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スペースデブリ問題の法的側面

Legal Aspects of Space Debris Issues

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本プレゼンは、現在実施及び構想されているスペースデブリ対策に係る活動に対して法的な視座を提供することを目的とする。宇宙活動に関する法原則を、法的拘束力を有する規則とそうでない規則に分類して概観した後、デブリ観測、デブリ低減、衝突回避運用、デブリ除去の主要な4つの活動形態において関与している法や規則を明らかにする。これを通じ、デブリに係る研究活動や運用において法的視点が加味されることを目指す。

This presentation is aim to provide a legal perspective to currently conducted and envisioned activities regarding space debris issues. The presentation will firstly outline the legal principles of space activities which are consisted by legally-binding rules and non-legally-binding rules. Secondly, the presentation will illustrate relevant laws and regulations while the main 4 types of activities are executed; space debris observation, space debris mitigation, collision avoidance maneuver, and active space debris removal. The final goal of this presentation is to add some legal taste to the research and development activities on space debris.

Legal Aspects of Space Debris Issues

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* The views expressed herein are entirely those of the author and do not reflect those of Japan Aerospace Exploration Agency (JAXA) or the Government of Japan by any means.

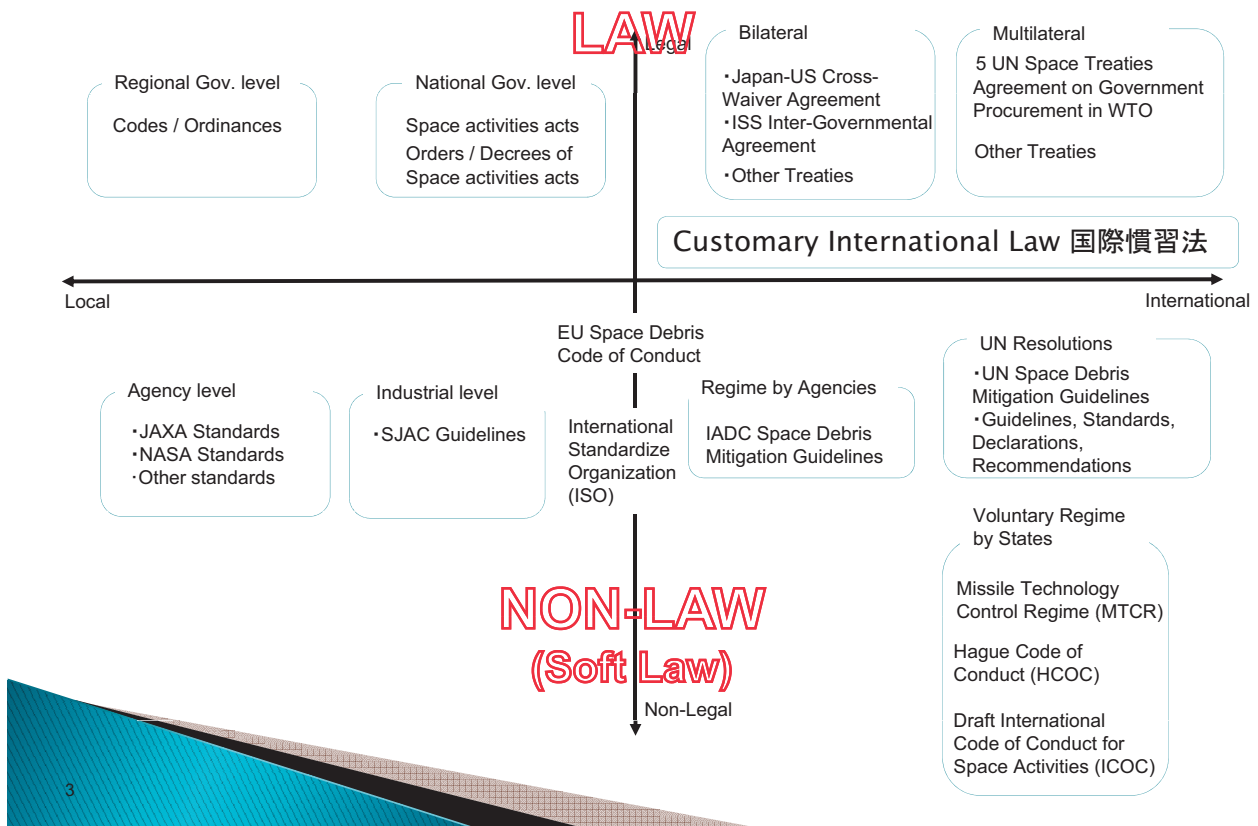
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1. Legal Principles of Space Activities



【Basic Principle】

“Free to use the outer space” by all States 宇宙活動自由の原則 (OST § 1)

【4 Constrains to the Basic Principle】

① Peaceful Purposes : The use shall be “exclusively for peaceful purposes” (OST § 4)

“Peaceful” interpreted “non-aggressive 非侵略” ⇒ Non-aggressive military uses are allowed.

