



International Workshop for the Prevention of an Arms Race in Outer Space

Beijing - July 2018

Session II: International Efforts to Prevent an Arms Race in Outer Space, including the Relevance and Sufficiency of Applicable Norms and Principles

Part I: The Status of Norms Applicable to International Security and the Prevention of an Arms Race in Outer Space

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The Status of Norms Applicable to International Security and the Prevention of an Arms Race in Outer Space

Part I – Elements of International Law

Part II – Applicable Norms



Part I – Elements of International Law

Why have laws at all?

Athenians: For ourselves, we shall not trouble you with specious pretenses.... holding in view the real sentiments of us both; since you know as well as we do that right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must.

- *History of the Peloponnesian War*
Thucydides, 431 BC

Part I – Elements of International Law

Why have laws at all?

Latin: *inter arma enim silent leges.*

English: In a time of war, the laws are silent.

- Cicero, 106-43 BC

Part I – Elements of International Law

Why have laws at all?

Rationality. Long-term interests and values outweigh immediate, short-term interests, including emergencies.

Rational actors have a plan, and stick to it.

Part I – Elements of International Law

Why have laws at all?

Freedom and Security can be INCREASED with rules/regimes which order behavior and prohibit some behaviors.

1972 Biological Weapons Convention
1993 Chemical Weapons Convention

Resources can be utilized in more efficient/productive ways when risks are eliminated.

Rules are an investment which create a better future.

Part I – Elements of International Law

Definition of Regime:

Principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area over an extended period of time.

Part I – Elements of International Law

Rules of international law are made by states so as to structure the relationships among them in particular ways.

Good rules/regimes are ones where everyone benefits.

Part I – Elements of International Law

What is the content of regimes?

- 1) Definitions**
- 2) Rights** (privileges/permissions)
- 3) Obligations** (duties OR restrictions/prohibitions)

Part I – Elements of International Law

Rules/Regimes Conflict (Too Many Rules)

Definition of conflict of rules:

Rules conflict if conduct in conformity of one rule implies a violation of another rule.

- This cannot be known in the abstract. Must be contextual
- Additionally, a **right that is inferior to all obligations** is really no right at all.

Part I – Elements of International Law

Rules/Regimes Conflict (Too Many Rules)

Lex Superior – the superior law prevails

Charter of the United Nations

Article 103. “In the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.”

Part I – Elements of International Law

Uncertainty, lack of clarity, *non-liquet* (French: “it is not clear”) in the law (**Unclear Rules**)

ICJ Nuclear Weapons Advisor Opinion

*“However, in view of the current state of international law, and of the elements of fact at its disposal, the Court **cannot conclude definitively...**”* (paragraph 105)

Part I – Elements of International Law

Gaps, *lacuna* (French: a gap, an unfilled space), and **silence in the law** (**Not enough Rules**)

ICJ Kosovo Advisory Opinion

“Consequently the adoption of that declaration did not violate any applicable rule of international law.” (paragraph 122).

ICJ Nicaragua Paramilitaries

“since in international law there are no rules, other than such rules as may be accepted by the State concerned, by treaty or otherwise, whereby the level of armaments of a sovereign State can be limited, and this principle is valid for all States without exception (paragraph 269).

Part I – Elements of International Law

Gaps, *lacuna* (French: *a gap, an unfilled space*), and **silence in the law** (**Not enough Rules**)

Silence in law is a possibility, especially in international law, and especially in new, emerging fields.

Law is an open system. New law refines previous law, and changes the pre-existing legal relations between states with new rights & obligations.

Part I – Elements of International Law

Main Sources of International Law:

Treaties, Custom, and General Principles

Main Subjects of International Law

Sovereign States, and now.. international organizations with legal personality (EU, ESA, ITU)

Main Objects of International Law

Incredibly various!

