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International Cooperation in the Peaceful Exploration and Use of Outer Space for the Benefit and Interest of All States:

Our Common Future

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I Development of the Concept of "International Cooperation" Reflected in the UN COPUOS Instruments

What is "International Cooperation" in the Peaceful Exploration and Use of Outer Space?

It shall be considered within the sphere of the international space law developed mainly in the UNCOPUOS.

The List of the Instruments in which "International Cooperation" is Specified

- 1 1963 Declaration of Legal Principles Governing Outer Space Activities (GA Resolution 1962)
- 2 1967 Outer Space Treaty
- 3 1979 The Moon Agreement
- 4 1982 DBS Principles
- 5 1986 The Remote Sensing Principles
- 6 1992 NPS Principles
- 7 1996 Space Benefit Declaration

1 Declaration of the Activities of States in the Exploration and Use of Outer Space (GA Res. 1962 of 13 December 1963)

Principle 4

The Activities of States in the exploration and use of outer space shall be carried on in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting **international cooperation** and understanding.

1 Art.III of the Outer Space Treaty

2 Outer Space Treaty (1967)

2 Art. IX

---States Parties to the Treaty shall be guided by the principle of **cooperation** and mutual assistance and shall conduct all their activities in outer space, ---with due regard to the corresponding interests of all other States Parties to the Treaty.

(continued)

3 Art. X

In order to promote **international cooperation** in the exploration and use of outer space, --- the States Parties --- shall consider on a basis of equality any requests by other States Parties --- to be afforded an opportunity to observe the flight of space objects launched by those States.

4 Art. XI

In order to promote **international cooperation** in the peaceful exploration and use of outer space, States Parties ---agree to inform the Secretary-General of the United Nations as well as the public and the international scientific community---.

3 The Moon Agreement

- 1 Art.2
- ---promoting **international cooperation** and understanding---
- 2 Art.4.2
- ---International cooperation in pursuance of this Agreement should be as wide as possible and may take place on a multilateral basis, on a bilateral basis or through international intergovernmental organizations.

4 Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982)

<u>Principle D</u> Activities in the field of international direct television broadcasting by satellite should be based upon and encourage **international cooperation**.

Principle H ---States should **cooperate on a bilateral or multilateral basis** for protection of copyright and neighbouring rights by means of **appropriate agreements** --- In such **cooperation** they should give **special consideration to the interests of developing countries-**---.

<u>Principle I</u> In order to promote **international cooperation** in the peaceful exploration and use of outer space, States conducting or authorizing activities in the field of international direct television broadcasting by satellite should inform the Secretary-General of the United Nations.

5 Principles Relating to Remote Sensing of the Earth from Outer Space (1986)

- <u>Principle V</u> States carrying out remote sensing activities shall promote **international cooperation** in these activities. To this end, they shall make available to other States opportunities for participation therein. Such participation shall be based in each case on equitable and mutually acceptable terms.
- Principle VIII The United Nations and the relevant agencies within the United Nations system shall promote international cooperation including technical assistance and coordination in the area of remote sensing.

(continued)



Principle XIII To promote and intensify international cooperation, especially within regard to the needs of developing countries, a State carrying out remote sensing of the Earth from space shall, upon request, enter into consultation with a State whose territory is sensed in order to make available opportunities for participation and enhance the mutual benefits to be derived therefrom.

Scope of Cooperation



- 1 opportunity for participation
- 2 technical assistance (and coordination)
- 3 data and/or information provision
 - particularly to any developing country affected by the program
 - that is capable of averting any phenomenon harmful to the Earth's natural environment
 - that may be useful to States affected or to be affected by impeding natural disasters

Modes and Conditions

Modes

 Through agreements or other arrangements—in particular within the framework of regional agreements or arrangements whenever feasible.

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Conditions

- on equitable and mutually agreed terms.
- 2 on mutually agreed terms
- 3 to the greatest extent feasible and practicable
- 4 on a non-discriminatory basis and on reasonable cost terms
- 5 taking particularly into account the needs and interests of the developing countries

Balance between market mechanism and fair opportunity, yet remains vague in the modes and conditions

6 Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992)

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Principle 7

1 Upon the notification of an expected re-entry into the Earth's atmosphere of a space object containing a nuclear power source on board and its components, all States possessing space monitoring and tracking facilities, in the spirit of **international cooperation**, shall communicate the relevant information that they may have available on the malfunctioning space object with a nuclear power source on board [to the UN Secretary –General and the State concerned] as promptly as possible--.

