Space Legislation in Japan

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Outline

I  Path to the two national space acts

II  Space Activities Act (2016)

III  Satellite Remote Sensing Data Act (2016)

VI  Conclusion
I. Path to the two national space acts

2008 Space Basic Act    Art. 35 requests that space activities act(s) be established.

January 2015    3rd Space Basic Plan (Art. 24 of the Space Basic Act) requested two space acts be adopted.

Bills were submitted in March 2016    promulgated on 16 November 2016

to force:

Remote Sensing Data Act    15 November 2017
Space Activities Act    15 November 2018
II. Act on launching of spacecraft, etc. and control of spacecraft (Space Activities Act)

1. purposes the Space Activities Act (SAA)

1) implement international space law
2) public safety TPL (allocation of risk)
3) improvement of the life of the citizens as well as development of the economy and society (promotion of space business)
## 2 Two kinds of authorization: Who needs authorization for what?

<table>
<thead>
<tr>
<th>A. Launching of spacecraft, etc.</th>
<th>B. Control of spacecraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>“spacecraft” = objects placed into the Earth orbit or beyond</td>
<td>“Spacecraft control facility” = facility receiving electromagnetic waves from the spacecraft and sending a signal to the spacecraft for Telemetry, Tracking and Control (TT&amp;C)</td>
</tr>
<tr>
<td>“spacecraft, etc.”= spacecraft and rocket <strong>suborbital object is excluded</strong></td>
<td></td>
</tr>
<tr>
<td>A person who intends to launch spacecraft, etc. from launch sites in Japan (incl. ships and aircraft with Japanese nationality)/per launch</td>
<td>A person who intends to control spacecraft using a spacecraft control facility located in Japan /per spacecraft</td>
</tr>
</tbody>
</table>

* strictly territorial jurisdiction
3 Requirements for the permission of the launch of *spacecraft, etc.* (launch = from ignition (when the action becomes irreversible) to the separation of spacecraft from a rocket)

Permission is granted by the Prime Minister

If type certification and compliance certification are obtained in advance from the Prime Minister, review process will be facilitated.

<table>
<thead>
<tr>
<th>Certification</th>
<th>review per application, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rocket safety</td>
<td>Type certification (or foreign certification)</td>
</tr>
<tr>
<td>Launch site safety</td>
<td>Compliance certification</td>
</tr>
<tr>
<td>Launch safety</td>
<td></td>
</tr>
<tr>
<td>Spacecraft loaded on the rocket</td>
<td></td>
</tr>
</tbody>
</table>
4 TPL for spacecraft fall damage

- damage on the ground surface, on water surface, aircraft in flight or other flying objects by rocket + spacecraft (whole or parts), or by rocket only (after all of the spacecraft have been successfully separated)
- strict liability
- channeling of liability for a launch operator
- launch operator shall obtain insurance or a deposit in an official depositary up to certain amount which is specified by Cabinet Office Order
- if a natural disaster or other force majeure also contributed to the occurrence of the damage, the Court may determine the liabilities
(cont’d)

- Liability for Third Party’s Damage on the surface of the Earth or to aircraft in flight caused by the launch

- Strict liability for a launch operator

- Requirements of TPL insurance and State's guarantee or Deposit

- Specific launch vehicle fall damage (an act of terrorism, war, etc.)

- Government indemnification

Launch operator’s compensation

Government indemnification

TPL insurance

Set for each launch vehicle

350 billion yen

The Court’s decision

Damage amount

Types of damage
5 Requirements for the license for the control of spacecraft and liability for the licensee

<table>
<thead>
<tr>
<th>Requirements for license</th>
<th>license is granted by the Prime Minister</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 purposes and methods of spacecraft</td>
<td></td>
</tr>
<tr>
<td>2 satisfy obligations based on Art. IX of the OST and relevant space debris mitigation measures</td>
<td></td>
</tr>
<tr>
<td>* contamination prevention; * collision avoidance; post-mission measures (GEO, LEO), etc.</td>
<td></td>
</tr>
<tr>
<td>- strict liability for the spacecraft fall damage on the ground</td>
<td></td>
</tr>
<tr>
<td>no obligations for obtaining insurance or other measures for demonstrating financial responsibility</td>
<td></td>
</tr>
<tr>
<td>no governmental support</td>
<td></td>
</tr>
</tbody>
</table>
6 Transfer of control of spacecraft

When the spacecraft control facility of the transferee is located in Japan

*Authorization* from the Prime Minister is needed.

When the spacecraft control facility of the transferee is outside of Japan

Transferor shall make a *notification* to the Prime Minister to that effect in advance.
(cont’d) on-orbit transfer of control of spacecraft

<table>
<thead>
<tr>
<th>transferee</th>
<th>Japanese/located in Japan</th>
<th>Foreigner/located in Japan</th>
<th>Japanese/located outside Japan</th>
<th>Foreigner/located outside Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreigner/located in Japan</td>
<td>Authorization</td>
<td>Authorization</td>
<td>Notification</td>
<td>Notification</td>
</tr>
<tr>
<td>Japanese/located outside of Japan</td>
<td>New license</td>
<td>New license</td>
<td>No provision</td>
<td>No provision</td>
</tr>
<tr>
<td>Foreigner/located outside of Japan</td>
<td>New license</td>
<td>New license</td>
<td>No provision</td>
<td>No link with Japan</td>
</tr>
</tbody>
</table>

strictly territorial principle
III. Act on ensuring appropriate handling of satellite remote sensing data (Remote Sensing Data Act)

1 Purpose of the act
to strike a balance between:
(1) the promotion of data distribution services; and
(2) to ensure international peace and security & national security of Japan

2 Who needs a license?
A person who intends to operate satellite remote sensing instruments with the capability of acquiring a high-resolution image using the ground radio station for command and control located (GRSCC) in Japan (incl. ships and aircraft with Japanese nationality)

Threshold: to detect the moving facilities (ships, aircraft and other vehicles) details are provided in the Cabinet Office Order
3 licensing schemes

- License
  - Satellite Remote Sensing Instruments User
    - Resolution, degree of value-added, time elapsed from the imaging, etc.
    - Concern to the international and national security
  - Person handling Satellite Remote Sensing Data
  - Specified Data Handling Organization
- Certification
4 order/request of non-provision of data

Prime Minister may order not to provide data:

i) when international and national security is threatened
ii) minimum extent necessity (specified scope of data and time period)
iii) Foreign handler (domicile/residence/principal office outside Japan) is excluded from the prohibition

To foreign handlers, not an order but an request is issued.

Territorial principle

This directly contributes for space security
IV Final remarks

Non-official translation of the two acts and other relevant cabinet office orders etc. will be provided once they are ready.

Thank you so much for your kind attention.