The Status of Norms Applicable to International Security and the Prevention of an Arms Race in Outer Space

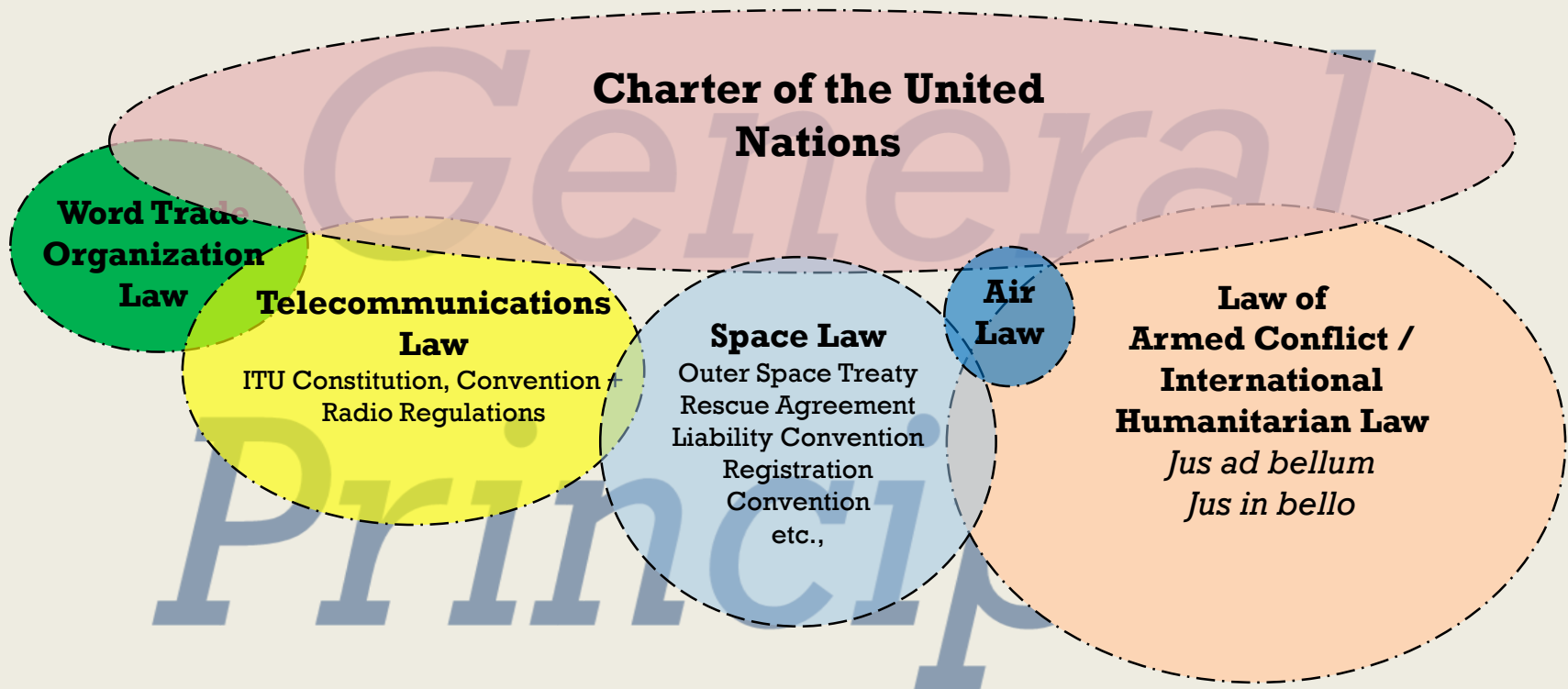
Part I – Elements of International Law

Part II – Applicable Norms



Part II – Applicable Norms

The Network and Hierarchy of International Law



Not displayed in this graph: state practice; Vienna Convention on the Law of Treaties; or other special regimes in international law

Part II – Applicable Norms

Space Law

Rights

balanced with

Art. I.

Freedom of

Exploration and Use

Duties

1) Obligations

(duty to take certain actions)

Art. III, V, VII, VIII, IX

2) Prohibitions

(duty to not take certain actions)

Art. II, IV, IX



Article II

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.

Article III

States Parties to the Treaty **shall carry on activities** in the exploration and use of outer space, including the Moon and other celestial bodies, **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.

Article VI

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.

When activities are carried on in outer space, including the Moon and other celestial bodies, by an international organization, **responsibility for compliance with this Treaty shall be borne** both by the international organization and by the States Parties to the Treaty participating in such organization.

