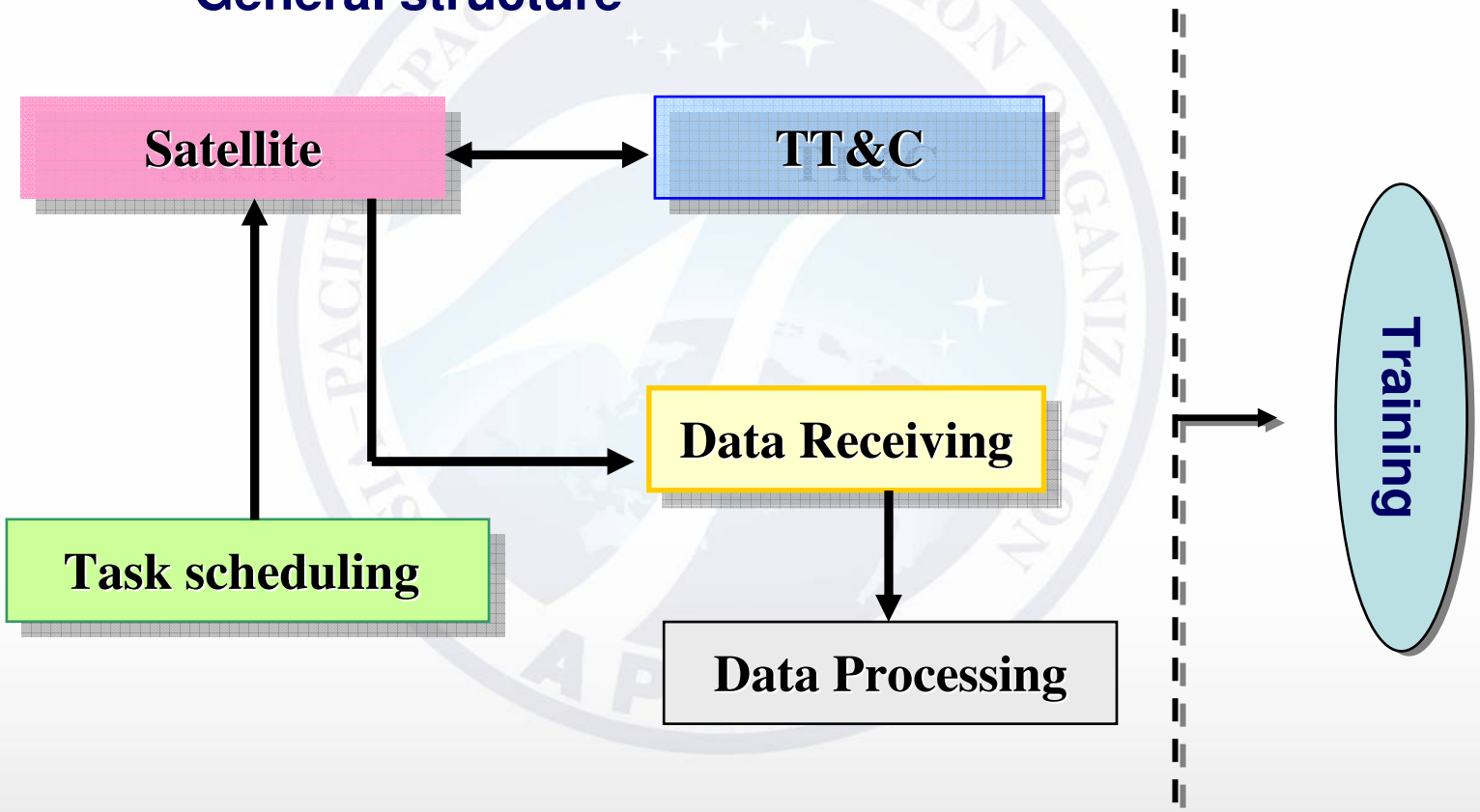
On September 5 to 6, 2008, 30 delegates from 8 Signatory States to the Convention of APSCO witnessed the launch at Taiyuan Satellite Launch Center.

