



Law on Remote Sensing

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Law on Remote Sensing

- Outer Space Treaty, 1967
- United Nations Remote Sensing Principles
- Domestic Laws/policies/regulations

Outer Space Treaty

- The OST is based on the principle of freedom of space activities, meaning that no State can be impeded from carrying out space activities or be requested to obtain prior authorization to do so. Therefore, any State is entitled to launch satellites into space for the purpose of remote sensing and this choice cannot be lawfully impeded by other States.
- Article VI of the OST states that private or commercial entities must be authorized by their national State, which then must continually supervise their activities.

UN Remote Sensing Principles

- The UN Remote Sensing Principles were established under UN GA Resolution 41/65 of 1986.
- The Principles lay down the rights and duties of the actors involved in remote sensing activities and establish the rules regarding access to and distribution of data at an international level.

Provisions of the Principles

Provisions of these principles are broadly classified as -

- Freedom of remote sensing
- Respect for the rights and interest of the sensed state
- Specific data rules

Limitations of Principles

- The UN Remote Sensing Principles are relevant to only a limited number of applications for civil purposes only. Specifically: natural resource management, land use, and protection of the environment.
- It is clear that military applications are not included within the scope, and it is currently uncertain whether dual-use satellites are regulated.

Indian Law on Remote Sensing

- Remote Sensing Data Policy, 2001
- Remote Sensing Data Policy, 2011
- Draft Space RS Policy, 2020

RSDP, 2011

Purposes –

- 1. To establish a licensing mechanism
- 2. To establish guidelines to control the dissemination of RS Data

Guidelines for dissemination

- All data of resolutions up to 1 m shall be distributed on a non-discriminatory basis and on “as requested basis”
- With a view to protect national security interests, all data of better than 1 m resolution shall be screened and cleared by the appropriate agency prior to distribution; and the following procedure shall be followed:
 1. Government users namely, Ministries/ Departments/ Public Sector/ Autonomous Bodies/ Government R&D institutions/ Government Educational/ Academic Institutions, can obtain the data without any further clearance

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2. Private sector agencies, recommended at least by one Government agency, for supporting development activities, can obtain the data without any further clearance.
 3. Other Private, foreign and other users, including web based service providers, can obtain the data after further clearance from an interagency High Resolution Image Clearance Committee (HRC).
 4. Specific requests for data of sensitive areas, by any user, can be serviced only after obtaining clearance from the HRC.
 5. Specific sale/ non-disclosure agreements to be concluded between NRSC and other users for data of better than 1 m resolution

Space RS policy, 2020

Aim: SpaceRS Policy 2020 is aimed at enabling wider stakeholders “participation and ease of data access”.

Space RS Policy-2020 states that the Government of India shall –

- Promote Indian Industries to carry out space based remote sensing activities within and outside India.
- Enable easy access to space based remote sensing data, except for “sensitive data and information”.
- Concentrate on realization of space based remote sensing systems to cater to the country’s needs, that cannot be effectively, affordably and reliably satisfied by the commercial entities, either due to national security concerns or economic factors.
- Provide a timely and responsive regulatory environment for the commercial Indian industry to establish and operate space based remote sensing systems.

IN-SPACe and RS NGP, 2020

- In accordance with the RS Policy 2020, the Indian National Space Promotion and Authorization Center (“IN-SPACe”) will be responsible for providing authorization for enabling Indian entities to establish and operate satellite RS systems to provide remote sensing data and solutions within and outside India.

The RS NGP 2020 permits the Indian entities to take authorizations from IN-SPACe for establishing space assets -

Authorization for Establishment of Space Assets which are owned by Indian Entities for RS Data Collection:

- Indian entities can procure authorization to establish space assets for RS data services by providing information about the spacecraft i.e., payload details, spectral bands, orbital parameters, coverage area, etc.
- The Indian entity would be liable for any potential liabilities or damages which may be caused to other space assets in outer space and to the environment and the Indian entity would need to provide a financial guarantee or insurance. The sum of the guarantee and insurance will be determined by IN-SPACe;

The authorization provided by IN-SPACe shall be applicable to the

- (i) applicant entity and any change in the ownership requires a fresh authorization and
- (ii) specific space assets and any change or replacement of the asset will again require a fresh authorization.

- The RS NGP 2020 allows Indian entities to set up ground stations within India for operation and control of RS satellite and reception of RS data.

Authorization for establishing of ground stations within India for operation and control of RS satellite and data reception:

The authorization will be valid for the

- (i) specific applicant entity and any change in ownership would require a fresh authorization and
- (ii) specific facility for monitoring and control of the specific space assets and/or data reception from specific space asset and any change or replacement will again require a fresh authorization.

Authorization of space assets for transmission of RS data over Indian territory:

- If RS data is originating from an authorized space asset and the RS data is not “sensitive”, then the RS data over Indian territory can be made easily accessible to users by the Indian entity.
- The Indian service provider will need to submit its proposal as prescribed in Annexure C of the RS NGP 2020 for registering the space asset used for acquiring RS data within Indian territory;
- The RS data will need to have a ground sampling distance coarser more than 50 cm (non-sensitive);
- Authorization provided will be for a specific space asset and any change or replacement of the asset will require a fresh authorization.

Dissemination of Sensitive RS Data/Services of Indian Territory emanating from the Space Asset

- Any RS data having very high resolution and ground sampling distance of less than 50 cm will be considered as “sensitive” data and the Indian service provider will need to seek an authorization for such dissemination by submitting its proposal in the form prescribed (in Annexure D of RS NGP 2020).
- The service provider will need additional authorization if it wants to disseminate sensitive data of certain areas by following a procedure laid down by the Government;
- The Government will have the power to impose control on the imaging/observations and data distribution, in case of national security or international obligation or foreign policy issues;

