



**UN/Turkey/APSCO  
Conference on Space Law and Policy  
Theme 1:  
Promoting responsible, peaceful and safe use of outer space**

**The Role of International Manuals in Contributing to  
Responsible, Peaceful and Safe Use of Outer Space**



20 September 2019  
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# Trajectory of the Presentation

1. Setting the scene: Space is...
2. “ways and means of maintaining outer space for peaceful purposes”
3. Clarification needed between Peace and War
4. Why an international Manual
  - Contents of a manual
  - What a manual is not
  - Authority of the manual



# Space is...

- Competitive
- Contested
- Congested
- Complex



- what brings us together.

“... increasingly complex and congested space environment resulting from the growing number of objects in outer space, the diversification of actors in outer space and the increase in space activities, which were phenomena that posed a challenge to the safety and sustainability of space activities”. 2019 Report of the Committee on the Peaceful Uses of Outer Space

# Ways and means of maintaining outer space for peaceful purposes

## Outer Space Treaty 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.

## TRENDS IN SPACE

Space technologies play a fundamental role in the day-to-day affairs of the public, businesses, governments, and militaries worldwide. Satellite remote sensing, communications, and navigation systems enable real-time access to information necessary to connect people, operate a global economy, respond to natural disasters, and support military operations. While technological advancement in the space domain has created new opportunities, it has also created new risks and vulnerabilities across these sectors. For the U.S. and its allies, maintaining the leading edge in warfighting requires understanding evolving trends in the space domain.

Competing in Space, 2018

# Report of the Committee on the Peaceful Uses of Outer Space 2019

**“as a matter of priority, of ways and means of maintaining outer space for peaceful purposes and its consideration of the broader perspective of space security and associated matters that would be instrumental in ensuring the safe and responsible conduct of space activities...”**

Views that were expressed:

- **Lack of an arms race is due to “good will of States and their understanding of all aspects of the danger and consequences of conflict in outer space.**
- **A view underlined “preventing conflicts in outer space and preserving outer space for peaceful purposes had become more relevant than ever”**
- **meaningful dialogue needed to prevent “misperception, misinformation, misunderstanding and miscalculation arising from military activities in outer space”**
- **“absence of conflicts in space in the past could not be regarded as a guarantee of peace, in particular in an era in which new actors were entering the space arena.”**
- **“the international legal framework for outer space activities needed to be strengthened to enhance the safety and sustainability of space for all space users.**

# Governance phases addressing space security

## Treaty law

- Outer Space Treaty
- Arms control agreements, e.g. Limited Test Ban Treaty, Environmental Modification Treaty etc

## UN Principles

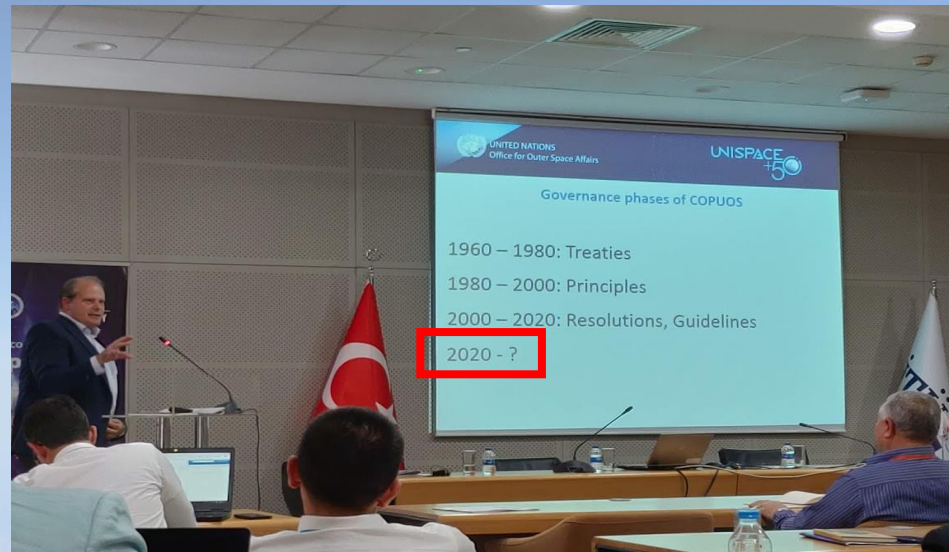
- remote sensing; direct broadcasting; nuclear power sources; Benefits Declaration

