



**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**

May 2024

IN:ISP2023:NGP2024/V1.0

Left Blank Intentionally

DOCUMENT AND VERSION CONTROL SHEET

Title	Norms, Guidelines and Procedures for implementation of Indian Space Policy-2023 in respect of Authorization of Space Activities (NGP)		
Abstract	This document describes the Norms, Guidelines, And Procedures for implementation of Indian Space Policy-2023 in respect of Authorization of different Space Activities by Indian Entities.		
Originating Agency	Indian National Space Promotion and Authorization Centre (IN-SPACE), Department of Space, Government of India, Ahmedabad		
Authored by	Program Management and Authorization (PMA) Directorate, IN-SPACE, Ahmedabad  (P. K. Jain) Director, PMA		
Release Date	May 03, 2024		
Approved by	IN-SPACE Board  (Pawan Goenka) Chairman, IN-SPACE		
Contact	Director (PMA), IN-SPACE, Ahmedabad (director-pmad@inspace.gov.in)		
Number of Pages	147	Number of Appendices	3
Security & distribution status	Unrestricted		
Document Number	IN:ISP2023:NGP2024	Version No.	1.0

Left Blank Intentionally

Preface

The unlocking of space sector in India was announced by the Government of India in June 2020 with an aim to boost private sector participation in the entire range of Space Activities. The reforms envisage Non-Government Entities (NGEs) emerging as independent players in the space sector capable of carrying out end-to-end Space Activities.

In line with the reforms, Indian National Space Promotion and Authorization Centre (IN-SPACe), an autonomous single window nodal agency within Department of Space, was constituted in October 2021 with a mandate to authorize all Space Activities undertaken by the Government and NGEs in the country. In addition, IN-SPACe also acts as a promoter, enabler and supervisor for the NGEs involved in the Space Activities.

Subsequently, the Indian Space Policy-2023 (ISP-2023) was brought out by the Government in April 2023 outlining the role of all the stakeholders in space sector in the country. The ISP-2023 has also identified the range of Space Activities that require Authorization by IN-SPACe.

IN-SPACe has accordingly formulated the Norms, Guidelines and Procedures for implementation of the Indian Space Policy 2023 in respect of Authorization of Space Activities (NGP). The NGP, as described in this document, includes the list of Space Activities which need Authorization from IN-SPACe, criteria for granting the Authorization and necessary conditions/guidelines to be adhered-to by an Applicant. Application templates seeking Authorization for the Space Activities have also been provided in the document.

Left Blank Intentionally

Contents

Chapter	Description	Page
	List of Abbreviations	1
	Definitions	3
I.	Introduction	8
II.	Authorization Process	10
III.	General Provisions, Terms & Conditions of Authorization	11
IV.	Space Based Communication	17
V.	Establishment and/or Operation of Remote Sensing and Amateur Satellite systems	31
VI.	Framework and Guidelines for providing access of the available Indian Orbital Resources to Indian Entities, and making a new ITU Filing by Indian Entities	35
VII.	Dissemination of Space Based Earth Observation/Remote Sensing data	41
VIII.	Operation of the Space Transportation Systems	49
IX.	Establishment and/or Operation of the Ground Systems	54
X.	Liability-Related Aspects	57
XI.	Registration of the Space Objects	61
	Appendix-I	71
	Sample Format of Authorization Certificate for Conducting Space Activities	
	Appendix-II	91
	Application Templates for Different Categories of Authorization	
	Appendix – III	135
	Indian Space Policy – 2023	

Left Blank Intentionally

List of Abbreviations

1.	AIT	: Assembly, Integration & Testing
2.	AO	: Announcement of Opportunity
3.	AoA	: Articles of Association
4.	BBIU	: Bringing Back Into Use
5.	BIU	: Bringing Into Use
6.	BSS	: Broadcasting Satellite Service
7.	BW	: Bandwidth
8.	CDR	: Critical Design Review
9.	CIN	: Corporate Identification Number
10.	COLA	: Collision Avoidance Analysis
11.	COMINT	: COMmunications INTelligence
12.	CPSE	: Central Public Sector Enterprises
13.	DoS	: Department of Space
14.	DoT	: Department of Telecommunications
15.	DPIIT	: Department for Promotion of Industry and Internal Trade
16.	DSM	: Digital Surface Model
17.	DST	: Department of Science and Technology
18.	DTM	: Digital Terrain Models
19.	EIRP	: Effective/Equivalent Isotropic Radiated Power
20.	ELINT	: ELectronic INTelligence
21.	EO	: Earth Observation
22.	FDI	: Foreign Direct Investment
23.	FMECA	: Failure Modes, Effects, and Criticality Analysis
24.	FSS	: Fixed Satellite Services
25.	G/T	: Gain to noise Temperature
26.	GSD	: Ground Sampling Distance
27.	GSO	: Geo-Stationary Orbit
28.	GSTIN	: Goods and Services Tax Identification Number
29.	HEO	: Highly Elliptical Orbit
30.	IARU	: International Amateur Radio Union
31.	IDP	: IN-SPACE Digital Platform (www.inspace.gov.in)
32.	IEC	: Import Export Code
33.	IN-SPACE	: Indian National Space Promotion & Authorization Centre
34.	ISP	: Indian Space Policy
35.	ISRO	: Indian Space Research Organisation
36.	IST	: Integrated Satellite Test
37.	IS ⁴ OM	: ISRO System for Safe and Sustainable Space Operations Management
38.	ITU	: International Telecommunication Union
39.	ITU-R	: International Telecommunication Union – Radiocommunication Sector
40.	JPIP	: Joint Project Implementation Plan
41.	LEO	: Low Earth Orbit
42.	LEOP	: Launch and Early Orbit Phase
43.	LLP	: Limited Liability Partnership
44.	LLPIN	: Limited Liability Partnership Identification Number

45.	LSA	: Launch Service Agreement
46.	LV	: Launch Vehicle
47.	MCC	: Mission Control Centre
48.	MEO	: Medium Earth Orbit
49.	MIB	: Ministry of Information and Broadcasting
50.	MIFR	: Master International Frequency Register
51.	MoA	: Memorandum of Association
52.	MoD	: Ministry of Defense
53.	MoU	: Memorandum Of Understanding
54.	MPL	: Maximum Probable Loss
55.	MSDS	: Material Safety Data Sheet
56.	MSME	: Medium, Small & Micro Enterprise
57.	NAVAREA	: NAVigational AREA
58.	NFAP	: National Frequency Allocation Plan
59.	NGE	: Non-Government Entity
60.	NGSO	: Non Geo-Stationary Orbit
61.	NOCC	: Network Operation Control Centre of DoT
62.	NSIL	: NewSpace India Limited
63.	OEM	: Original Equipment Manufacturer
64.	ONA	: Off Nadir Angle
65.	PAN	: Permanent Account Number
66.	PESO	: Petroleum and Explosives Safety Organization
67.	PMD	: Post Mission Disposal
68.	POEM	: PSLV Orbital Experimental Module
69.	PSE	: Public Sector Enterprise
70.	PSLV	: Polar Satellite Launch Vehicle
71.	PSU	: Public Sector Undertaking
72.	RS	: Remote Sensing
73.	SCC	: Satellite Control Centre
74.	SIGINT	: SIGnal INTelligence
75.	SOP	: Standard Operating Procedure
76.	SSA	: Space Situational Awareness
77.	TAN	: Tax Deduction and Collection Account Number
78.	TPL	: Third Party Liability
79.	TRAI	: Telecom Regulatory Authority of India
80.	TT&C	: Telemetry, Tracking & Command
81.	UNOOSA	: United Nations Office for Outer Space Affairs
82.	WMO	: Wireless Monitoring Organisation of DoT
83.	WPC	: Wireless Planning & Coordination Wing of DoT

