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# Space treaties and IGA

Ms. Motoko Uchitomi  
Part-time Lecturer,  
Todai Policy Alternatives Research Institute,  
The University of Tokyo

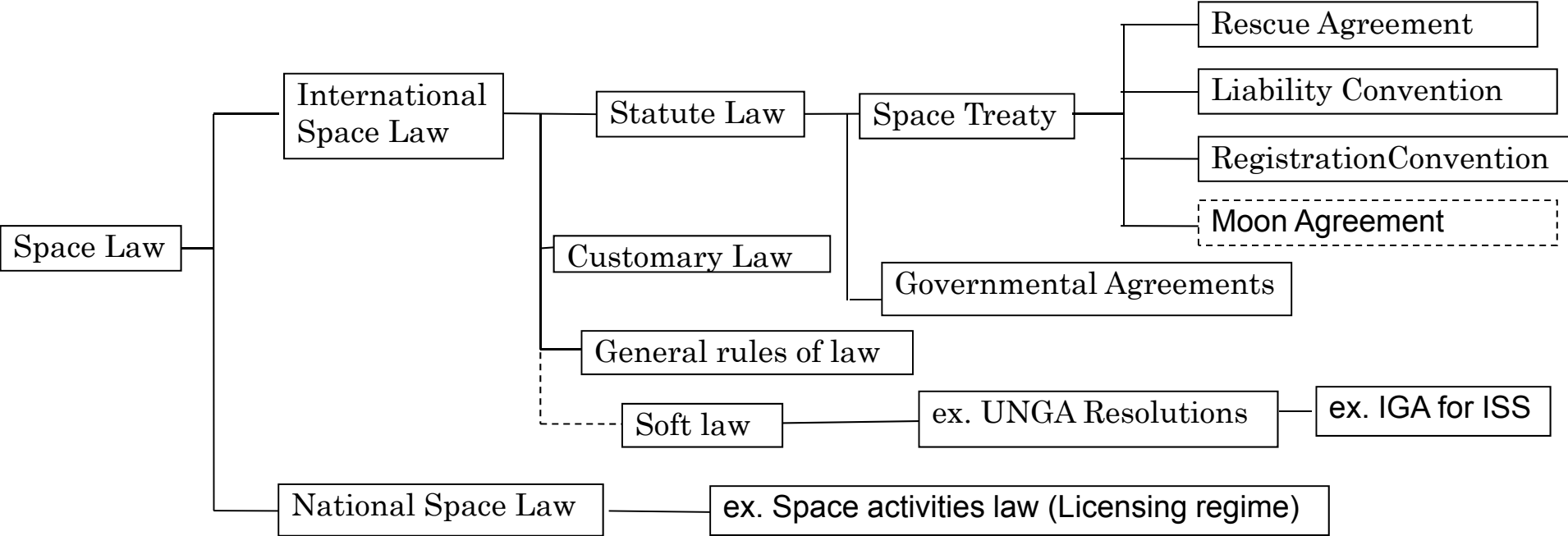


\*UNCOPUOS and Space Law

# What is “space law”?

- Space treaties were quickly developed at the age of “space race” by the Cold War.
- Situation has totally changed, but It seems difficult to create new treaties nowadays, because of the consensus system of UNCOPUOS and diversity of its member states
- UNCOPUOS creates a lot of soft laws recently. Among them.. “Space Benefit

- because of the consensus system of UNCOPUOS and diversity of its member states  
UNCOPUOS creates a lot of soft laws recently. Among them., “Space Benefit Declaration (1996) ‘ is important to consider future space cooperation.