## Resolutions, Guidelines, Proposals

- *Missile Technology Control Regime*
- *Hague Code of Conduct against Ballistic Missile Proliferation*
- Prevent of an Arms Race in Outer Space (UNGA)
- Prevention Placement of Weapons in Outer Space Treaty (China & Russia)
- Transparency and Confidence-Building Measures (UN)
- International Code of Conduct (European Union)
- No first placement of weapons in outer space (UNGA)
- Group of Governmental Experts on PAROS (UN)

## Ongoing/proposed initiatives

- Long-Term Sustainability (LTS) Guidelines (UN)
- a joint panel discussion of the First and Fourth Committees on possible challenges to space security and sustainability
- *Manuals*



APSCO Tubitak Uzay Training Course

# Long-Term Sustainability Guidelines

A/74/20, Annex II

“The guidelines are premised on the idea that the interests and activities of States and international intergovernmental organizations in outer space, as they **have or may have defence or national security implications**, should be compatible with preserving outer space for peaceful exploration and use, and safeguarding its status pursuant to the Outer Space Treaty and the relevant principles and norms of international law. “

- Not legally binding, only voluntary implementation
- Action taken towards their implementation should be consistent with applicable principles and norms of intl law
- Nothing in the Guidelines constitute revision, qualification or reinterpretation of principles and norms
- Nothing is interpreted as giving rise to new legal obligation

# Draft Guideline 7:

Provide, in national legal and/or policy frameworks, for a **commitment to conducting space activities solely for peaceful purposes**

“Insofar as States may have legitimate **[security] interests** in outer space, those interests should comply with applicable international law and should take into account the common interests of all humankind.”

*Alternative 1*

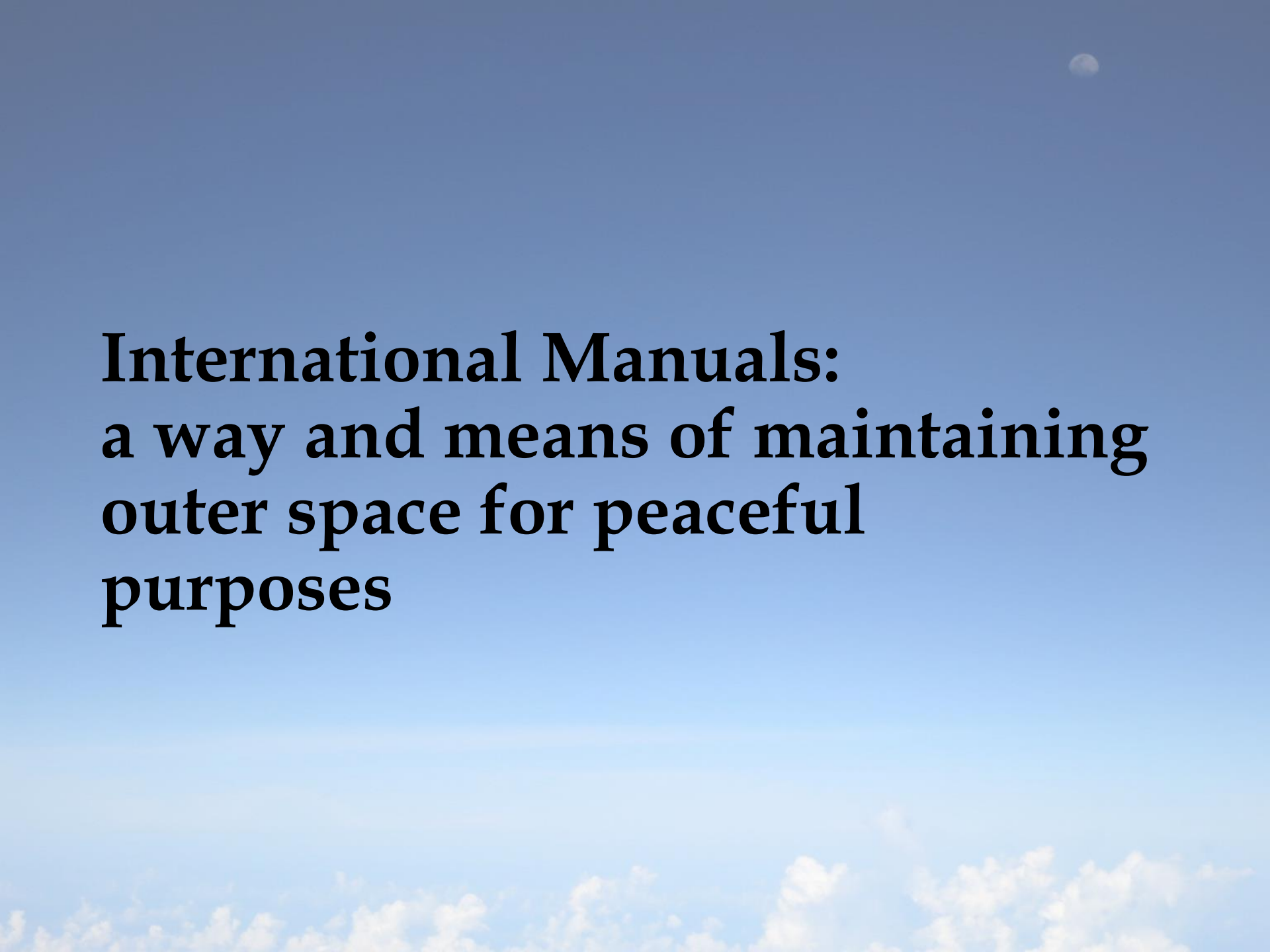
...States are encouraged to work collectively to prevent **threats to the [peace], safety and [security]** [sustainability] that can compromise the long-term sustainability of outer space activities.]