Definitions

Unless the context otherwise requires,

- 1) “Applicant” shall mean an Indian Entity who has applied to IN-SPACE in the prescribed format seeking Authorization to undertake a Space Activity as per Indian Space Policy 2023;
- 2) “Authorization” shall mean the permission granted by IN-SPACE to any Indian Entity working in the space sector;
- 3) “Authorized Space Object/Satellite/Constellation” shall mean the Space Object/Satellite/Constellation which is authorized by IN-SPACE along with the corresponding Space Activity as applicable;
- 4) “Authorized Entity” shall mean an Indian Entity which is authorized by IN-SPACE to undertake a Space Activity;
- 5) “Data Dissemination” shall mean supply, sale or distribution of the satellite-based earth observation/Remote Sensing data to a user for further usage, processing, developing data products, applications or application interface for the purpose of commercial or free of cost. User for this purpose can be an individual, NGE, Government entity or non-Indian Entity;
- 6) “Data Disseminator” shall mean any Indian Entity disseminating satellite-based earth observation/remote sensing data (including providing direct download of data through cloud, website/portal, internet or any other means) to a user for the purpose of commercial or free of cost. User for this purpose can be an individual, NGE, Government entity or non-Indian Entity;
- 7) “Ground Sampling Distance” or “GSD” shall mean the distance between two consecutive pixel centres as measured on the ground;
- 8) “High Resolution Data” shall mean any space-based earth observation/Remote Sensing Primary Data which is of ≤ 30 cm Ground Sampling Distance at nadir;
- 9) “Indian Administration” for the purpose of ITU related activities shall mean the WPC;
- 10) “Indian Entity” shall mean any Indian Government entity or Indian Non-Government Entity (NGE);
- 11) “Indian Launch Vehicle” shall mean a launch vehicle whose ownership & control is with an Indian Entity;

- 12) “Indian Management and Control” shall mean the Management and Control wherein the majority of the ‘key managerial personnel’ are Indian citizens and the majority of the ‘control’ is with the Indian citizen(s);
- 13) “Indian Orbital Resource” shall mean any Orbital Resource acquired or in the process of being acquired by the Indian Administration through an ITU Filing;
- 14) “Indian Space Policy-2023” or “ISP-2023” is the policy document released in public on 20 April 2023 by the Government of India;
- 15) “Indian Space Object” shall mean a Space Object whose ownership & control is with an Indian Entity or which is registered in the National Registry;
- 16) “Indian Territory” shall mean territory within the jurisdiction of India including the area to the limit of Indian exclusive economic zone;
- 17) “ITU Filing” shall mean an application submitted to ITU for acquiring the orbital resources;
- 18) “Joint Project Implementation Plan” or “JPIP” shall mean a document executed amongst IN-SPACe, ISRO and the NGE and explicitly includes the pricing aspects related to the technical services rendered by ISRO to the NGE. Certain technical services (such as conjunction analysis, tracking, consultations to mitigate on-orbit conjunction risks etc.) can be provided by IN-SPACe/ISRO to an NGE owning/operating a Space Object on chargeable basis;
- 19) “Launch Facility” shall mean a designated area (fixed or mobile) and associated infrastructure and facilities required for undertaking launch operations of Space Objects including planned or controlled landings. It could include launch pad, vehicle assembly building and facilities enabling launch vehicle and satellite integration, testing, propellant filling, ground support for TT&C, mission control, safety systems, etc;
- 20) “Launch Operator” shall mean any entity who undertakes the launch (orbital or sub-orbital) of Space Objects, which may or may not enter the Earth’s atmosphere;
- 21) “Management and Control” means the persons or entities that exercise control over, and have the power to control and manage the affairs of the entity, and shall include the ‘key managerial personnel’ where the terms ‘key managerial personnel’ and ‘control’ have the following meanings:

- a. If the Applicant is a company incorporated under the Companies Act, 2013, then '*key managerial personnel*', shall include the Chief Executive Officer or the managing director or the manager or equivalent, the company secretary or equivalent, the whole-time director or equivalent, the Chief Financial Officer, or the Chief Operating Officer or the Chief Financial and Operating Officer, or equivalent, as applicable; and such other officer as may be prescribed under the Companies Act, 2013 or by IN-SPACE;
 - b. If the Applicant is a partnership firm under the Limited Liability Partnership Act, 2008, then '*key managerial personnel*' shall include partners and 'designated partner' as under the Limited Liability Partnership Act, 2008 the Chief Executive Officer, the Chief Managing Director, Chief Financial Officer and Operating Officer or equivalent, as applicable of the Applicant.
 - c. If the Applicant is a trust as under the Indian Trust Act, 1882, then '*key managerial personnel*' shall include the author, trustees of the trust, the Chief Executive Officer, the Chief Managing Director, Chief Financial Officer and Operating Officer or equivalent, as applicable of the Applicant.
 - d. 'Control' shall include the right to appoint majority of the directors/ key managerial personnel or to control the management or policy decisions exercisable by a person or persons acting individually or in concert, directly or indirectly, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements or partnerships agreements or confidence of trust or in any other manner;
- 22) "Mission Control Centre" or "MCC" shall mean processing equipment (hardware and software) associated with generation of telecommand to and processing the telemetry from a Space Object through TT&C Earth Station;
 - 23) "National Registry" shall mean the Registry of Space Objects maintained by India, as per Article-II of Convention on Registration of objects Launched into Outer Space;
 - 24) "Non-Government Entity" or "NGE" shall mean (i) a company incorporated under the Companies Act, 2013 or (ii) a partnership firm established under

the Limited Liability Partnership Act, 2008, (iii) a trust under the Indian Trusts Act, 1882, (iv) an association of persons or body of individuals incorporated under relevant statutes in India;

- 25) "Non-Indian Entity" shall mean an entity which is not an Indian Entity;
- 26) "Non-Indian Orbital Resource" shall mean any Orbital Resource acquired or in the process of being acquired by any country other than India;
- 27) "Non-Indian Satellite" shall mean a satellite which is not an Indian satellite. For this purpose, Indian satellite is a satellite whose ownership & control is with an Indian Entity or which is registered in the National Registry;
- 28) "NOTAM" shall mean Notice to Airmen and Navigational Area (NAVAREA) warnings on the danger zone notification, issued as an alert, by the relevant authorities, before any launch mission is undertaken.
- 29) "Orbital Resource" shall mean any GSO slot and/or NGSO along with the associated frequency spectrum and coverage acquired or in the process of being acquired through an appropriate ITU Filing;
- 30) "Primary Data" shall mean either raw data received from an earth observation/Remote Sensing satellite or processed raw data limited to geometric & radiometric corrections only.
- 31) "Registration Convention" shall mean the Convention on Registration of Objects Launched into Outer Space adopted by the United Nations General Assembly in 1974;
- 32) "Remote Sensing" shall mean sensing the Earth's surface and atmosphere from space for any purpose including improving natural resources management, land use and the protection of the environment;
- 33) "Space Activity" shall mean an activity pertaining to the space sector, which shall include, inter-alia, launch, operation, guidance and/or re-entry of any Space Object from outer space;
- 34) "Satellite Control Centre" or "SCC" shall mean the satellite control facility for monitoring and control of the satellites and which shall comprise TT&C Earth Stations and associated processing equipment referred to as Mission Control Centre (MCC);

- 35) “Space Object” shall mean:
- (i) any object launched or intended to be launched into an orbital or sub-orbital trajectory around the earth or to a destination beyond earth orbit;
 - (ii) any constituent element of an object referred to in sub-clause (i), or
 - (iii) any other object as may be notified from time to time
- 36) “Space Transportation Systems” shall mean Launch Facility and launch vehicles including associated hardware, software and infrastructure required for launch operations of Space Objects, which may or may not re-enter the Earth’s atmosphere;
- 37) “TT&C Earth Station” shall mean an earth station for receiving telemetry from, tracking and command of a Space Object;
- 38) “Value-Added Product” shall mean usable products generated from further processing of the geometrically & radiometric corrected raw data received from an earth observation/Remote Sensing satellite. For example, enhanced data, thematic maps, precision products, imagery mosaic products, merged products, three-dimensional /elevation data, etc. shall be treated as Value-Added Products;
- 39) “Wireless Planning and Coordination” or “WPC” shall mean the Wireless Planning & Coordination Wing of Department of Telecommunications, Ministry of Communications, which is the nodal agency that represents India at ITU. WPC Wing of DoT is responsible for radio spectrum management in the country and acts as the notifying administration for India at ITU for international frequency coordination, notification and recording in the Master International Frequency Register.