Other Sources of Norms for Outer Space

Subsequent Treaties to the Outer Space Treaty

1968 Astronaut Agreement

-expands OST Art. V

1972 Liability Convention

-expands OST Arts. VI and VII

1975 Registration Convention

-expands OST Art. VI and VIII

1979 Moon Agreement

-poorly ratified, not important

Other Sources of Norms for Outer Space

ITU Constitution, Convention, and Radio Regulations

-coordination of frequencies and GEO orbits

IADC & COPUOS Space Debris Mitigation Guidelines

- not cause debris, deorbit within 25 years

ISS Intergovernmental Agreement, etc.,

27 June 2018

English only

Committee on the Peaceful
Uses of Outer Space
Vienna, 20–29 June 2018

Guidelines for the Long-term Sustainability of Outer Space Activities

Conference room paper by the Chair of the Working Group on the Long-term Sustainability of Outer Space Activities

I. Context of the guidelines for the long-term sustainability of outer space activities

Background

1. The Earth's orbital space environment constitutes a finite resource that is being used by an increasing number of States, international intergovernmental organizations and non-governmental entities. The proliferation of space debris, the increasing complexity of space operations, the emergence of large constellations and the increased risks of collision and interference with the operation of space objects may affect the long-term sustainability of space activities. Addressing these developments and risks requires international cooperation by States and international intergovernmental organizations to avoid harm to the space environment and the safety of space operations.
2. Space activities are essential tools for realizing the achievement of the Sustainable Development Goals. Hence, the long-term sustainability of outer space activities is of interest and importance for current and emerging participants in space activities, in particular for developing countries.
3. Over the years, the Committee on the Peaceful Uses of Outer Space has considered different aspects of the long-term sustainability of outer space activities from various perspectives. Building on those previous efforts and other relevant related efforts, the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee has developed a set of voluntary guidelines with a view to setting out a holistic approach to promoting the long-term sustainability of outer space activities. The guidelines comprise a compendium of internationally recognized measures for, and commitments to, ensuring the long-term sustainability of outer space activities and, in particular, enhancing the safety of space operations.
4. The development of voluntary guidelines is premised on the understanding that outer space should remain an operationally stable and safe environment that is maintained for peaceful purposes and open for exploration, use and international cooperation by current and future generations, in the interest of all countries, irrespective of their degree of economic or scientific development, without discrimination of any kind and with due



UN COPUOS Long-term Sustainability Guidelines

Compilation of best-practices

Non-binding 'soft law' norms

To be implemented on the national level

Final state:

Preamble of 24 paragraphs

21 agreed-upon guidelines

[A/AC.105/2018/CRP.20](https://www.un.org/Depts/los/convention_agreements/items/outer_space_guidelines_2018.pdf)

Draft guidelines

[A/AC.105/2018/CRP.21](https://www.un.org/Depts/los/convention_agreements/items/outer_space_guidelines_2018.pdf)

Part II – Applicable Norms

Space Law

Some definitions found space law:

Astronaut: (“envoy of mankind”)

Space Object: parts of a space object, as well as its launch vehicle + parts thereof

Launching State: 4 categories

State of Registry: A Launching State listing a space object on its registry

Many definitions are lacking in space law!
definition of damage, due regard, peaceful purposes, etc.,



Status of International Agreements relating to activities in outer space as at 1 January 2018

	<u>Ratified</u>	<u>Signed</u>
Outer Space Treaty	107	23
Astronaut Agreement	92	23
Liability Convention	95	19
Registration Convention	67	3
Moon Agreement	18	4
ITU Constitution	193	

Source: Status of International Agreements relating to activities in outer space as at 1 January 2018, COPUOS 2018 Legal Subcommittee, **A/AC.105/C.2/2018/CRP.3**

Status of International Agreements relating to activities in outer space as at 1 January 2018

	<u>Ratified</u>	<u>Signed</u>
'63 Nuclear Test Ban Treaty	126	11
Nonproliferation Treaty (NPT)	191	91
Hague Code of Conduct (HCOC)	139	
Missive Technology (MTCR)	35	

Source: UN Treaty Section; Hague Code of Conduct

Hague International Code of Conduct against Ballistic Missile Proliferation (HCOOC)

3. Resolve to implement the following General Measures:

b) **To curb and prevent** the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction, both at a global and regional level, through multilateral, bilateral and national endeavours;

c) **To exercise maximum possible restraint** in the development, testing and deployment of Ballistic Missiles capable of delivering weapons of mass destruction, including, where possible, to reduce national holdings of such missiles, in the interest of global and regional peace and security;

d) **To exercise the necessary vigilance** in the consideration of assistance to Space Launch Vehicle programmes in any other country so as to prevent contributing to delivery systems for weapons of mass destruction, considering that such programmes may be used to conceal Ballistic Missile programmes;

e) **Not to contribute** to, support or assist any Ballistic Missile programme in countries which might be developing or acquiring weapons of mass destruction in contravention of norms established by, and of those countries' obligations under, international disarmament and nonproliferation treaties;

Putting together all of 'space law' and all other security measures...

