

India's Space Policy: Policy Aspects for achieving Space Sustainability

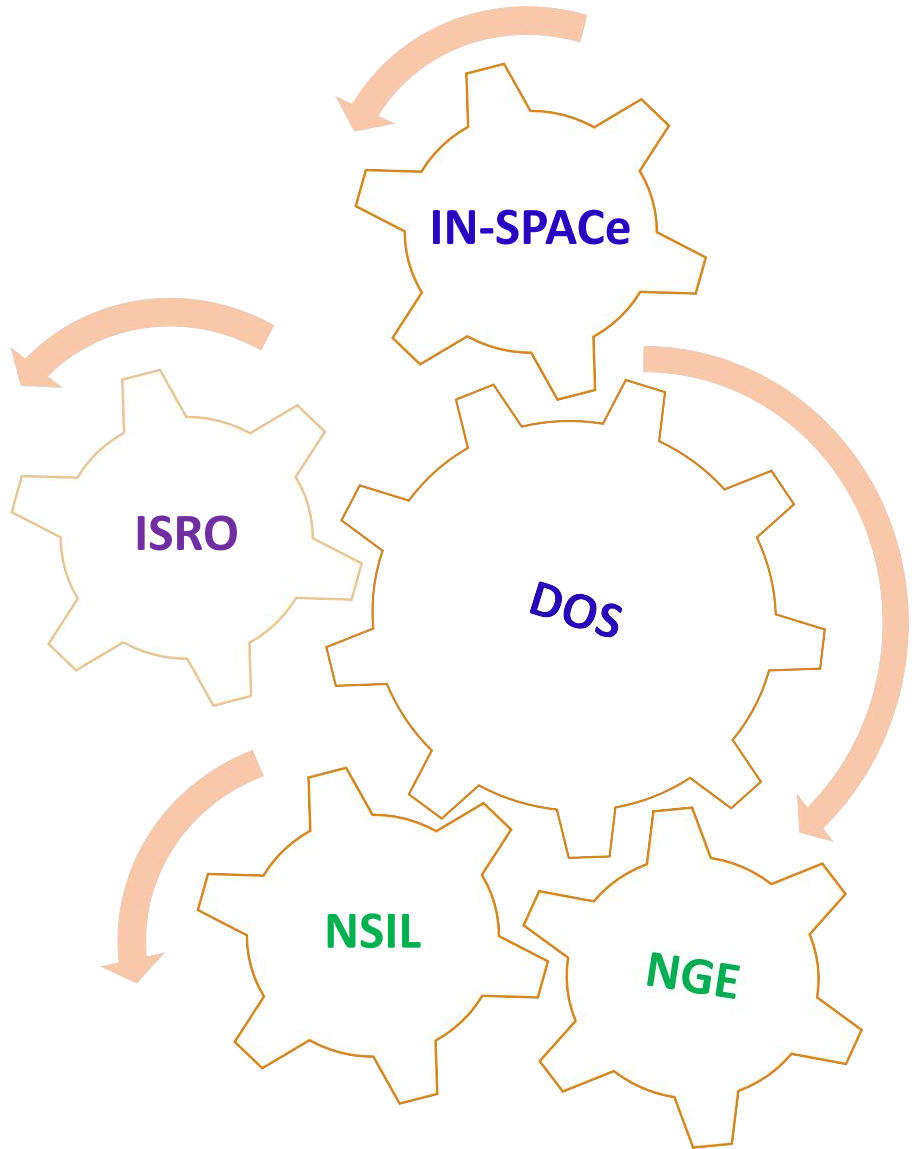
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Establish framework to ensure safe & sustainable space operations, in compliance with relevant international space debris mitigation guidelines.

Enhance national SSA capabilities & share observations with relevant stakeholders

Issue guidelines for meeting safety & security requirements of space objects

Develop and commercialize Ground & Space based SSA capabilities

Modelling, analysis & cataloguing of Space Debris/Satellites

Undertake R&D , tech development

Share tech., products, processes and best practices



**Norms, Guidelines and Procedures
for Implementation of
Indian Space Policy-2023
in respect of
Authorization of Space Activities
(NGP)**



Indian National Space Promotion and Authorization Centre
Department of Space
Government of India

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IN:ISP2023:NGP2024/V1.0

List of Space Activities needing
Authorization

Criteria for Authorization

Process for granting Authorization

Conditions/guidelines to be adhered to
by an Applicant

- Design/mission-plan
- Orbit selection
- Operation
- PMD

[SSA guidelines
released in June
2026](#)

- i. During the mission planning stages,**
 - transit phase, injection phase and the nominal operational phase of the satellite.
 - cumulative collision probability over mission life < 1 in 1000.
 - **Recommendation:** Avoid densely populated orbital.
- ii. If mission orbit is selected in the vicinity of human space flight missions (370-430 km) then have the requisite manoeuvring capability.**

- i. Perform Failure Mode Effects and Criticality Analysis (FMECA).**
- ii. Carry out Launch Collision Avoidance Analysis (Launch – COLA).**
- iii. Perform survivability and ground casualty risk assessment for re-entering sub-orbital stages.**
- iv. Avoid inserting orbital stages with solid motor, wherever feasible.**
- v. In case of multiple satellite injection, ensure that there would be no close approach risks amongst the separated satellite(s) and the upper stage.**
- vi. De-orbit uppermost stages after injection of payloads.**
- vii. Passivate all upper orbital stages of LV.**

Guidelines by IN-SPACE for Satellites

- i. Carry out Failure Mode analysis**
- ii. Ensure sufficient fuel budgeting for PMD operations.**
- iii. Minimizing debris creation** (operational mission period & passivation).
- iv. Prevent unauthorized commandeering of satellite** (adequate data security).
- v. Ensure manoeuvrings capability for satellites** with largest face area > 0.1m^2 .
- vi. Satellite shall be Trackable** (uniquely identifiability, passive tracking aids)

- i. Regular on-orbit conjunction risk assessment using best data .
- ii. If Probability of Collision (P_c) > pre-defined threshold, critical and warrants mitigation of collision risk.
- iv. Design, analyze, and **execute Collision Avoidance Manoeuvre (CAM)** for a manoeuvrable satellite,
- v. Coordinate with the operator to ensure that **only one of the satellites under conjunction is maneuverer for collision avoidance.**
- vi. Document the relevant procedures for conjunction assessment, collision avoidance, and coordination to external entities, while submitting the application to IN-SPACe for Space Object registration.

Thank you

For more information on IN-SPACe, connect with us at
<https://www.inspace.gov.in>

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Authorisation Guidelines for specific SSA activities

- I. Establishment and/or operations of space-based SSA Sensors
- II. Establishment and/or operations of ground-based SSA Sensors
- III. Providing SSA Services

Annexure-1

Guidelines for the Remote Access (RA) of the Ground Stations in India from a location outside India

Annexure-2

- Part A - Reporting Mechanism
- Part B - Prior Intimation/Approval Mechanism
- Part C - Audit & Monitoring Mechanism

Annexure-3

End-Use Cum End-User Certificate (EUC) For Disseminating SSA Raw Data Or Providing SSA Services

Annexure-4

Intimation by Academic Entities for ground based SSA sensor installations



Two-Tier Regulatory System

SSA Activity Tier

Restricted
(sensitive nature
or high security
relevance)

Controlled
(other than those
falling under
Restricted Tier)

- Applicant with **non-Indian Management & Control** **OR**
- intending to provide SSA Data/Service to a **non-Indian government** **OR**
- intending to provide SSA Data/Service to a **non-Indian Entity for defence/security purpose** **OR**
- establishing ground-based SSA sensor **outside India**