Chapter-I

Introduction

1. Who needs Authorization?

Any Entity carrying out Space Activities to or from Indian Territory or within the jurisdiction of India including the area to the limit of its exclusive economic zone needs Authorization from IN-SPACe.

2. Who can apply for Authorization?

Only an Indian Entity can apply to IN-SPACe seeking Authorization. Non-Indian Entities desiring to conduct Space Activity in India can apply to IN-SPACe for Authorization through an Indian Entity which could be its Indian subsidiary, joint venture or any other collaboration arrangement recognised by the Government of India. However, the authorized representative/dealer of non-Indian Entities can seek IN-SPACe Authorization for certain category of Authorizations such as Authorization of non-Indian GSO and/or NGSO satellite/constellation to enable provisioning of its capacity in India for communication services, Dissemination of space-based earth observation/Remote Sensing data, etc.

3. What activities need Authorization?

Any Space Activity, which shall include, inter-alia, launch, operation, guidance and/or re-entry of any Space Object, as outlined in Section-5 of Indian Space Policy-2023, shall need Authorization from IN-SPACe. Authorization for such Space Activities is broadly classified as given under:

1. Establishment and/or operations of Space Object(s);

1.1. Space Based Communication services:

1.1.1. Establishment and/or operation of a satellite/constellation for communication services in GSO and/or NGSO using Indian Orbital Resources; **[IN:AU:01.01]**

1.1.2. Establishment and/or operation of a satellite/constellation for communication services in GSO and/or NGSO using non-Indian Orbital Resources; **[IN:AU:01.02]**

1.1.3. Authorization of non-Indian GSO and/or NGSO satellite/constellation to enable provisioning of its capacity in India for communication services; **[IN:AU:01.03]**

1.2. Establishment and/or operation of Remote Sensing and amateur satellite systems; **[IN:AU:01.04]**

1.3. Hosted payloads

1.3.1. Payloads owned by Indian Entities hosted on foreign satellites;
[IN:AU:01.05]

1.3.2. Payloads of Indian or non-Indian Entities hosted on Indian satellites;
[IN:AU:01.06]

1.3.3. Payloads hosted on PSLV Orbital Experimental Module (POEM) or similar platforms. **[IN:AU:01.07]**

1.4. Establishment and/or operation of Space objects other than communication and remote sensing satellite systems. **[IN:AU:01.08]**

2. Operations of Space Transportation Systems:

2.1. Undertaking Sub-orbital and/or Orbital Launches from Indian Territory and/or outside the territory of India; **[IN:AU:02.01]**

2.2. Establishment and operation of launch facility by Indian Entity which could be self-owned, leased or be a mobile platform within or outside the territory of India. **[IN:AU:02.02]**

3. Planned re-entry of Space Objects with or without recovery. **[IN:AU:03]**

4. Establishment and/or operation of the ground systems: **[IN:AU:04]**

4.1. Satellite Control Centre (SCC) including TT&C and Mission Control Centre

4.2. Remote Sensing or amateur satellite data reception station(s);

4.3. Ground-based sensors for SSA related observations.

4.4. Ground systems such as TT&C, Mission Control Centres, radars, mobile terminals, etc for supporting operations of space transportation system

5. Dissemination of space-based earth observation/Remote Sensing data.

5.1. Dissemination of high-resolution space-based earth observation/Remote Sensing data pertaining to Indian Territory; **[IN:AU:05.01]**

5.2. Dissemination of Primary Data pertaining to Indian Territory and greater than 30cm GSD at nadir from earth observation/remote sensing satellite.
[IN:AU:05.02]

6. Sale/ purchase/ transfer of Space Objects in-orbit. **[IN:AU:06]**

7. Any other kinds of Authorizations announced by IN-SPACe from time-to-time.
[IN:AU:07]

Chapter - II

Authorization Process

Step	Activity
1.	Submission of the online application on IDP.
2.	Preliminary assessment of the application including credentials and capability of the Applicant by IN-SPACe and seeking additional information, if any, from the Applicant.
3.	Providing acknowledgement to the Applicant, informing whether the application is accepted for further processing or otherwise.
4.	The application will be scrutinised by IN-SPACe, as per its internally defined mechanism, on the basis of safety, national security, technical, radio frequency (RF) interference, compliances to national & international regulatory guidelines, state's liability towards third party damage from the Indian Space Object, international obligations, geopolitical considerations and relations with foreign countries , export & import regulations, foreign shareholding, and/or any other considerations deemed necessary by IN-SPACe, as applicable.
5.	Issue of the provisional Authorization/advisory note, if needed, by IN-SPACe to enable the Applicant to initiate the approval/clearance/licenses process with other relevant ministries, as applicable.
6.	Issue of Authorization/rejection by IN-SPACe after completing the necessary internal approval process.

Note:

Timeline envisaged for processing the application from the receipt of the application, complete in all respects, is 75 (seventy-five) days to 120 (one hundred and twenty) days depending upon the activities, requirement of inter-ministerial/departmental consultations and timely response from the different Entities involved in the Authorization process including the Applicant. Therefore, Applicants are advised to submit their applications complete in all respects, preferably 6 (six) months in advance.

Table-1: IN-SPACe Authorization process

Chapter-III

General Provisions, Terms & Conditions of Authorization

1. Space Activities shall be conducted only as per the applicable Authorization issued by IN-SPACE following an application by the Applicant. Notwithstanding anything contained in these guidelines, IN-SPACE reserves its right to provide exemptions to the provisions contained herein on a case-to-case basis.
2. Any Indian Entity can apply for the Authorization to IN-SPACE on the IDP.
3. The Applicant shall have adequate requisite managerial, operational, infrastructural, technical and financial capacities to conduct Space Activities. In this regard, assessment in respect of in-house technical expertise & experience or proposed plan to hire the consultancy/services/sub-contract from external experts, expected expenditure and source of funding including financial status in the recent annual reports, etc., for the proposed project/activity for which the Authorization is being sought shall be carried out.
4. Unless the context requires otherwise in the Norms, Guidelines and Procedures pertaining to an Authorization category, any entity whose application is under consideration by IN-SPACE or which has been granted Authorization by IN-SPACE shall inform IN-SPACE in writing and through email, within 48 (forty-eight) hours of any change in its 'Management and Control' or shareholding pattern or an equivalent change in a partnership or trust. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the application, revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/ Entities, or if the Applicant is no longer under Indian Management and Control.

5. Space Activities must not and shall not be carried out in a manner so as to, pose a threat to national defence, intelligence and security operations, foreign relations, public order, the safety of people or their property, and protection against natural disasters, and shall not negatively affect public health and the environment.
6. Space Activities shall not be in contravention of treaties or rules of international law that are binding on India.
7. The application as well as the Space Activities conducted by the Applicant must be in strict conformity with the applicable laws, rules, and regulations of India. The Applicant shall at all times, comply with any amendments or additions to such laws, rules, and regulations. Non-compliance of the same, may result in the revocation

of Authorization by IN-SPACe.

8. Applicant shall adhere to the guidelines as and when brought out by IN-SPACe for meeting safety and security requirements for Space Objects and activities.
9. Where specific standards for Space Activities are not explicitly mentioned in this document or any other applicable law of India, the Applicant shall adhere to globally recognized best practices prevailing in the industry. This includes but is not limited to areas such as encryption of data, cybersecurity, and other relevant aspects. The Applicant is responsible for staying informed about such best practices and implementing them to ensure the highest standards of safety, security, and performance.
10. Space Activities shall make use of the available frequencies and spectrum in accordance with the applicable national & international regulations governing radio spectrum management and use.
11. The Applicant shall take all possible measures for (a) limiting the generation of space debris in accordance with the applicable Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space (UN-COPUOS) (2007) along with the Norms, Guidelines and Procedures for 'Registration of the Space Object' provided in the Chapter-XI, and their future revisions if any, and (b) limiting adverse environmental effects on Earth or in outer space or adverse changes in the atmosphere.
12. The Applicant shall adhere to the third-party liability policy guidelines included in Chapter-X and further guidelines issued by IN-SPACe from time to time as well as the Convention on International Liability for Damage Caused by Space Objects ("Liability Convention").
13. IN-SPACe shall be carrying out the assessment based on the information provided by the Applicant and detailed guidelines brought out under different categories of Authorization in the subsequent chapters.
14. All the information identified/declared by the Applicant as commercial confidence or trade/technical secrets shall be treated by IN-SPACe with necessary due diligence while processing the application and shall not be put in public domain or disclosed to third parties, other than government agencies or unless it is required to be shared, in compliance to the applicable statutory requirements, without the prior consent of the Applicant.
15. The time for processing the application for the Authorization is envisaged to be 75 (seventy-five) days to 120 (one hundred and twenty) days from the receipt of the application, complete in all respects. It is, therefore, advised that the applications seeking IN-SPACe Authorization are submitted well before, preferably 6 (six) months, the planned Space Activity for which this Authorization is being sought. It is clarified that IN-SPACe does not guarantee any time period for the processing of

applications, and IN-SPACE bears no liability for any loss caused due to delay in the processing of applications, for any reason whatsoever.

