

Regional and International Cooperation:

the Role of bilateral and multilateral legal Agreements

Presentation to the UN/Thailand/ESA Workshop on Space Law

*“Activities of States in Outer Space in Light of New Developments:
Meeting International Responsibilities and Establishing National
Legal and Policy Frameworks*

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1. Introduction: What are the reasons? What is the environment?
2. Which tools are frequently used? What are the criteria why are they chosen?
3. Some examples from ESA's experience
 - a. The Convention
 - b. Cooperation with the EU
 - c. Bi-lateral cooperation
 - d. Multilateral cooperation
4. Conclusions

- Increase of space activities
- Their indispensability for modern living
- Outer Space Treaty:
 - Outer Space as province of all mankind
 - In exploration and use of Outer Space, States Parties to be guided by the principle of cooperation and mutual assistance
- Space Benefits Declaration:
 - “States are free to determine all aspects of their participation in international cooperation in the exploration and use of outer space on an equitable and mutually acceptable basis.”
- Benefits of cooperation: cost-sharing and pooling of resources open up accessibility and affordability of space activities for more Nations.

Other motivations may include the pursuit of national influence and prestige on the global scene

- space as one factor in a bigger picture
- a way to export national values and working methods
- expand sphere of influence from a different angle: economical as well as political and societal

Different tools for different objectives:

1. Varying degrees of

- a. Institutionalisation, formalisation
- b. Flexibility

2. Possible categories:

- a. technical cooperation arrangements
- b. scientific cooperation
- c. data, information and results sharing
- d. political cooperation

Examples: ESA Convention



Some key figures:

- Over 30 years of experience
- 18 Member States
- Five establishments, about 2000 staff
- 3.7 billion Euro annual budget (2010)
- Over 60 satellites designed, tested and operated in flight
- 17 scientific satellites in operation
- Five types of launcher developed
- Over 190 launches
- Some 400 Agreements concluded.



*"To provide for and promote, for exclusively peaceful purposes, **cooperation among European States** in space research and technology and their space applications."*



- **Article 2 of
ESA Convention**

All Member States participate (on a GNP basis) in activities related to space science and a common set of programmes (**Mandatory activities, Article V.1.a**).

Mandatory

- General Budget: Future studies, technological research, education, common investments (facilities, laboratories, basic infrastructure)
- Science: Solar System science, astronomy and fundamental physics

In addition, Member States choose their level of participation in **Optional programmes, Article V.1.b**.

Optional

- Human Spaceflight
- Telecommunications & Integrated Applications
- Earth Observation
- Launchers
- Navigation
- Robotic Exploration
- Space Situational Awareness

Council and the Director General assisted by a staff, Article X

Council's responsibilities, in particular Article XI.5

A. With regard to mandatory activities:

- approves these activities and programmes;
- determines the level of resources for the coming five-year period;
- determines, towards the end of the third year, the level of resources for the new five-year period, starting at the end of this third year.

B. With regard to optional activities:

- accepts each programme (enabling Resolution);
- determines in the course of their implementation, the order of priority of programmes

Director General

- appointed by Council;
- chief executive officer of the Agency and its legal representative;
- takes all measures necessary for the management of the Agency, the execution of its programmes, the implementation of its policy and the fulfilment of its purpose;
- has authority over the establishments of the Agency;
- makes an annual report to Council;
- submits proposals concerning activities and programmes, and measures designed to ensure fulfilment of the Agency's purpose;
- assisted by scientific, technical, administrative and clerical staff.

Subordinate bodies to Council

Article XI.8 foresees that the Council shall establish a Science Programme Committee and may establish other subordinate bodies as may be necessary for the purpose of the Agency.

Horizontal Committees and Vertical Programme Boards.

The peculiarity of ESA collegial organs is that the right to vote is variable :

- On general policy, on Agency's mission, financial regulations, industrial policy, international cooperation, information and data, mandatory activities, facilities, third party activities, mandates to Boards or WGs:

➔ *all Member States have the right to vote;*

- On matters concerning optional programmes:

➔ *only programme Participants vote, including non-Members States.*

Success of ESA Convention

→ *Combining a robust degree of institutionalisation with a high degree of flexibility.*

Examples: Cooperation with the EU



The European Union and ESA share a common aim: to strengthen Europe and benefit its citizens.

Closer ties and an increased cooperation between ESA and the EU bring substantial benefits to Europe by:

guaranteeing Europe's full and unrestricted access to services provided by space systems for its policies, and

encouraging the increasing use of space to improve the lives of its citizens.

Framework Agreement between ESA and the EU:

Creation of the Space Council, assisted by a Joint Secretariat composed of officials of the Commission and the ESA Executive,

Regular informal consultations of Member States in the High-Level Space Policy Group (HLSPG)



Space Council

In May 2007, 29 European countries (17 Member States of ESA and 27 Member States of the EU) adopted a Resolution on the **European Space Policy**, adding a new dimension to European space activities.