# Legal Subcommittee of the UNCOPUOS

## Committee on the Peaceful Uses of Outer Space (COPUOS)

- ◆ A subsidiary organ of the UN General Assembly
- ◆ Permanent organ since 1959 76 States as of today

### Organization:

- (i) Scientific and Technical Subcommittee (STSC)
  - (ii) Legal Subcommittee (LSC)
  - (iii) Main Committee
- ◆ Function of the LSC: “to study the nature of legal problems which may arise from the exploration of outer space.”  
(GA Res 1472 (XIV) 12 Dec. 1959, A 1. iii) b))
  - ◆ Consensus-based decisions since 1962  
(A/AC.105/PV.2, 19 Mar. 1962)

# New Challenge “the review of international mechanisms” at LSC

1) 29 March 2012 proposed by the US, cosponsored by China, Ecuador, Japan, Peru and Saudi Arabia. LSC set a WG for this new agenda, whose chairperson is Prof. Setsuko Aoki (Keio University, Japan) .

2) Purposes of this agenda item is to stock various experiences of international space cooperation mechanisms with a view to identifying common principles and procedures. This information could be helpful to Member States as they choose relevant mechanisms to facilitate future cooperative endeavors.

3. WG will finalizes its report to the LSC in 2017 (the 50<sup>th</sup> anniversary year of the Outer Space Treaty) , which may lead to a new UNGA resolution(soft law).



## \*Review of Space Treaties

# Freedom of space activities / common interest of humankind

(Space treaty)

Preamble ...Recognizing **the common interest of all mankind** in the progress of the exploration and use of outer space for peaceful purposes, ...Believing that the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development, ...

**Article I** The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out **for the benefit and in the interests of all countries**, irrespective of their degree of economic or scientific development, and **shall be the province of all mankind**. Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by **all States** without discrimination of any kind, on a basis of equality and **in accordance with international law, and there shall be free access to all areas of celestial bodies**. ....

**Article V** ...States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space ..

**Article IX** ...with due regard to the corresponding interests of all other States Parties to the Treaty. ..

## ➤ Freedom of space activity: only spacefaring countries can enjoy

1. Right of free access for space

2. Right of free exploration

3. Right of free utilization

4. Restrictions

- province of all mankind

- for the benefit and in the interests of all countries

# Space Benefit Declaration (1996)

(Annex. Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of all States, Taking into Particular Account the Needs of Developing Countries)

2. 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**. **Contractual terms in such cooperative ventures should be fair and reasonable and they should be in full compliance with the legitimate rights and interests of the parties concerned as, for example, with intellectual property rights.**

3. All States, particularly those with relevant space capabilities and with programmes for the exploration and use of outer space, should contribute to promoting and fostering international cooperation **on an equitable and mutually acceptable basis**. In this context, **particular attention should be given to the benefit for and the interests of developing countries and countries with incipient space programmes stemming** from such international cooperation conducted with countries with more advanced space capabilities.

5. International cooperation, while taking into particular account the needs of developing countries, should aim, inter alia, at the following goals, considering their need for technical assistance and rational and efficient allocation of financial and technical resources:

- (a) Promoting the development of space science and technology and of its applications;
- (b) Fostering the development of relevant and appropriate space capabilities in interested States;
- (c) Facilitating the exchange of expertise and technology among States on a mutually acceptable basis.

## ➤ Consideration for the cooperation between developing country:

1. **On an equitable and mutually acceptable basis**
2. **Contractual terms should be fair and reasonable**
3. **Taking into particular account the needs of developing countries for the development of technology, capacity building and exchange of expertise and technology.**



## Obligation of authorization and continuing supervision for the non-governmental entities

(Space treaty) Article 6 **States Parties** to the Treaty **shall bear international responsibility for national activities** in outer space, including the Moon and other celestial bodies, **whether such activities are carried on by governmental agencies or by non-governmental entities**, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. **The activities of non-governmental entities in outer space**, including the Moon and other celestial bodies, **shall require authorization and continuing supervision by the appropriate State Party to the Treaty.** . . . .

**National space law is necessary to “implement” international obligations under the space treaties**

\*Japanese space activities law is under the consideration by the Government, aiming at enactment in **2016**

## Liability of the “launching State” (OST7→LC2、3)

(OST Art.7) Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air or in outer space, including the moon and other celestial bodies.

### LC

#### Article I

(c) The term "launching State" means:

- (i) A State which launches or procures the launching of a space object;
- (ii) A State from whose territory or facility a space object is launched;
- (d) The term "space object" includes component parts of a space object as well as its launch vehicle and parts thereof.