16. In case the Authorization application is rejected, the Applicant may submit the revised application to IN-SPACE with appropriate modification or justification, as applicable. It is clarified that IN-SPACE does not guarantee the acceptance of a revised application which was previously rejected.
17. The Authorization shall be applicable to only that entity who has applied for the Authorization. No other person or entity, including the subsidiaries of the Applicant, holding companies of the Applicant, or persons in control of the Applicant, controlled by the Applicant or person/entity under the control of the person(s) that exercise control over the Applicant, either by virtue of shareholding or contract, can conduct the Space Activity authorized by IN-SPACE.
18. The Authorization issued to the Applicant is non-transferrable to any third party, except with the prior written approval of IN-SPACE. IN-SPACE may grant such approval in its sole discretion, subject to the third party meeting all applicable criteria. The third-party entity to which such Authorization is transferred, shall inform IN-SPACE in writing and through email, within 48 (forty-eight) hours of any change in its 'Management and Control' or shareholding pattern or an equivalent change in a partnership or trust. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/ entities or if the Applicant is no longer under Indian Management and Control.

19. The Authorization will have a validity period and Applicant shall seek a separate Authorization from IN-SPACE to conduct the Space Activity beyond the validity period. It is clarified that IN-SPACE does not guarantee that the application to conduct the Space Activity beyond the validity period will be necessarily accepted by IN-SPACE.
20. The Applicant shall provide information to IN-SPACE regarding filing of any criminal complaint or report, including first information report, registration of criminal case(s), allegations, chargesheet, trials, conviction by courts, etc., if any, against the controlling shareholders or promoters or beneficial owners or directors or officers or partners or trustees of the Applicant company for the offences under Chapter VI, VII, VIII, IX, IXA, XIV, XVI and XXII of the Indian Penal Code, 1860, offences under the Official Secrets Act, 1923, offences under the Prevention of Corruption Act, 1988 and/or offences under the Prevention of Money Laundering Act, 2002 and/or aiding and/or abetting or engaging in a conspiracy for the commission of the any of the foregoing offences and/or such other offences as may

be notified by IN-SPACE from time to time, in writing. Such information shall be furnished/declared by the Applicant at the time of submitting the application to IN-SPACE. Change in the status of such declaration, if any, shall be promptly updated and informed to IN-SPACE by the Applicant during the processing of the application or after the issue of IN-SPACE Authorization till its validity period, as applicable. IN-SPACE, taking note of such offences, reserves the right to either reject/short-close the application or terminate/suspend/revoke the Authorization. The Applicant may be given prior notice of such rejection/termination/suspension, wherever possible.

21. IN-SPACE may impose control on operations of the Authorized Space Objects & Space Activities or terminate/suspend the Authorization, during national emergencies or in the interest of national security, such as situation arising out of or due to conflicts or natural disasters or times of emergency as declared or specified by Government of India or other such contingencies as may be specified by IN-SPACE or the Government of India. The Authorized Entity may be given a prior notice of such measures/termination or suspension, wherever possible.
22. The Applicant shall provide true and correct information to IN-SPACE and shall adhere to the terms and conditions of the Authorization during its validity period. If any of the information, provided by the Applicant is found to be incorrect, at any time or a breach of any terms & conditions of the Authorization is identified, IN-SPACE reserves the right to terminate/suspend the Authorization. In case, if the Applicant is able to rectify or remedy the breach to the satisfaction of IN-SPACE, IN-SPACE may consider restoring this Authorization so terminated or suspended.
23. The Applicant shall notify IN-SPACE in writing and through e-mail within 30 (thirty) days of any event or factor that could affect the validity or the continuance of the granted Authorization or of any change with regard to the meeting of conditions under which the Authorization was granted.
24. In case of any accident, malfunction, emergency or any other incident which impacts the operation of an Authorized Space Object that poses a threat to the national security, public order, safety of people or their property, national intelligence and security operations, or the environment of India, the Applicant shall immediately carry out appropriate measures to prevent or minimise the consequences of such accident or emergency or incident. The Applicant shall notify IN-SPACE, in writing and through e-mail, about such incident within 24 (twenty-four) hours of occurrence, and the details of the measures taken shall be notified within 7 (seven) working days.
25. The Applicant shall refrain from asserting sovereign claims on the whole or portion of outer space, including over resources extracted from space. However, it is understood that not all forms of extraction and utilization of resources in space, qualify as appropriation. Therefore, any plans to extract or utilize resources in space

requires separate Authorization from IN-SPACe, which IN-SPACe may authorize or reject, subject to considerations, including the necessity of the extraction and utilization of resources in space (“EUR Activities”) for conducting the Space Activities in accordance with applicable international law and the likelihood of the EUR Activities causing harmful interference to the Space Activities of other states or persons authorized by other states.

26. The Applicant shall notify IN-SPACe in writing and through e-mail within 24 (twenty-four) hours of any circumstances that prevent the operation/operative control or result in any change in the nominal operation of the authorized Indian Space Object.

27. An Applicant desiring to discontinue/terminate/withdraw, partially or fully, the Space Activity authorized by IN-SPACe anytime during the term of the Authorization granted by IN-SPACe shall provide a prior notice, in writing and through e-mail, to IN-SPACe giving reason/s for such discontinuation/termination/withdrawal.

However, an Applicant desiring to discontinue/terminate/withdraw, partially or fully, the Space Activity authorized by IN-SPACe which results in provisioning of services to the masses, affects public interest or national security, anytime during the term of the Authorization granted by IN-SPACe shall provide a prior notice of at least 30/60/180 days depending on the type of the Authorized activity, in writing and through e-mail, to IN-SPACe giving reason/s for such discontinuation/termination/ withdrawal.

In the event that the Applicant unilaterally discontinues/terminates/withdraws the provision of services, partially or fully, during the term of the Authorization provided by IN-SPACe, without such notice period or for the reasons that are not justifiable in the sole determination of IN-SPACe, IN-SPACe reserves the right to terminate the Authorization immediately and impose a financial penalty depending on the nature of the authorized Space Activity, loss, damage, impact on Indian users due to discontinuation of service, expenses or any harm or prejudice to the interests of India’s national security caused by such actions of the Applicant.

Provided that imposition of financial penalty will be without prejudice to any legal claims or remedies that IN-SPACe or the Government of India or its agencies may have against the Applicant.

Provided further that while imposing the penalty, IN-SPACe may consider a) the nature and gravity of the actions of the Applicant, b) the intent and motives of the Applicant’s actions, c) whether or not the Applicant’s actions or omissions were caused by reasons beyond the control of the Applicant, d) penalties already imposed or likely to be imposed by any other state authority and e) the impact of the Applicant’s actions on India’s national interests including the impact on Indian users due to discontinuation of service.

Provided however, that if the Applicant rectifies or remedies the discontinuation or withdrawal of services or breach to the satisfaction of IN-SPACE, IN-SPACE reserves the right but not an obligation to restore this Authorization so terminated and/or not to levy the financial penalty.

The Applicant shall notify such discontinuation/ termination/ withdrawal of its Space Activity, in writing and through e-mail, to IN-SPACE as soon as possible, in any case no later than 30 (thirty) days after the actual date of discontinuation/ termination/ withdrawal.