7 Space Benefit Declaration (1996)

- "Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All Sates, Taking into Particular Account the Needs of Developing Countries"
- 8 Paragraphs in total and "international cooperation" referred 9 times
- "international cooperation in the exploration and use of outer space for peaceful purposes"= international cooperation (Para. 1)

This Declaration quoted in the Space Millennium: Vienna Declaration on Space and Human Development (UNISPACE III)

A State participate in the UNISPACE III "recognizes that the promotion of bilateral, regional and international cooperation in the field of outer space must be guided by General Assembly Resolution 51/112"(I -5)

Modes and Conditions of International Cooperation in the 1996 Declaration

<u>Modes</u>

most effective and appropriate to the States concerned

- -governmental and nongovernmental
- commercial and noncommercial
- global, multilateral, regional or bilateral
- UN Programme on Space Applications and other initiatives (encouraged to contribute)

Conditions

- 1 Particular account should be taken of the needs of developing countries (3 times)
- 2 on an equitable and mutually acceptable basis (twice)
- 3 on a mutually acceptable basis
- 4 Contractual terms should be **fair and reasonable** and they should be in full compliance with the **legitimate rights and interests of the parties** (ex. intellectual property rights.)

Space Benefit Declaration as a Success Story



- * new agenda item in 1988
- * 1991 the first draft (full of NIEO concept)
- "special responsibility" of space-faring nations to internationalize their space programs and requires the transfer of technology with a most favoured-nation conditions.
- 1993 the second draft more conciliatory
- 1995 Franco-German proposal 1996 Space Benefit Declaration Success of the UNISPACE III

balance between free market mechanism and the opportunity to be an equal partner attained

Il Diversity of the Mechanisms of International Cooperation (with Some Examples)

The Criteria of the Space Benefit Declaration useful

- -governmental and non-governmental
 - commercial and non-commercial
- global, multilateral, regional or bilateral (para.4)
 - UN Programme on Space Applications and other initiatives (para.8)

Criteria for what?

In order to better examine:

- the possible subject-matters to cooperate;
- more favourable cooperative mechanisms among States, international organizations and other entities
- the common clauses (conditions) in a certain kind of cooperative mechanisms
- the issues to be addressed for the future collaboration, etc.

A Possible Criterion (Noting the 1996 Declaration)



- 1 legally-binding non-legally binding
- 2 universal (global), multilateral, bilateral
- 3 norm-creating, or disposal (contractual)
- 4 establishing international organization (IGO & NGO)
- 5 unilateral (voluntary)

1 legally-binding(1)multilateral agreements

a) to create a norm (and therefore to aim at universal ratification)

UN treaties on outer space

b) to establish an international intergovernmental organization

- ITU, WMO, UNESCO,
- INTELSAT, INTERSPUTNIK, INMARSAT, ESA, EUTELSAT,
- EUMETSAT, ARABSAT, APSCO

c) to provide for a specific operational project

- ISS Intergovernmental Agreement,
- Ariane Production Declaration

(2) Bilateral Agreements

- a) to create a comprehensive cooperation framework without an immediate specific project
- b) to provide for conditions of a specific project agreement which continues for a certain specific term
 - * US- Japan Exchange of Notes
 - * Commercial Space Launch Agreements (space trade): US-China, US-Russia, US-Ukraine
 - *China-Brazil Protocols on CBERS Satellite Resources Program
 - *Ukraine-Brazil Agreement for the launch Site of Cyclon 4 Rocket
 - * Russia-Kazakhstan Lease Agreement on Baikonur
 - * Franco-German Symphonie Agreement
- c) to conduct a joint activity which would end by a single activity (disposal)
 - consigned launch agreement

2 Non-binding multilateral agreements and mechanisms

(1) UN-based universal and regional mechanisms

(either governmental-based or agency-based) UNISPACE III action plans; UN-SPIDER

- (2) non-UN multilateral mechanisms
- a) to create a political norm for the either comprehensive or a specific activity of the exploration and use of outer space