#### Article II

A launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the earth or to aircraft flight.

#### Article III

In the event of damage being caused elsewhere than on the surface of the earth to a space object of one launching State or to persons or property on board such a space object by a space object of another launching State, the latter shall be liable only if the damage is due to its fault or the fault of persons for whom it is responsible.

OST6 +OST7+OST8(+OST9etc.)

=domestic space law with licensing regime with obligations of

-insurance for TPL

-information for registration

-measures for space debris etc.<sup>10</sup>

# Registration (OST8→RC)

## OST 8

A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State Party, which shall, upon request, furnish identifying data prior to their return.

## (RC2)

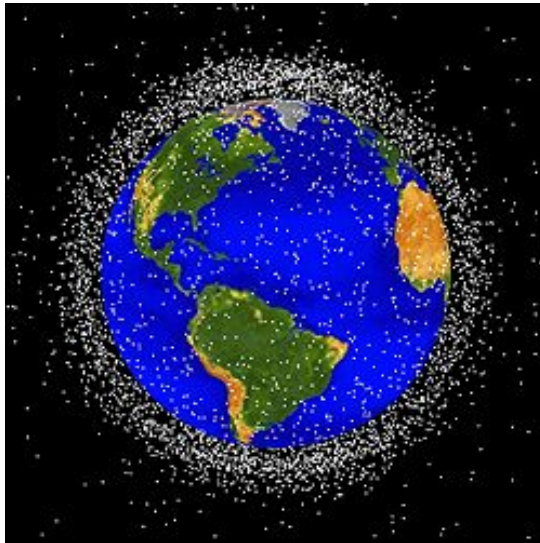
1. When a space object is launched into earth orbit or beyond, the launching State shall register the space object by means of an entry in an appropriate registry which it shall maintain. Each launching State shall inform the Secretary-General of the United Nations of the establishment of such a registry.

2. Where there are two or more launching States in respect of any such space object, they shall jointly determine which one of them shall register the object in accordance with paragraph 1 of this article, bearing in mind the provisions of article VIII of the Treaty on principles governing the activities of States in the exploration and use of outer space, including the moon and other celestial bodies, and without prejudice to appropriate agreements concluded or to be concluded among the launching States on jurisdiction and control over the space object and over any personnel thereof.

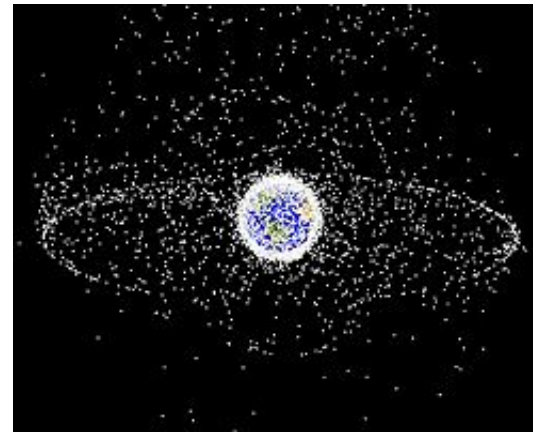
3. The contents of each registry and the conditions under which it is maintained shall be determined by the State of registry concerned.

- **State of registry = Launching state (absolute liability)**
- **State of registry / Owner of the space object**
- **UNGA Resolution 62/101**

## OST 9 : Preservation of Outer Space Environment Soft Law approach against Space Debris problems ~



Referred from NASA



- | Prohibition of harmful contamination in space (OST Article 9)
- | UN Space debris mitigation guidelines COPUOS (2007) ← IADC guidelines
- | WG for Long-Term Sustainability of Outer Space Activities (STSC)
- | International Code of conduct for outer space activities lead by EU

1<sup>st</sup> step/ SSA+information sharing

2<sup>nd</sup> step/ debris mitigation (guidelines (soft law))

3<sup>rd</sup> step/ active debris removal (cost ← responsibility/liability (unclear))

# Preservation of The Earth Environment

## -Sample Return-



- OST Article 9: Prevention of adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter
- Application of planetary protection policy established by COSPAR  
→ Legally binding instruments might be required

## ◆ national appropriation /treatment of natural resources

(Space treaty Article 1)

There shall be freedom of scientific investigation in outer space, including the Moon and other celestial bodies, and States shall facilitate and encourage international cooperation in such investigation

(Article 2)

Outer space, including the Moon and other celestial bodies, **is not subject to national appropriation by claim of sovereignty**, by means of use or occupation, or by any other means.