② Non-appropriation to any State : Space and celestial bodies shall be maintained as international territories 国際領域. (OST § 2)

③ International responsibility to the Launching State(s) 打上げ国 : State(s) shall bear responsibility and liability for any object launched by their territories or nationals (including by non-governmental entities). (OST § 6,7; LIAB § 1~4)

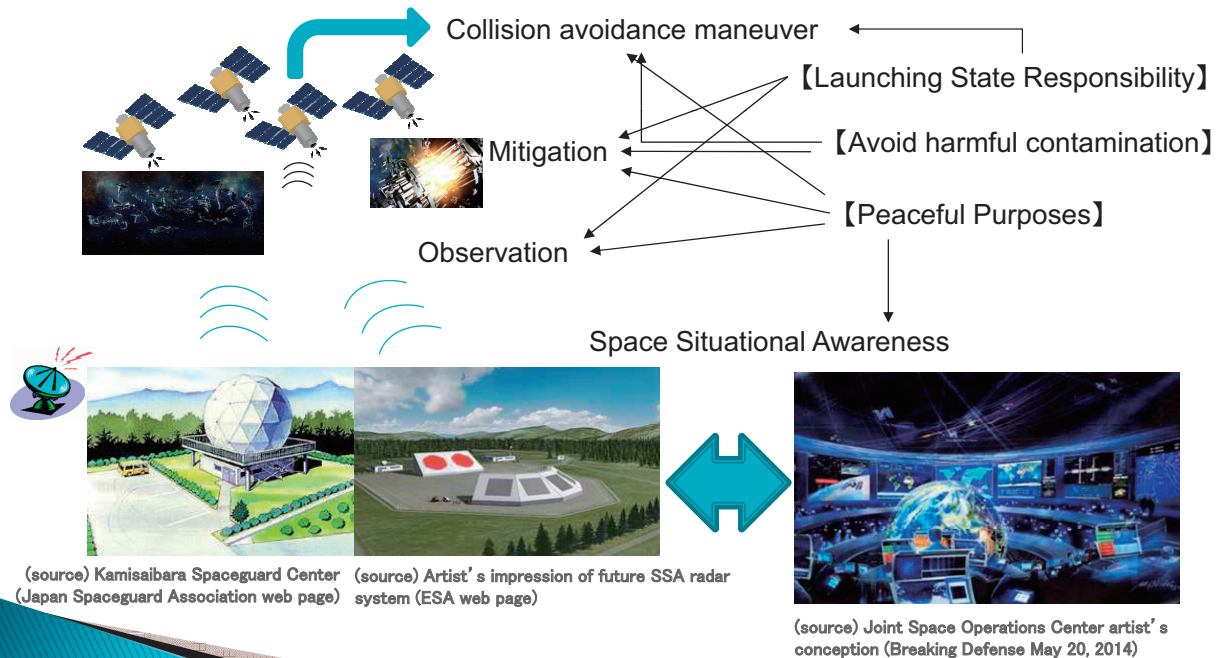
⇒ State of Registry 登録国, among the Launching State(s), retain jurisdiction and control 管轄権と管理の権限 over such object in space. (OST § 8)

④ Avoid harmful contamination to the environment and harmful interference to other activity. State shall consult with possible affected State(s). (OST § 9)

⇒ “harmful contamination” does not include space debris in general interpretation.

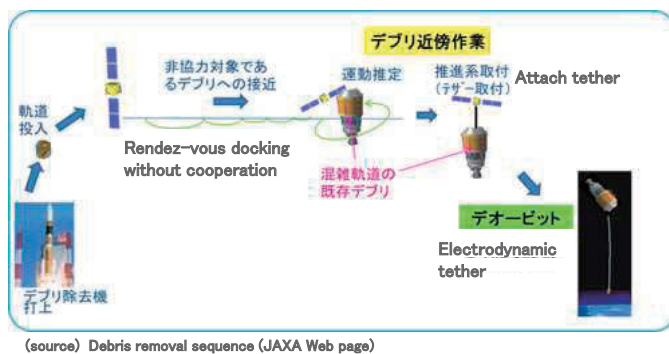
* OST: Outer Space Treaty (1967)
LIAB: Liability Convention (1972)

2. Rules and Regulations for; (1) Space Debris Observation; Mitigation; Collision Avoidance Operations



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2. Rules and Regulations for; (2) Active Space Debris Removal



【Peaceful Purposes】

Using Rendez-vous docking technology to an active satellite may be an aggressive use.

【Launching State Responsibility】

Jurisdiction of space object belongs to the Launching State(s). Even space debris defined as space object. The removing State shall not violate the jurisdiction of the Launching State of the object.

【Avoid harmful contamination】

States are responsible to conduct space activities in a manner to avoid harmful contamination to the space environment and harmful interference to the other State's activity.

⇒ Space debris is not defined as "contamination" so far.

【Launching State Responsibility】

The Launching State of the space debris may have the responsibility to handle appropriately to the end of those objects.

⇒ No legal obligations for the end of life.

National security concern

Need to clear jurisdiction

Cost bearing

⇒ **Political implications**

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3. Conclusion

– reflecting legal implications to R&D activities

- ① Consider legal implications of the R&D activities may contains
- ② Use legal expert(s) to exam them
- ③ Sometimes, one should consider political implications
- ④ If so, find governmental partner(s)