In case of such discontinuation/ termination/ withdrawal, the Applicant shall provide appropriate assistance to IN-SPACE, including but not limited to support, transition assistance, sharing of data, as may be determined by IN-SPACE in its sole discretion, and such obligation shall be specifically enforceable.

28. For supervision purposes such as ensuring the compliance to IN-SPACE NGP and terms of Authorization or for verifying the information provided in the application, whenever asked with a prior notice, the Applicant shall provide IN-SPACE or its authorized representative with access to the business premises and facilities used for the Activity that is authorized, allow inspection of their business documentation, and provide the information as demanded.
29. It is stated for clarity that IN-SPACE does not guarantee that any applications for extension of the Authorization, or any application for the change in the configuration, constellation, or any other aspect which is related to the Authorization, will necessarily be granted by IN-SPACE.
30. Applicant shall be issued a formal Authorization Certificate permitting to undertake the specific Space Activity. A sample format of Authorization Certificate is provided in Appendix-I.

Chapter-IV

Space Based Communication

Introduction:

- a) Any satellite/constellation owned by an Indian Entity requires Authorization for its establishment and/or operations in order to provide communication services over India or outside Indian Territory. Any Non-Indian satellite/constellation also needs Authorization, through an Indian Entity, in order to enable provisioning of its capacity to users for communication services in Indian Territory. These satellites/constellations can either use Indian Orbital Resources or non-Indian Orbital Resources.
- b) Any Indian Entity can seek Authorization for establishment and/or operation of a satellite/constellation which could be self-realized, procured or procured in-orbit, using Indian or non-Indian Orbital Resources for communication services with coverage over Indian Territory and beyond or exclusively outside Indian Territory. Further, a Non-Indian Satellite/Constellation needs IN-SPACe Authorization in order to enable provisioning of its capacity for providing communication services in Indian Territory.
- c) Any Indian service provider/user can avail or provide the space-based communication services only from the satellite/constellation authorized by IN-SPACe (Authorized Satellite/Constellation).
- d) A service provider shall provide the space-based communication services at its own risk and costs and without any right or claim against IN-SPACe, DoT or any other agency of the Government of India. Any user can avail the space-based communication services at its own risk and costs and without any right or claim against IN-SPACe, DoT or any other agency of the Government of India.

I. Establishment and/or operation of a satellite/constellation for communication services in GSO and/or NGSO using Indian Orbital Resources:

- a) An Indian Entity can seek the Authorization for establishment and/or operation of a satellite/constellation for communication services in GSO and/or NGSO using:
 - i. either already available Indian Orbital Resource; or
 - ii. using new Orbital Resource with new ITU Filing through WPC.
- b) In both the above cases, the satellite/constellation shall normally be considered by IN-SPACE for registration in the National Registry, following the Norms, Guidelines and Procedures for “Registration of the Space Objects” provided in the Chapter-XI.

If the Applicant is a subsidiary/joint venture/ franchise/ collaboration with a Non-Indian Entity, the consent from both Applicant and such Non-Indian Entity is to be furnished affirming that the complete control over the satellite/constellation shall reside with the Applicant and the jurisdiction being under Indian government and law.

- c) Indian Entities desiring to establish and operate a satellite may make a new ITU filing to ITU, or may make use of the available un-utilized under-process Indian ITU Filings or coordinated/allotted orbit resource through a pre-defined framework. The framework and guidelines for making a new ITU Filing and to provide access to the available Orbital Resources to the interested Indian Entity are provided in the Chapter-VI. In case of a new ITU Filing, the Applicant shall apply to IN-SPACE and seek an advisory-note. With the IN-SPACE advisory-note, the Applicant may submit the ITU Filing to ITU through WPC. “Guidelines and procedures for submission of satellite network filings to ITU by Indian Entities”, being brought out by DoT, shall be followed by the Applicant for further processing of the ITU Filing.

While WPC shall carry out the detailed evaluation of the proposed ITU Filing including conformance to the ITU process, the application shall be preliminarily investigated by IN-SPACE considering the compliances to national and international regulatory provisions and protection of the services of the incumbent Indian and IN-SPACE authorized Non-Indian Satellites/constellations and the Indian ITU Filings with overlapping frequencies and coverage, which are under consideration by IN-SPACE as potential candidates for the planned satellites by Indian Entities. A detailed interference analysis shall be carried out by the Applicant to this effect, along with explaining the strategy for the coexistence for providing services over the intended service area without harmful interference. No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the

application. In case the Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/- 5 degrees of the proposed GSO orbital slot.

- d) IN-SPACe may consider granting the Authorization to the Applicant on non-protection non-interference basis, if it is satisfied that the operation of the new entrant satellite would not interfere with the incumbent services. Further, wherever applicable, desirable or advised by IN-SPACe, the Applicant (new entrant) shall collaborate, negotiate and enter into frequency coordination agreement or coexistence-arrangements with the incumbent or other new entrant satellite operators (satellite systems providing services over India or those satellite system which are identified by IN-SPACe for the Authorization to provide services over India) in good faith in order to ensure that the operations of these satellites/constellations over India are without harmful interference. IN-SPACe reserves the right to make appropriate and enforceable interventions including terminating/suspending/not-granting the Authorization, if it is convinced that one party is not collaborating or negotiating in good faith or in case the reported and confirmed harmful interference to other satellite network continues to remain unresolved within the notice period provided by IN-SPACe. Notwithstanding above, IN-SPACe, in coordination with WPC, WMO and NOCC, shall reserve the right to direct an operator including the Applicant to cease the emission in case the harmful interference from its satellite/constellation to other networks is not removed or resolved after notice period.
- e) An Applicant can seek IN-SPACe Authorization for providing the communication services over and beyond Indian Territory or even exclusively outside Indian Territory. This Authorization shall be provided after confirming the validity and regulatory status of the ITU Filing for the intended service area. Communication services over such intended service area, however, shall be subject to the stipulated regulations or the legislation of the concerned country's administration.
- f) Applicants are also permitted to procure/acquire an already operational in-orbit satellite/constellation from Indian or non-Indian Entities or transfer the ownership to Indian or non-Indian Entities, after obtaining Authorization of IN-SPACe.
- g) Satellite Control Centre (SCC) consists of two elements viz., Mission Control Centre (MCC) which generates the telecommand data for operations & control of the satellite and Telemetry Tracking and Command (TT&C) Station for up-linking the telecommand and receiving the telemetry signals carrying the health parameters of the satellite and associated data.

TT&C stations and MCC stations, either self-owned or procured services, are to be nominally located within Indian Territory. However, IN-SPACe may permit an

Applicant to avail the services of TT&C and/or MCC stations located outside Indian Territory, provided that:

- i. the Applicant is able to demonstrate, (a) that the location of such stations outside the territorial jurisdiction of India provides significant technical or business advantages to the Applicant, and (b) that the location of such stations outside the territorial jurisdiction of India does not pose a threat to the national security, foreign relations, national intelligence and security operations in the interests of the Republic of India; and that
 - ii. at least one MCC station is located within Indian Territory, and the Applicant is able to cease the operations of the identified satellite/constellation being controlled from the MCC station(s) outside India without any delay, as and when directed by IN-SPACe for national security and geopolitical considerations.
- h) The Applicant shall make available the data being received/transmitted from the TT&C and MCC stations, located within or outside Indian Territory, to IN-SPACe or other Departments/Agencies of Government of India, as and when demanded, and without undue delay for the reasons involving national security or such critical considerations.
 - i) Any change in the location of the TT&C or MCC station, whether within or outside Indian Territory, shall require approval of IN-SPACe.
 - j) Government of India may designate such parts of the country, in which the setting up of TT&C station and/or MCC station is not permitted. If any station is already set up in such notified prohibited areas, IN-SPACe may direct the shifting of such station to another location, provided, however, that such direction is found to be necessary in the national interest, security or in conformance to the prevailing regulations by the Government of India.
 - k) IN-SPACe Authorization shall be required in order to establish and/or operate a TT&C and/or MCC station within Indian Territory by an Indian Entity. The Norms, Guidelines and Procedures for seeking Authorization for these ground systems are provided in Chapter-IX.
 - l) The details of the launch vehicle and the launch service agreements, if applicable shall be provided by the Applicant. Any change in the launch date, lift-off timings, and nominal injection parameters of spacecraft shall be intimated to IN-SPACe.
 - m) The information to be provided to IN-SPACe for seeking Authorization under this category is included in the application template provided in Appendix-II.
 - n) The Authorization shall be applicable for the specific satellite/constellation which is being authorized and shall be valid till the end of the declared operational life