HCOC; prospective international code of conduct for outer space activities

b) to establish an international governmental entity (or continued existence such as an annual conference) to conduct a continued activity

GEO, GEOSS 10-year implementation plan

- c) to establish an interagency or other organization to conduct a continued activity
 - (i) global : IADC, CEOS, IGOS-P, Disaster Charter, ISO/TC20/SC14
 - (ii) regional: African Association of the Remote Sensing of the Environment (AARSE), Space Conference of Americas, Asia-Pacific Regional Space Agency Forum (APRSAF)

(3) Bilateral Mechanisms between:

- a) governments;
- b) space agencies;
- c) space agency and a non-space agency JAXA and Ramsar Secretariat on the provision of ALOS data
- d) government, space agency, or a non-space agency and a private entity (university, a company, etc.)

An example of bilateral non-binding mechanism between space agency and non-space agency

Agreement between JAXA and the Ramsar Secretariat regarding cooperation on global wetlands survey by use of Japanese ALOS images

The Convention on Wetlands of International Importance especially as Waterfowl Habitat (entered into force in 1975) 165 parties in 2013

Key provisions to address the future differences

Art. 3 Financial Arrangements
Cooperation is subject to availability of funds
No cost incurred by one party will be assumed by the
other party

Each of the JAXA and the Ramsar Secretariat will use its utmost efforts to implement its contributions (Arts.4 & 5)

In case for technical reasons ALOS terminate its operations, JAXA will inform Ramsar Secretariat accordingly (Art. 6)

Each Party shall be entitled to terminate this agreement unilaterally in writing (art. 7)

(continued)

- * Offer from JAXA to the Ramsar Secretariat is based on good will- (Annex)
 - *The Ramsar Secretariat agrees that ALOS images are made available without any assurance or warranty that images, products and information derived meet the intended needs of the Ramsar Secretariat. (Annex)
- * Intellectual Property Rights of ALOS images shall belong to JAXA (Annex)

3 Unilateral Contribution towards Global and Regional Needs

- USA provision of the LANSAT images, weather satellites data, GPA signals, SSA data such as TLEs
- ESA data provision; EUMETSAT data provision for a certain category of data by humanitarian necessity; CBERS free data to Africa
- UK supplementary Registry of space objects (when withdrawing UN registration, yet the data in its supplementary Registry gives the appropriate information on that space object, which serves transparency)

Information Received from Member States 1 Australia, Kazakhstan and Portugal

(A/AC.105/C.2/102(11 Feb. 2013))

Concerning a new agenda item "Review of international mechanisms for cooperation in the peaceful exploration and use of outer space"

Criteria:

- * treaty-level agreements and administrative-level MOU
 - * appropriate international arms control and TCBM measures
- * information and data involving universities or private entities

2 USA A/AC.105/C.2/CRP.17 (8 April 2013)

- A Multilateral and Bilateral Legally Binding Agreements;
- B. Legally Non-Binding Principles and Technical Guidelines;
- C. Multilateral Coordination Mechanisms;
- D. International Fora

3 Austria, China and Germany

A/AC.105/C.2/2013/CRP.14 (8 April 2013)

- *Cooperation in the International Organizations
- *bilateral agreements, multilateral agreements
- *Based on subject-matters

Characteristics

- tendency not using a test of binding or nonbinding
- More focus is placed on the nature of activities

III Conclusion

- I Increasing number of States have become space-faring nations
- 42 States (+ 2 IO) registered their space objects in the UN registry (2013)

Awareness of the power of international cooperation and the determination to strengthen the process

(continued)

- 2 The other side of the coin of the international cooperation: competition
- *It is essential to understand that every State has its own national interests to protect (* competition between various stakeholders)

International cooperation carried on for the direct and indirect national interests and for the humanitarian consideration

Increasing global challenges on the Earth (ex. climate change) and in outer space (ex. space debris) shall be tackled by the international community

(continued)

3 Awareness of the Power of
Understanding and Developing
International Mechanisms for Cooperation
in the Peaceful Exploration and Use of
Outer Space

The findings of the specific character of the various interprinal cooperative mechanisms new stage of further cooperative ventures