*Alternative 2*

States and international intergovernmental organizations are also **encouraged to foster and develop dialogues congenial to harmonizing perceptions [understanding] of the ways and means of maintaining outer space for peaceful purposes,** considering appropriate facets of this task.]

*Alternative 3*





**International Manuals:  
a way and means of maintaining  
outer space for peaceful  
purposes**

**Article IX of the Outer Space Treaty** is devoid of specifications as regards both the description of “harmful interference” notion and quantitative characteristics of harmful interference. ...Thus, the notion of “harmful interference” encompasses a wide spectrum of situations that may lead to conflict.

**...Harmful interference with the activities of States in the exploration and use of outer space may serve as a catalyst for potential conflict and, moreover, as formal grounds for resorting, under some jurisdictions, to the right to self-defence”.**

Harmful interference:

- **Radiofrequency interference**
- **experiments altering the natural conditions of the space environment;**
- **operations influencing the function of equipment aboard space objects (e.g., blocking or limiting the field of view of on-board optical or radio equipment);**
- **Inspection [coorbital] operations** which may lead to the threat of collision of space objects under the jurisdiction and control of different States; and
- **operations providing for a non-coordinated physical contact**

# Between Peace and War

## Action

(Harmful)  
Interference

- Electromagnetic interference
- Radiofrequency interference
- Spoofing, lasering, dazzling
- Jamming
- Rendez-vous and Proximity Operation

(non-) Intervention

- Kinetic energy attack
- Directed energy attack
- Nuclear or weapons mass destruction

Threat of Force

Use of Force

Armed  
Attack

Aggression

State Responsibility

Articles on State Responsibility

Peace

Armed Conflict

Diplomacy

consultation, "negotiation, mediation or other peaceful means"

UN Charter, Art 33

## Reaction

# Between Peace and War

## Action

**(Harmful) Interference** →

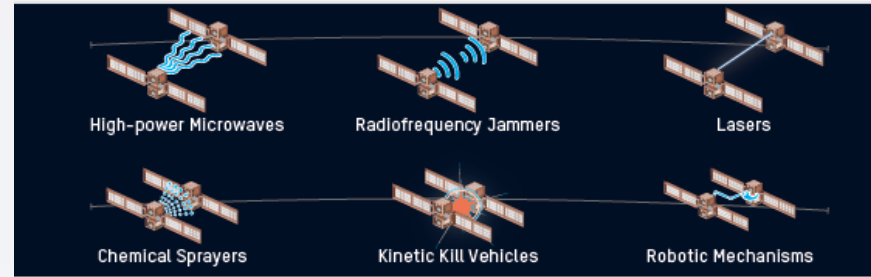
- Electromagnetic interference
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**(non-) Intervention** →