What does it permit?

what freedoms/rights?

- OST Article I, but what else?

What does it prohibit?

What duties/obligations?

what positive obligations, to take action?

what negative obligations, to not take action?

Putting together all of 'space law' and all other security measures...

Just as importantly...

Do conflicts exist? Art. VII with *jus in bello*

What is unclear? (*non liquet*)

What gaps exist? (*lacunae*)

OST Art. IV?

What is the law silent about?

GGE on PAROS focus

1) Prevention of an arms race 2) prevention of the use of force against space objects

Resolution adopted by the General Assembly on 24 December 2017

[on the report of the First Committee (A/72/407)]

72/250. Further practical measures for the prevention of an arms race in outer space

The General Assembly,

Recalling its resolutions 71/31 and 71/32 of 5 December 2016 and 71/90 of 6 December 2016, as well as its other resolutions on this subject,

Encouraging all States to contribute actively to the prevention of an arms race in outer space, especially the placement of weapons in outer space, as well as the use of force against space objects, with a view to promoting and strengthening international cooperation in the exploration and use of outer space for peaceful purposes, with the objective of shaping a community of shared future for mankind,

Recognizing that the prevention of an arms race, especially of the placement of weapons in outer space, would avert a grave danger for international peace and security,

GGE on PAROS focus:

1) *Prevention of an arms race in space*

Relevant norms

1963 Test Ban Treaty Art. I. 1 (a) – Each of the Parties to this treaty undertakes to **prohibit, to prevent, and not to carry out** any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction and control, (a) in the atmosphere; beyond its limits, including outer space.

OST Art. I – exploring space is the province of all mankind, is **free for exploration and use** in accordance with international law, **free access** to all areas of celestial bodies.

Art. III – explore outer space in the interest of maintaining international peace and security and promoting international cooperation and understanding.

Verification provisions in the OST: – freedom of access to space & celestial bodies

GGE on PAROS focus:

1) *Prevention of an arms race in space*

Is the law clear? complete?

any gaps? areas of uncertainty?

OST Article IV

States Parties to the Treaty **undertake not to place** in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, **install** such weapons on celestial bodies, **or station** such weapons in outer space in any other manner.

The Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies **shall be forbidden**. The use of military personnel for scientific research or for any other peaceful purposes **shall not be prohibited**. The use of any equipment or facility necessary for peaceful exploration of the Moon and other celestial bodies shall also not be prohibited.

GGE on PAROS focus:

2) *Prevention of the use of force against space objects*

Relevant norms

OST Art. I – Exclusively for peaceful purposes. Peaceful means not aggressive. Threat of force, or use of force, is not a peaceful use.

OST Art. IX

(sentence one):

In the exploration and use of outer space, including the Moon and other celestial bodies, 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**, including the Moon and other celestial bodies, with **due regard to the corresponding interests** of all other States Parties to the Treaty.

(sentence four):

A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the Moon and other celestial bodies, would cause **potentially harmful interference with activities in the peaceful exploration and use of outer space**, including the Moon and other celestial bodies, may request consultation concerning the activity or experiment.

GGE on PAROS focus:

1) *Prevention of the use of force against space objects*

Relevant norms

UN Charter Article 2.4

All Members **shall refrain** in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.

UNGA Definition of Aggression?

Putting together all of 'space law' and all other security measures...

What does it permit?

what freedoms/rights?

- OST Article I, but what else?

What does it prohibit?

What duties/obligations?

what positive obligations, to take action?

what negative obligations, to not take action?

Putting together all of 'space law' and all other security measures...

Just as importantly...

Do conflicts exist? Art. VII with *jus in bello*

What is unclear? (*non liquet*)

What gaps exist? (*lacunae*)

OST Art. IV?

What is the law silent about?

Putting together all of 'space law' and all other security measures...

Is the current law clear?

Is the law complete? Or, is more needed?

Do we need more rights? More obligations? More definitions?

Definition of space weapon / Definition of illegal use of force

Do we need to assign risks and roles?



Questions?

Thank you

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