Space Data Sharing Service Platform



High-Resolution Earth Observation Satellite Project--Content

General structure



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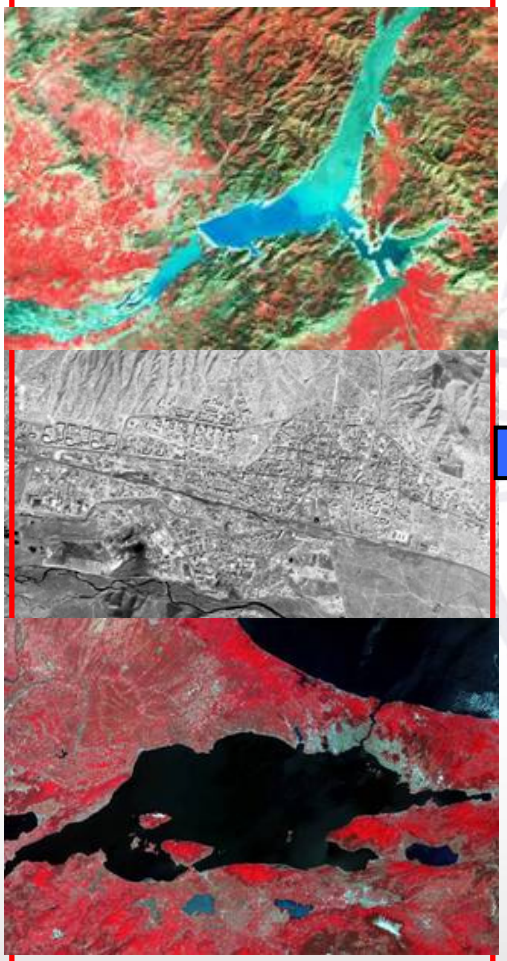
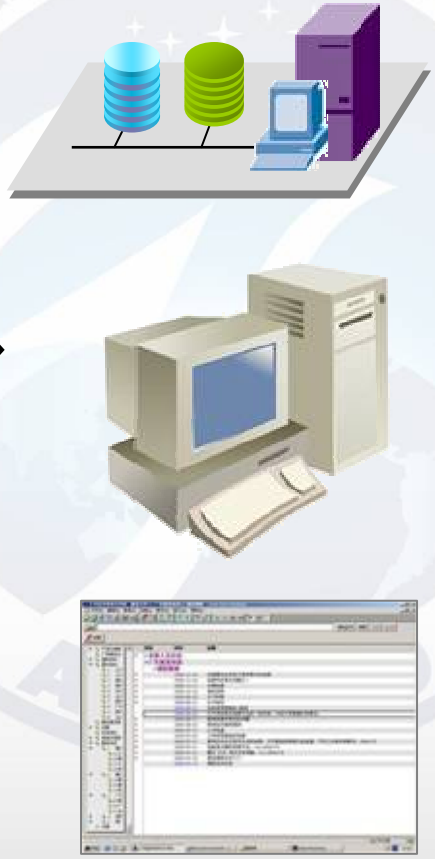
Data processing system

Satellite Data



Processing System



Thematic Products

Environmental Monitoring / Management

Natural Resources Management

Land Management / Development

Forestry

National Security

Application Products

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High-Resolution Earth Observation Satellite Project--Implementation

- ***APSCO will implement the project and be responsible for its daily operation after its completion.***
- ***The member states can participate in the project through many cooperative ways including direct investment and provision of equipment.***
- ***The project results will be shared according to the investment-return principle.***

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Education and Training

- *PhD Course for Space Communications*
- *Programs for MSc. And PhD Studies in Space Science and Technology (Astronomy, Remote Sensing, etc.)*
- *Space Camp and Space Museum*
- *Training in Hydrology, Satellite Meteorology and Communication*
- *Training Program for Satellite Communications*
- *Training on Space Development Activities and Project Management.*
- *Training Program for Space Project Development and Management*
- *Web-based Education and Training in Space Law*

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Projects Approved by the Council of APSCO

(1) Proposal for Spatial Data Sharing Service Platform and Its Application Pilot Project

(2) Proposal for APSCO Applied High Resolution Satellite Project.

(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) Development of Asia-Pacific Ground Based Optical Satellite Observation System (APOSOS)

(5) Feasibility Study of the Applications of Compatible Navigation Terminal System.

(6) Education and Training in the Applications of Satellite Remote Sensing Data, in particular from HJ-1 (SMMS) and Thailand Earth Observation Satellite (THEOS).