**Threat of Force** ↔ **Use of Force** ↔ **Armed Attack** ↔ **Aggression**

**State Responsibility**  
Articles on State Responsibility

- Kinetic energy attack
- Directed energy attack
- Nuclear or weapons mass destruction



**Peace**

**Armed Conflict**

**Diplomacy**

consultation, "negotiation, mediation or other peaceful means"

UN Charter, Art 33

**Collective Security**  
UN Charter, Ch VII

## Reaction

**Countermeasures**

Articles on State Responsibility

**Retorsion**  
Articles on State Responsibility

**Reparations**  
Articles on State Responsibility

**Self Defence**  
UN Charter, Art 51

# Between Peace and War

(Harmful) Interference →

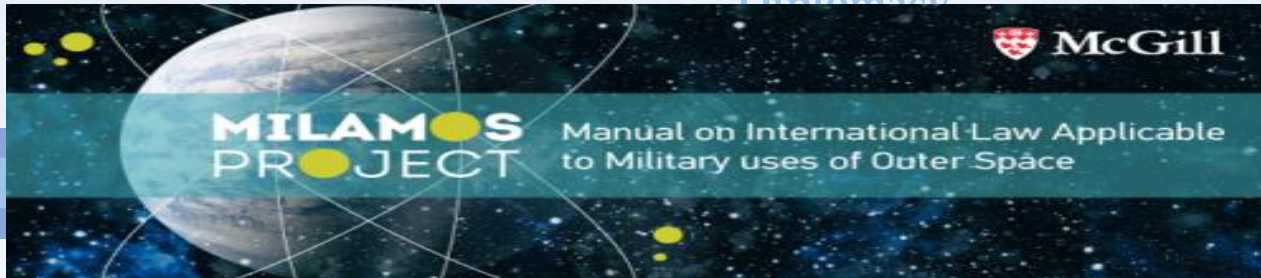
(non-) Intervention →

Threat of Force ↔ Use of Force ↔ Armed Attack ↔ Aggression

State Responsibility  
Articles on State Responsibility

Peace

Armed Conflict



Not one, but **two international manuals** being drafted to address military and security activities in outer space

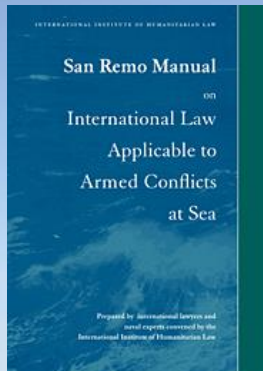
UN Charter, Art 51

# Why an international manual?

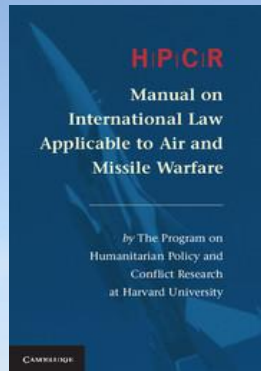
The Institute, too, does not propose an international treaty, which might perhaps be premature or at least very difficult to obtain;  
Preface, *The Laws of War on Land (Oxford Manual)*, 9 September 1880.

- A manual is a
  - restatement of international law as it is (*lex lata*)
  - produced by an international group of experts and scholars
- provide evidence of custom and practice accepted as law by international community
- Traditionally dealt with law of armed conflict/international humanitarian law (LOAC/IHL)

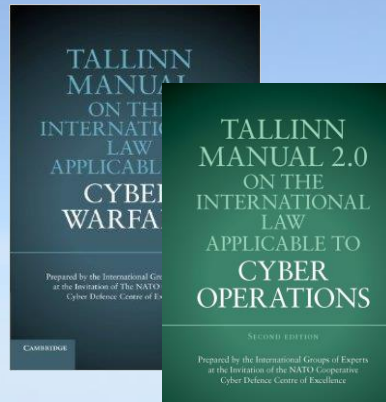
*Conflicts at Sea*



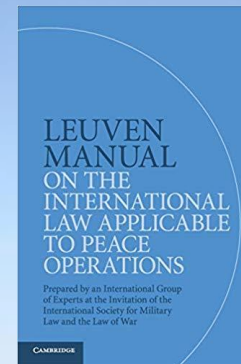
*Conflicts in Air*



*Cyber warfare/  
Operations*



*Peacekeeping  
Operations*



*Military Uses of  
Space*



“Many manuals today do not limit their coverage just to the law of armed conflict. They include other aspects of international law”.