of the satellite/constellation. Any change or replacement of the satellite shall require a fresh Authorization. In case of a constellation, periodic replacement of the satellites in the Authorized Constellation shall not require fresh IN-SPACE Authorization, subject to Applicant informing IN-SPACE, in writing as well as through email, of such replacement 30 (thirty) days prior to launch, along with an undertaking that the configuration of the replacement satellite(s) and ground network operational parameters and conditions (payload & bus, frequency, network architecture, ITU Filing, etc.) remains unchanged. However, any change in the configuration (payload & bus, frequency, network architecture, ITU Filing, etc.) of the replacement satellites or replacing the constellation with next generation satellites shall call for a fresh Authorization. Further, the Authorized Entity may seek the extension of the operational life of the satellite/constellation and the extension of the validity of this Authorization, subject to the assessment of the satellite health parameters and space situational awareness aspects by IN-SPACE, and the same shall be granted by IN-SPACE at its discretion.

- o) Capacity of such IN-SPACE Authorized Satellite/Constellations can be provisioned to any of the end users/service providers through lease/sub-lease/sale/resale for use over India, subject to the stipulated regulatory provisions and requisite clearance/approval/license from the relevant Government department(s) such as DoT, MIB etc.

II. Establishment and/or operations of a satellite/constellation for communication services in GSO and/or NGSO - using Non-Indian Orbital Resources

- a) An Applicant can seek the Authorization for establishment and/or operation of a satellite/constellation in GSO and/or NGSO using Non-Indian Orbital Resource for communication services.
- b) The satellite/constellation shall normally be considered by IN-SPACE for registration in the National Registry following the Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI.

If the Applicant is a subsidiary/joint venture/ franchise/collaboration with a Non-Indian Entity, the consent from both Applicant and such Non-Indian Entity is to be furnished affirming that the complete control over the satellite/constellation shall reside with the Applicant and the jurisdiction being under Indian government and law.

- c) The Applicant shall provide details of arrangements made for obtaining the rights for using Non-Indian Orbital Resource for the operations of the satellite/constellation for which the IN-SPACE Authorization is being sought along with the concurrence/approval or a copy of the corresponding Authorization or

similar documentation granted by the concerned non-Indian Administration. The information provided by the Applicant shall be treated with due diligence, if declared as commercial confidential information by the Applicant.

- d) The Authorization application shall be assessed with a view to protect (i) operational services provided by the incumbent Indian and IN-SPACE authorized Non-Indian satellites/constellations, in GSO and NGSO, over India, and (ii) those existing Indian ITU Filings, in GSO and NGSO, with overlapping frequencies and coverage which are under consideration by IN-SPACE as potential candidates for the planned satellites by Indian Entities, taking into account ITU regulatory provisions and procedures. A detailed interference analysis shall be carried out by the Applicant to this effect along with outlining the additional measures and strategy to co-exist with other satellite systems for providing services over the intended service area without harmful interference, while submitting the application to IN-SPACE pertaining to the specific Orbital Resource(s). No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application. In case this Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/- 5 degrees of the proposed GSO orbital slot.
- e) IN-SPACE may consider granting the Authorization to the Applicant on non-protection non-interference basis, if it is satisfied that the operation of the new entrant satellite would not interfere with the incumbent services. Further, wherever applicable, desirable or advised by IN-SPACE, the Applicant (new entrant) shall, and will cause the concerned non-Indian Administration (or source from which the Orbital Resource is obtained) to collaborate, negotiate and enter into frequency coordination agreement or coexistence-arrangements with the incumbent or other new entrant satellite operators (satellite systems providing services over India or those satellite system which are identified by IN-SPACE for the Authorization to provide services over India) in good faith in order to ensure that the operations of these satellites/constellations over India are without harmful interference. IN-SPACE reserves the right to make appropriate and enforceable interventions including terminating/suspending/not-granting the Authorization, if it is convinced that one party is not collaborating or negotiating in good faith or in case the reported and confirmed harmful interference to other satellite network continues to remain unresolved within the notice period provided by IN-SPACE. Notwithstanding above, IN-SPACE, in coordination with WPC, WMO and NOCC. shall reserve the right to direct an operator including the Applicant to cease the emission in case the harmful interference from its satellite/constellation to other networks is not removed or resolved after the notice period.

- f) Operations of the satellite that is being proposed to use non-Indian orbit resource initially shall be permitted, wherever feasible & applicable, to bring under Indian ITU Filing eventually through an appropriate arrangement within the ambit of ITU regulations and procedures. Such proposals, if brought in at time of submission of initial application to IN-SPACe, shall be accorded priority for IN-SPACe Authorization.
- g) An Applicant can seek IN-SPACe Authorization for establishment and/or operation of the satellite/constellation for providing the communication services within Indian Territory or even exclusively outside Indian Territory. The Authorization shall be provided after confirming the validity and regulatory status of the ITU Filing for the intended service area. Communication services over such intended service area, however, shall be subject to the stipulated regulations or the legislation of the concerned country's administration.
- h) Applicants are also permitted to procure/acquire an already operational in-orbit satellite/constellation from Indian or non-Indian Entities or transfer the ownership to Indian or non-Indian Entities, after obtaining Authorization of IN-SPACe.
- i) Satellite Control Centre (SCC) consists of two elements viz., Mission Control Centre (MCC) which generates the telecommand data for operations & control of the satellite and Telemetry Tracking & Command (TT&C) Station for uplinking the telecommand and receiving the telemetry signals carrying the health parameters of the satellite and associated data.

TT&C and MCC stations, either self-owned or procured services, are to be nominally located within Indian Territory. However, IN-SPACe may permit the Applicant to avail the services of TT&C and/or MCC stations located outside Indian Territory, provided that

- i. the Applicant is able to demonstrate, (a) that the location of such stations outside the territorial jurisdiction of India provides significant technical or business advantages to the Applicant, and (b) that the location of such stations outside the territorial jurisdiction of India does not pose a threat to the national security, foreign relations, national intelligence and security operations in the interests of the Republic of India; and that
 - ii. at least one MCC station is located within Indian Territory, and the Applicant is able to cease the operations of the identified satellite/constellation being controlled from the MCC station(s) outside India without any delay, as and when directed by IN-SPACe for national security and geopolitical considerations.
- j) The Applicant shall make available the data being received/transmitted from the TT&C and MCC stations, whether located within or outside Indian Territory, to IN-SPACe or other Departments/Agencies of Government of India, as and when

demanded for the reasons involving national security or such critical considerations.

- k) Any change in the location of the TT&C or MCC station, whether within or outside Indian Territory, shall require approval of IN-SPACe.
- l) Government of India may designate such parts of the country, in which, the setting up of TT&C station and/or MCC station is not permitted. If any station is already set up in such notified prohibited areas, IN-SPACe may direct the shifting of such station to another location, provided, however, that such direction is found to be necessary in the national interest, security or in conformance to the prevailing regulations by the Government of India.
- m) IN-SPACe Authorization shall be required in order to establish and/or operate a TT&C and/or MCC station within Indian Territory by an Indian Entity. The Norms, Guidelines & Procedures for seeking Authorization for these ground systems are provided in Chapter-IX.
- n) The details of the launch vehicle and the launch service agreements, if applicable shall be provided by the Applicant. Any change in the launch date, lift-off timings, and nominal injection parameters of spacecraft shall be intimated to IN-SPACe.
- o) The information to be provided to IN-SPACe for seeking Authorization under this category is included in the application template provided in Appendix-II.
- p) The Authorization shall be applicable for the specific satellite/constellation which is being authorized and shall be valid till the end of the declared operational life of the satellite/constellation or the validity of the rights for using Non-Indian Orbital Resources granted by the concerned non-Indian Administration, whichever is earlier. Any change or replacement of the satellite shall require a fresh Authorization. In case of a constellation, periodic replacement of the satellites in the Authorized Constellation shall not require fresh IN-SPACe Authorization, subject to Applicant informing IN-SPACe, in writing as well as through email, of such replacement 30 (thirty) days prior to launch, along with an undertaking that the configuration of the replacement satellite(s) and ground network operational parameters and conditions (payload & bus, frequency, network architecture, ITU Filing, etc.) remains unchanged. However, any change in the configuration (payload & bus, frequency, network architecture, ITU Filing, etc.) of the replacement satellites or replacing the constellation with next generation satellites shall call for a fresh Authorization. Further, the Authorized Entity may seek the extension of the operational life of the satellite/constellation and the extension of the validity of the Authorization subject to the assessment of the satellite health parameters and space situational awareness aspects by IN-SPACe, and the same shall be granted by IN-SPACe at its discretion.