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Successful International Organizations and Coordination Mechanism

- *ESA for Coordinating Regional Space Science and Applications*
- *International Charter for Disaster Mitigation*
- *GEO for construction of System of Systems*

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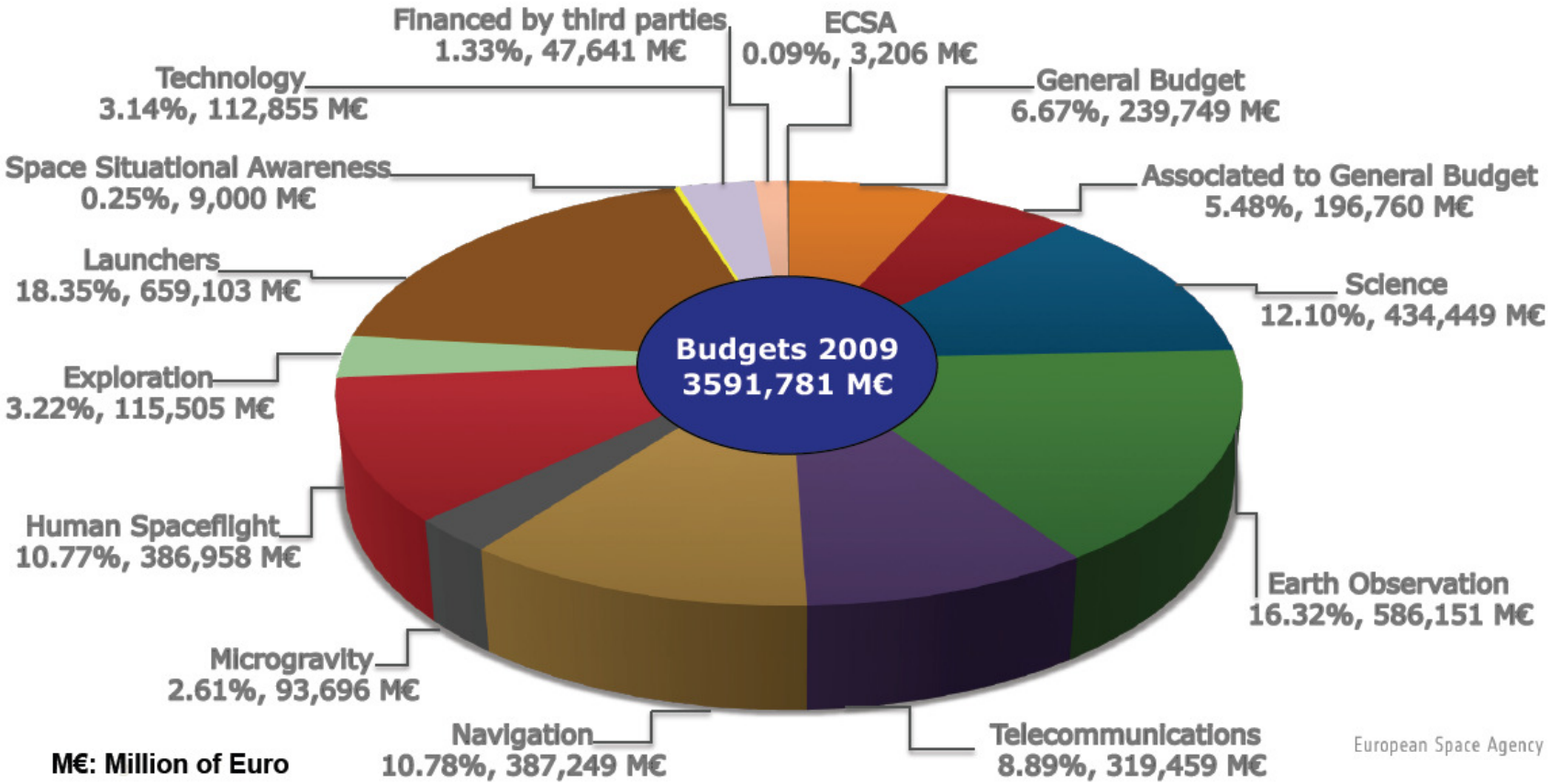
ESA Budget 2009

Approved programmes	3540,934 M€
Programmes financed by third parties	47,641 M€
European cooperating states agreement	3,206 M€
Total	3591,781 M€



M€: Million of Euro

European Space Agency

January 2009

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International Cooperation Programs

International cooperation programs such as ISS involved more then 14 countries

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Future of APSCO

- *Main space cooperation organization in the region*
- *More member countries are expected*
- *Pooling of human and financial resources*
- *Meet regional common interest*
- *Working with UN and other space organizations*

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Thank you