Flagship Programmes



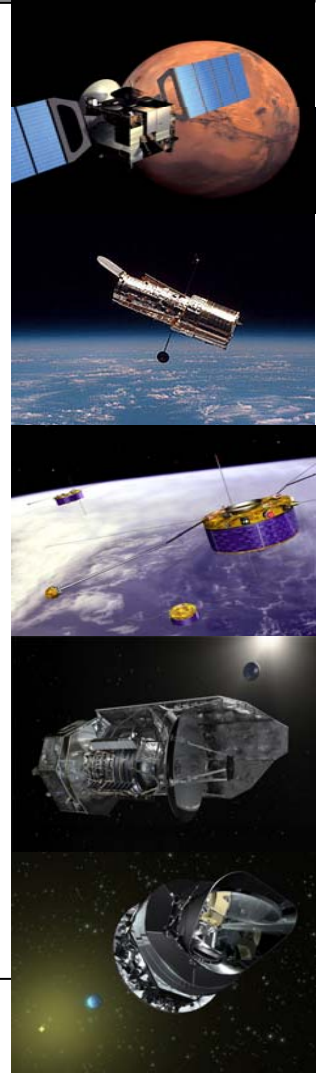
Examples: Bilateral Cooperation

❖ Ranges of involvement

- Full participation in the Agency's programme
- ECS concept
- Framework Cooperation Agreement
- Scientific cooperation:
 - Long-standing tradition
 - Calls for proposals opened world-wide
- Technical cooperation
- Sharing of results, data, information

❖ Some general principles

- No exchange of funds basis
- Arbitration



International Practice:

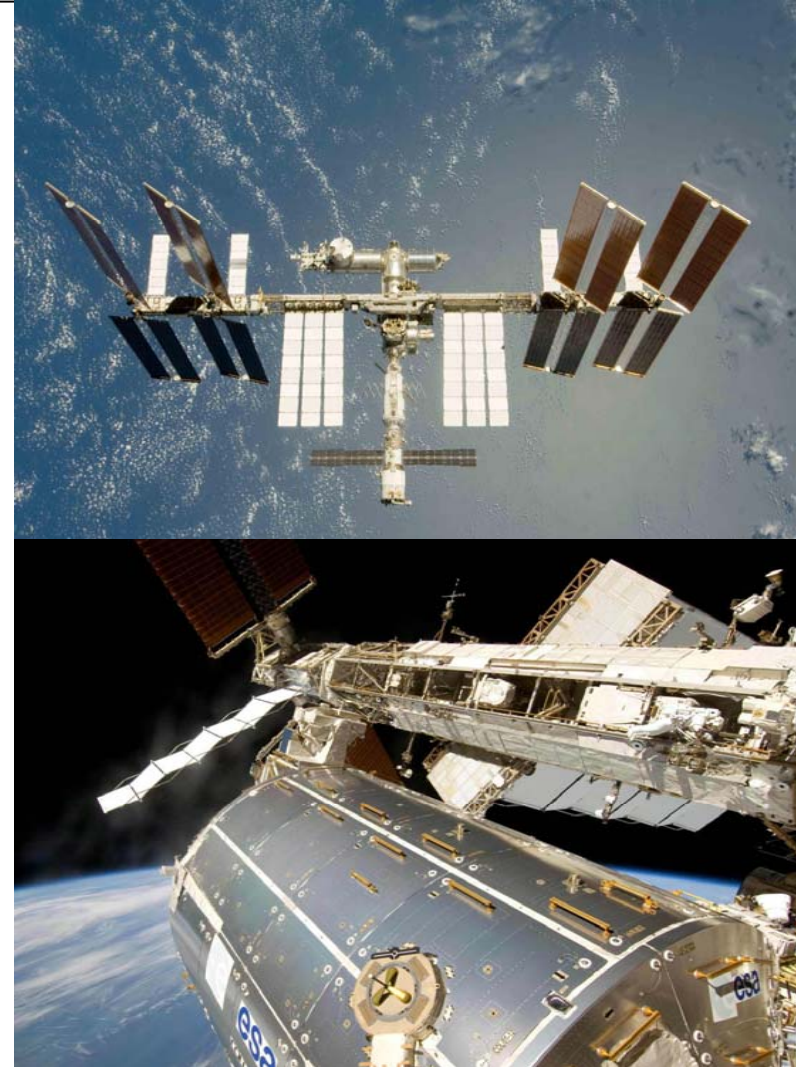
- Classical legal instrument: the International Agreement
 - Formal relationship
 - Binding obligations
- Alternative Practice: multilateral instruments containing non-binding principles, examples of soft law:
 - Charters
 - Terms of Reference for specific groups involved in space activities
 - Technical space standards and coordination

