

Briefing Meeting between UNIDIR and UNDC

Harmful Interference to
Satellite Communications:
When **L**aw **o**f **A**rmed **C**onflict Applies?

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Outline

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I. Introduction

■ Potential Threats to **Satellite Communications** are:

Kinetic

- Anti-Satellite Test by Ballistic Missiles

[**not illegal** after the invalidation of the 1972 ABM Treaty]

e.g. 1950s US&Russia, 2007 China, 2019 India

Non-Kinetic

- Jamming [**legal** within sovereign territory, territorial sea/airspace]

- Laser

[**legal if conducted under UNC Chapter VII or Art. 51 “self-defence”**]

- Cyber Operations (attack, terrorism, crime)

[**illegal** under ITU law]

[**legal if conducted under UNC Chapter VII or Art. 51 “self-defence”**]

➔ remind that, any ways of dysfunctioning space object result into creating space debris that endanger all states' space activities

I. Introduction

■ The Scope of Presentation

Harmful Interference to
Satellite Communications
which are subject to ITU regulatory framework

+

Conditions for applying **Law of Armed Conflict** to HI above

2. Principle of Harmful Interference Prohibition in ITU Law

■ ITU Law: ITU Constitution and Convention + Administrative Regulations (i.e. Radio Regulations)

→ Each state has **the sovereign right to “regulate” its telecommunication**

■ Principle of Harmful Interference Prohibition

◆ Art. 45

not to cause any harmful interference to the radio services or communications of other member states or of operating agencies when they establish and operate any radio services or communications

◆ Art. 48 (exception)

Ensures states for “entire freedom” in **military** radio installations, but requires to follow the existing regulation in case of public correspondence

2. Principle of Harmful Interference Prohibition in ITU Law

Definition:

◆ 1.166 “*interference*”

“[T]he effect of unwanted energy due to one or combination of emission, radiations upon reception in a *radiocommunication system*”

◆ 1.169 “*harmful interference*”

“[I]nterference which endangers the functioning of a radionavigation service or of other safety services [...] seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service [...]

ITU Radio Regulations, Section VII- Frequency Sharing

3. Principle related to Harmful Interference in Space Law

Article III leaves possibility to allow harmful interference in the case of self-defense (Art. 51) or collective security (Chapter VII)

Article IV (2) leaves the definition “peaceful” vague

US: “non-aggressive”

Russia: “non-military”

Japan: between “non-aggressive” and “non-military”

Article IX only provides an opportunity for **diplomatic consultation**

4. The Conditions to Apply LOAC to Harmful Interference

- ✓ Condition: **armed conflict exists already**
- ✓ When HI was caused... (in theory)
 - in the **context** of armed conflict
 - by **a party** to the armed conflict
 - in order to **contribute** to military efforts
 - to interrupt **humanitarian assistance**

However..... (in practice), challenges are:

to apply LOAC to harmful interference

which are caused by **cyber operation**

(cyber attack/terrorism/crime)

5. ITU's Initiatives for Cybersecurity

If harmful interference is caused by cyber operations, it is difficult to identify:
the right **IP address** to find the original attacker
the **timing** when cyber operations started
intangible targets and weapons



- ◆ ITU recommends its member states to ratify
the Budapest Convention on Cybercrime of 2001
“to criminalize cybercrime by requiring states parties
**to establish cyber offence by adopting / building their domestic law
in line with human rights treaties”**”

Articles 2-8: (illegal access; illegal interception; data interference;
system interference; misuse of device;
computer-related forgery; and computer-related fraud)

6. Conclusion

- ✓ Causing Harmful interference is already prohibited by ITU law, and the Law of Armed Conflict (LOAC) is applicable **under certain conditions**.
- ✓ However, in practice, HI caused by **cyber operations** leaves problems to the applicability.
- ✓ As satellite communication is part of outer space activities, Transparency and Confidence-Building Measures (**TCBMs**) need to be considered in the context of harmful interference to satellite communications.
- ✓ In order to detect the use of force in outer space, **monitoring mechanisms** by using data obtained from Space Situational Awareness (**SSA**) and Space Surveillance Network (**SSN**) need to be considered.

Thank you

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