- q) Capacity of such IN-SPACe Authorized Satellite/Constellations can be provisioned to any of the end users/service providers through lease/sub-lease/sale/resale for use over India during the Authorization period, subject to the stipulated regulatory provisions and requisite clearance/approval/license from the relevant Government department(s) such as DoT, MIB etc.

III. Authorization of non-Indian GSO and/or NGSO satellite/constellation to enable provisioning of its capacity in India for communication services

- a) Only IN-SPACe authorized non-Indian GSO satellites and/or NGSO satellite constellation are permitted for provisioning their capacity to provide space-based communication services in India.
- b) Satellite operator of such Non-Indian Satellite/Constellation shall identify its Indian subsidiary/joint venture/collaboration with any Indian Entity or its authorized dealer/representative in India. The application for seeking the Authorization of the Non-Indian satellite/Constellation shall be submitted to IN-SPACe only by such Indian Entity on behalf of the concerned Non-Indian satellite operator. The application should define the quantum of capacity (entire/partial capacity) of the Non-Indian satellite/Constellation proposed to be provisioned in India.
- c) The service providers or the end users need not seek any Authorization from IN-SPACe. However, the usage of the capacity of such IN-SPACe Authorized Satellite/Constellations by the service providers or the end users in India shall continue to be governed by the stipulated rules, regulations and policies of the concerned departments/ministries such as DoT, MI&B, etc.
- d) Normally multiple Applicants seeking Authorization of the same satellite/constellation shall not be permitted. However, IN-SPACe reserves the right to permit multiple Applicant(s) seeking Authorization pertaining to different types of payloads of the same satellite/constellation.
- e) The Applicant shall obtain the consent of the concerned satellite operator to the effect that the satellite operator would negotiate, collaborate and agree to enter into coexistence-arrangements/agreements in good faith with other satellite systems providing services over India or those satellite system which are identified by IN-SPACe for Authorization to provide services over India.

The Applicant shall submit the documentary evidence on the authority granted by, or contractual relationship if any, with the satellite operator to provision the satellite capacity in India at the time of application submission. The IN-SPACe Authorization shall be cancelled/revoked in case the concerned satellite operator withdraws its authority granted to the Applicant or terminates its contractual relationship with the Applicant. Applicant shall inform in writing as well as through e-mail to IN-SPACe within 5 (five) working days about such cancellation of the

authority or termination of the contractual relationship, along with reasons for such cancellation.

- f) The Applicant shall provide the concurrence/approval or a copy of the corresponding Authorization or similar document granted by the concerned non-Indian Administration for using Non-Indian Orbital Resource for the operations of the Space Object for which the IN-SPACe Authorization is being sought.
- g) Authorization shall be provided after considering and confirming the aspects such as orbit-spectrum resource, registration of the satellite in UN database in accordance with the Registration Convention, security, geopolitical considerations & international relations, satellite/constellation ownership share holding pattern, availability of Indian satellites capacity vis-à-vis estimated capacity requirement for the country, national and strategic requirements, etc., as deemed appropriate by IN-SPACe.
- h) The Authorization application shall be assessed with a view to protect (i) operational services provided by the incumbent Indian and IN-SPACe authorized Non-Indian satellites/constellations, in GSO and NGSO, over India, and (ii) those existing Indian ITU Filings, in GSO and NGSO, with overlapping frequencies and coverage which are under consideration by IN-SPACe as potential candidates for the planned satellites by Indian Entities, taking into account ITU regulatory provisions and procedures. A detailed interference analysis shall be carried out by the Applicant to this effect along with outlining the additional measures and strategy to co-exist with other satellite systems for providing services over India without harmful interference, while submitting the application to IN-SPACe pertaining to the specific Orbital Resource(s). No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application. In case the Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/-5 degrees of the proposed GSO orbital slot.
- i) IN-SPACe may consider granting the Authorization to the Applicant on non-protection non-interference basis, if it is satisfied that the operation of the new entrant satellite would not interfere with the incumbent services. Further, wherever applicable, desirable or advised by IN-SPACe, the Applicant (new entrant) shall, and will cause its concerned satellite operator to collaborate, negotiate and enter into frequency coordination agreement or coexistence-arrangements with the incumbent or other new entrant satellite operators (satellite systems providing services over India or those satellite system which are identified by IN-SPACe for this Authorization to provide services over India) in good faith in order to ensure that the operations of these satellites/constellations over India are without harmful

interference. IN-SPACe reserves the right to make appropriate and enforceable interventions including terminating/suspending/not-granting the Authorization, if it is convinced that one party is not collaborating or negotiating in good faith or in case the reported and confirmed harmful interference to other satellite network continues to remain unresolved within the notice period provided by IN-SPACe. Notwithstanding above, IN-SPACe, in coordination with WPC, WMO and NOCC, shall reserve the right to direct an operator including the Applicant to cease the emission in case the harmful interference from its satellite/constellation to other networks is not removed or resolved after the notice period.

- j) Once authorized, the authorized capacity (entire or partial, as authorized by IN-SPACe) of such Non-Indian satellites/constellations can be provisioned to any of the end users/service providers through lease/sub-lease/sale/resale for use over India during the Authorization period, subject to the stipulated regulatory provisions and requisite clearance/approval/license from the relevant government department(s) such as DoT, MIB etc.
- k) The Authorization shall be valid till the end of the declared operational life of the satellite/constellation or 5 (five) years period, whichever is earlier. This Authorization shall be applicable for the satellite/constellation and capacity which is being authorized and any change or replacement of the satellite/constellation and/or need for additional capacity shall require a fresh Authorization, extension, renewal or amendment to the Authorization.

For the sake of clarity, the following guidelines would be used in this regard:

- i. For NGSO constellation, the Authorization shall be valid for 5 (five) years and will be considered for renewal by IN-SPACe after due assessment on request from the Authorized Entity, subject to no change in the configuration of the replacement satellites and ground network operational parameters and conditions. The Applicant shall inform IN-SPACe, in writing as well as through email, of such replacement 30 (thirty) days prior to launch, along with an undertaking that the configuration of the intended replacement satellite(s) and ground network operational parameters and conditions (payload & bus, frequency, network architecture, ITU Filing, etc.) remain unchanged. Any change in the configuration (payload & bus, frequency, network architecture, ITU Filing, etc.) of the replacement satellites or replacing the constellation with next generation satellites shall call for a fresh Authorization.
- ii. For GSO satellite, the Authorization shall be valid for the 5-year period or till the operational life of the satellite declared by the Applicant, whichever is earlier. The Authorization can be considered for extension by IN-SPACe on request from the Authorized Entity subject to the extension of the operational life is confirmed by the concerned administration of the country of registration

of the satellite. Any replacement satellite shall call for a fresh Authorization from IN-SPACe.

- iii. In case the Authorization for enabling provisioning of the additional capacity of a satellite/constellation is sought by the Applicant, IN-SPACe Authorization could be amended to include such additional capacity, after the due assessment by IN-SPACe.
- l) Applicants who are willing to bring in the operation of their satellites, which are using Non-Indian Orbital Resource, under Indian ITU Filing eventually with appropriate arrangement within the ambit of ITU regulations and procedures, wherever feasible and applicable, or who could provide value addition to Indian space sector or Indian economy in general (in terms of local manufacturing of user terminals, launches by Indian Launch Vehicle, manufacturing in India and operations under Indian ITU Filing for the replacement satellites, etc., as applicable) shall be given the preference for Authorization. IN-SPACe, in its discretion but through a defined internal process, may consider prioritizing the processing of Authorization applications from such Applicants or may also consider granting the Authorization for the extended period, i.e., beyond 5 (five) years. However, IN-SPACe may periodically review and assess the status/progress of the implementation/execution of such commitments/proposals made by the Applicant, and shall reserve the right to take suitable actions including termination/suspension of the Authorization or not considering the application for the Authorization as and when it falls due for the renewal, if it is not convinced with the explanation/reasons provided by the Applicant for not meeting such commitments.