Examples: Multilateral Cooperation



ISS Cooperation:

- governed by an international treaty, ISS Intergovernmental Agreement, which provides the framework for design, development, operation, and utilisation of a permanently inhabited civil Space Station for peaceful purposes.
- bilateral Memoranda of Understanding exist between NASA and each of the four associated space agencies: The European Space Agency (ESA), Russian Federal Space Agency, (FKA, formerly Rosaviakosmos), the Canadian Space Agency (CSA) and the Japanese Space Agency (JAXA, formerly NASDA), outlining relevant ISS responsibilities, obligations and rights between the agencies



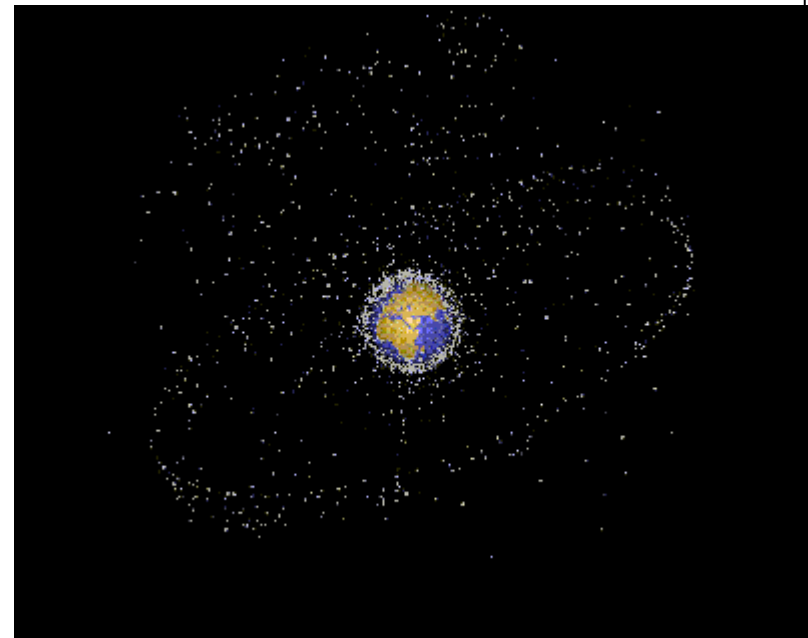
International Charter Space and Major Disasters

- Signed by founding members ESA and CNES in June 2000
- Goal: promote cooperation in the use of space facilities as a support to relief efforts
- Allows registered users to request and access free satellite data over stricken regions
- Has provided satellite data of roughly 300 disaster events, spanning 100 countries
- 24/7 operator to accept requests for activating the Charter. Following activation, all available satellites are tasked to acquire data over the requested area. The raw data are processed and interpreted and made directly available to the civil protection agencies concerned.
- By now eleven parties, space agencies and space system operators
- Cooperation on a voluntary basis
- No exchange of funds
- Administrative, operational and technical coordination provided by a Board
- Executive Secretariat for implementation



Inter-Agency Space debris Coordination Committee, IADC

- Purpose: exchange information, facilitate cooperation, identify mitigation options
- Membership: 11 Space Agencies
- Steering Committee and 4 Working Groups
- developed space debris mitigation guidelines
- Technical content and basic definitions formed basis for UN Space Debris Mitigation Guidelines, endorsed by COPUOS at its 50th session
- Informal setting
- Technical cooperation
- Highly efficient output.



Examples: Multilateral Cooperation



– GEO

- System of systems approach: GEOSS owned by all of the GEO Members and Participating Organizations; Partners maintain full control of the components and activities that they contribute to the system of systems.
- Voluntary partnership, legally non-binding, based on voluntary contributions
- Members: 84 governments + European Commission
- 58 intergovernmental, international and regional organisations with a mandate in Earth observation or related issues recognized as Participating Organisations

THE GLOBAL EARTH OBSERVATION SYSTEM OF SYSTEMS



- Plenary: (85+58) consensus decisions
- Executive Committee: 13 reprs.
- Secretariat
- Full and open exchange of data, metadata and products.

- Numerous other examples
 - Asia Pacific Space Cooperation Organization, APSCO
 - Asia-Pacific Regional Space Agency Forum, APRSAF
 - EUMETSAT
 - Space Frequency Coordination Group, SFCG
 - Inter-Agency Consultative Group for Space Science, IACG
 - Committee on Earth-Observation Satellites, CEOS
 - Space Agency Forum, SAF
 - ...

Cooperation is a key to success.

Some important keys to the success of a cooperation are

- Trust
- Compatible or common objectives among the partners
- Finding the appropriate tool
- Proportionate influence of the partners.

Questions ?

Remarks ?

Thank you !