(Agreement Governing the Activities of States on the Moon and Other Celestial Bodies)

- The Moon and its natural resources are the common heritage of mankind
- States Parties to this Agreement hereby undertake to establish an international regime, to govern the exploitation of the natural resources of the Moon as such exploitation is about to become feasible.
- An equitable sharing by all States Parties in the benefits derived from those resources, whereby the interests and needs of the developing countries, as well as the efforts of those countries which have contributed either directly or indirectly to the exploration of the Moon, shall be given special consideration.

- **Rules for utilization of natural resources for commercial purposes is not clear.**
- **It is necessary to set international rules because it is an important motivation for the governments and private entities and relating business is now emerging .**
- **NOTE : US President Obama signed bill recognizing asteroid resource property rights of US citizens into law.**



\*Lessons learned of ISS/IGA

# ① Fundamental principles for cooperation

## (1) Compliance with international law (Article 2)

- Space treaties(exception of Moon Agreement)

## (2) Registration/Jurisdiction/Control/Ownership(Article 5 & 6)

- Register its elements and retain jurisdiction & control
- Prior concurrence is necessary to transfer the ownership

## (3 )Peaceful purpose (Article 1 & Article 9)

- Each Partner may use and select users for its allocations ;
- Consensus is necessary for non-partner utilization
- The Partner providing the element determines “peaceful purpose”



#### (4) Management Mechanisms(Article 7 )

- Decision making by consensus
- USA shall be responsible for the overall program management and coordination

#### (5) Consultations (Article 23)

- Best efforts for the settlement by consultation

#### (6) Funding (Article 15, MOU)

- Equitable share of the cost  
=Give & Take (cost/ benefit (resources, crew (Japan 12.8%))
- Subject to the availability of the funds  
/ Best efforts to obtain the funds
- Obligation of consultation in case of the funding problem
- Best efforts to minimize operations costs
- Minimize the exchange of funds by barter

#### (7) Crew (Article 11)

- Crew Code of Conduct
- Crew Selection Criteria

## ② Conditions to facilitate cooperation

### (1) Cross-Waiver of Liability (Article 16)

Risk mitigation among the Parties & relating entities

### (2) Customs and Immigration (Article 18)

Duty free (Cost mitigation)

### (3) Exchange of Data and Goods (Article 19 and 20)

Provide necessary procedures (Cost mitigation)

### ③ Criteria for the application of domestic laws

#### (1) Jurisdiction and Control (Article 5)

State of registry has Jurisdiction and Control  
(Territorial Principle)

#### (2) Intellectual Property (Article 21)

Territorial Principle

#### (3) Criminal Jurisdiction (Article 22)

Nationality Principle

(Article 22 of 1988 IGA = Territorial principle)

## ④ Conditions to promote third party participation & utilization

### (1) Transfer of the Ownership (Article 6)

- Possible with the prior concurrence

### (2) Utilization (Article 9)

- Each Partner may use and select users for its allocations ;
- Non-partner utilization is possible with the prior consensus

### (3) Evolution (Article 14)

- Addition of capability is possible with the prior consensus

✂ Treatment of State Sovereignty of the Third Party country (Criminal Jurisdiction etc.) is a challenge.

✂ Industry collaboration is important not only for benefit & cost sharing, but also from the view point of getting citizen's support for the space activities.



# Thank you!

**Basic understanding for space laws is necessary  
to promote space cooperation.**

**Please join SPLANAP WS 13:30-16:30 today  
at Bali Dynasty Resort (5minutes walk) !**