“Manuals on the Law of Armed Conflict”, Max Planck Encyclopedia of Public International Law

# way and means to break the space security deadlock

**“Global problems need global solutions that are sought and implemented through global participation”.**

- Introduce initiatives that are non-State-centric and break away from geopolitical interests
- **a neutral, objective and accurate statement of the applicable law**
- **Involve a spectrum of experts and stakeholders** from all disciplines and all parts of the world
- Experts and contributors participating in their **personal capacities**
- Appeal to **common interests and united by common concerns**
- Agreement through **consensus**



# What the manual is *not*

- Academic treatise / scholarly document
- Set of guidelines or recommendations
- Law as it *should be* (*lex feranda*)
- Manuals are **not the law**, but provide **evidence of custom and practice** accepted as law by international community

Summer in Tokyo  
Seeking to save the planets  
And the thin blue dot  
We contemplate the clear rules  
And humanity lives on

*Tanka composed by MILAMOS Expert in Tokyo, July 2019*





# Contents of a Manual

- **black-letter rule**

- Agreed text on the law as it stands

- **commentary**

- Evidence of legal basis, State practice and opinions to support the rule

- Identify sources of clarification, agreement or disagreement

## Rule 123

**Activities in Space, including military space activities, must be conducted in accordance with international law.**

**Black-letter rule**

1. The basis of this rule can be found in Article III of the Outer Space Treaty, which has is a codification of customary international law that all space activities, whether civilian or military in nature, must be conducted in accordance with international law.
2. The Group of Experts agree on this...  
The view was expressed that...  
Some Experts noted that...
3. States have affirmed this rule in their declarations at the UN, and through the adoption of national space legislation...

**Commentary**

# Authority of an international manual: Reference by International Courts and Tribunals

In appraising the formation of customary rules or general principles one should therefore be aware that, on account of the inherent nature of this subject-matter, **reliance must primarily be placed on such elements as official pronouncements of States, military manuals and judicial decisions.**

*Tadić , ICTY, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, 1995*

“The established norms of customary international law must be respected and complied with by all relevant parties. The San Remo Manual **provides a useful reference in identifying those rules.**”

*Report of the Secretary-General's Panel of Inquiry on the 31 May 2010 Flotilla Incident, 2011*

[the San Remo Manual, SRM] **provides the most useful guidance on the applicable law** of naval blockades. The SRM represents an attempt to codify customary international law, carried out by a panel of naval law experts of diverse nationalities with both military and academic backgrounds. **The SRM thus provides a useful expression of the crystallisation** of maritime law of armed conflict in the context of an international armed conflict.

*Article 53(1) Report on the Situation on Registered Vessels of Comoros, Greece and Cambodia, 2014*

# Manual Process



*Example of the*

<https://www.mcgill.ca/milamos>

- Online collaboration and drafting
- Rule-drafting and consensus-building workshops
- Editorial Committee meetings
- Engagement with States

## Mission Statement

To develop, within a period of three years, a manual that objectively articulates and clarifies **existing international law applicable to military uses of outer space in time of peace, including challenges to peace.**

## VISION

To contribute to a future where all space activities are conducted in accordance with the **international rules-based global order**, without disrupting, and preferably contributing to, the sustainable use of outer space for the benefit of present and future generations of all humanity.



# Not a panacea

- Authority of the manual
- Acceptance of the manual
- Scope of the manual

But a space manual would...

- help clarify and strengthen the legal foundations of global space governance
- be a guide for operators
- be a basis for States for further discussion and adoption of instruments to strengthen space governance



# Contribution of Manuals to Responsible, Peaceful and Safe Use of Space

- There is a recognised need for ways and means to address security issues in outer space, and to ensure responsible and peaceful, and safe use of space
- Despites treaties, principles, and non-binding guidelines, there is need to strengthen the rule of law and clarify the law with regard to space activities
- Manuals can be a useful, practical way and means to reach consensus on basic legal principles that apply to space activities

*teşekkür ederim!* Thank you!