Applicants who have brought the operation of their Non-Indian Satellite(s) under Indian ITU Filing would be considered for extending the Authorization till the declared end of operational life of the satellite(s), once the registration of the Indian satellite network in the MIFR of ITU is completed and the frequency coordination with critical satellite networks of other countries is completed to the satisfaction of IN-SPACe. Such Applicants shall also be accorded priority in granting the Authorization for their replacement satellites brought in to operate under the same Indian ITU Filing/satellite network. Further, subsequent to the successful registration of such new Indian satellite network in the MIFR of ITU, the Applicant will continue to enjoy the 'rights of use' for this Orbital Resource/frequency assignment as long as it continues to operate the satellite. The Applicant will be permitted to seek the suspension of the satellite network assignment if it is unable to bring up the replacement satellite in time or relinquishing/surrendering of the satellite network, with the approval of IN-SPACe. Such approval shall be given after assessing the readiness and possible in-time deployment of the replacement satellite. Otherwise, the satellite network assignment shall be considered by IN-SPACe for offering it to the other Indian Entities (who intend to establish and/or

operate space-based system for communication) through 'Announcement of Opportunity' process. However, the Applicant shall be given an opportunity to transfer/sublet the satellite network assignment to any other Indian Entity (who intend to establish and/or operate space-based system for communication), subject to approval of IN-SPACE and meeting other relevant criteria.

- m) The process for bringing in the operations of a Non-Indian Satellite under Indian ITU Filing shall be in accordance with the ITU Radio Regulations and provisions and would be carried out in coordination with WPC. The Applicant shall produce a no-objection certificate from the concerned notifying non-Indian Administration as well as from the satellite/constellation operator/owner to IN-SPACE for using the non-Indian satellite for 'BIU' and shall complete the frequency coordination of the new Indian ITU Filing/satellite network with all critical senior/priority satellite networks identified by the ITU to the satisfaction of IN-SPACE before making 'BIU' and 'Due Diligence' filings.
- n) Authorization for the payloads of a Non-Indian Satellite operating in the planned BSS & planned FSS bands (Appendix 30, 30A and 30B) could be considered subject to the condition that the operations of these payloads are brought under Indian ITU Filing eventually with appropriate arrangement within the ambit of ITU regulations.
- o) Fresh Authorization from IN-SPACE shall be required for authorizing the Non-Indian Satellites which are already provisioning their capacity in India either through lease agreement involving NSIL/Antrix (DoS) or through direct lease of the C-Band capacity from the Non-Indian Satellite operators. However, provisioning of such capacity from these satellites shall be permitted till March 31, 2025. The existing lease agreements expiring during this period can be extended till March 31, 2025, if required, following the existing mechanism/process. However, any new Non-Indian Satellite or any additional capacity from the existing satellites in any of the frequency bands henceforth shall require IN-SPACE Authorization.

With effect from April 01, 2025, only IN-SPACE authorized Non-Indian satellites/constellations in any of the frequency bands shall be permitted to enable provisioning of their capacity in India.

- p) Authorized Entity shall inform IN-SPACE in writing as well as through email within 30 (thirty) days of any change in the jurisdiction & control pertaining to registration in UN data base in accordance with Registration Convention. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may or may not amend, revoke or issue fresh Authorization in such cases.

- q) The Applicant shall inform IN-SPACe in writing and through email, within 48 (forty-eight) hours, of any change in (i) Applicant's 'Management and Control' or in its partnership or trust, as applicable or shareholding pattern, and/or (ii) the Authorized Satellite/Constellation ownership share holding pattern. IN-SPACe in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the Application or revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/ Entities or if the Applicant is no longer under Indian Management and Control.

- r) The information to be provided to IN-SPACe for seeking Authorization under this category is included in the application template provided in Appendix-II.

A list of the authorized Non-Indian Satellites, Authorized Entity, authorized capacity and the authorized period/validity shall be made available on IDP.

Chapter – V

Establishment and/or Operation of Remote Sensing and Amateur Satellite Systems

- a. Any satellite owned by an Indian Entity requires Authorization for its establishment and/or operations in order to provide earth observation/Remote Sensing or amateur services. The aspects related to Authorization/intimation for Data Dissemination from such satellites are addressed separately in the subsequent sections.

Any Indian Entity can seek Authorization for establishment and/or operation of the self-owned/procured/leased satellite, which may use ITU Filing for TT&C, sensor and communication payloads frequencies under Indian or non-Indian Administration. In both the cases, the satellites/constellations shall normally be considered by IN-SPACE for registration in the National Registry, following the Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI.

If the Applicant is a subsidiary/joint venture/ franchise/collaboration with a Non-Indian Entity, the consent from both Applicant and such Non-Indian Entity is to be furnished affirming that the complete control over the satellite/constellation shall reside with the Applicant and the jurisdiction being under Indian government and law.

- b. The Applicant shall provide details regarding the ITU Filing status for TT&C, sensor and communication payloads frequencies, if it intends to use the existing ITU Filing.

The Applicant may also make a new ITU Filing to ITU, or may make use of the available unutilized, under-process Indian ITU Filings or coordinated/allotted orbit resource through a pre-defined framework. The framework and guidelines for making a new ITU Filing and to provide access to the available orbital resources to the interested Indian Entity are provided in the Chapter-VI. In case of a new ITU Filing, the Applicant shall apply to IN-SPACE and seek an advisory-note. With the IN-SPACE advisory-note, the Applicant may submit the ITU Filing to ITU through WPC. “Guidelines and procedures for submission of satellite network filings to ITU by Indian Entities”, being brought out by DoT, shall be followed by the Applicant for further processing of the ITU Filing.

While WPC shall carry out the detailed evaluation of the proposed ITU Filing including conformance to the ITU process, the application shall be preliminary investigated by IN-SPACE on factors including the compliances to national and international (ITU) regulatory provisions and protection of the services of the incumbent Indian satellites and the Indian ITU Filings with overlapping frequencies which are under consideration by IN-SPACE as potential candidates for the

planned satellites by Indian Entities. A detailed interference analysis shall be carried out by the Applicant to this effect along with additional measures and strategy to coexist with other satellite systems serving India to provide services without any harmful interference. No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application.

IN-SPACE may consider granting the Authorization to the Applicant on non-protection non-interference basis, if it is satisfied that the operation of the new entrant satellite would not interfere with the incumbent services.

- c. The Applicant can also use Non-Indian Orbital Resources for TT&C, sensor and communication payloads frequency operations. The Applicant shall provide details of arrangements made for obtaining the rights for using Non-Indian Orbital Resource for the operations of the satellite for which the IN-SPACE Authorization is being sought along with the concurrence/approval or a copy of the corresponding Authorization or similar documentation granted by the concerned non-Indian Administration. The information provided by the Applicant shall be treated with due diligence, if declared as commercial confidential information by the Applicant.

Other provisions and process in respect of the protection of the services of the incumbent Indian satellites and ITU Filings under consideration by IN-SPACE, and interference analysis, etc. shall be same as described above in para b.

- d. The Applicants seeking Authorization to establish and/or operate amateur satellites are advised to coordinate the frequencies with International Amateur Radio Union (IARU).
- e. The payloads having the capability to provide the Primary Data with ≤ 30 cm GSD at nadir shall have the appropriate security mechanism such as onboard encryption, etc., to prevent the unauthorized reception on ground and subsequent use/dissemination.
- f. Applicants are also permitted to procure/acquire an already operational in-orbit satellite(s) from Indian or non-Indian Entities or transfer the ownership to Indian or non-Indian Entities, after obtaining Authorization of IN-SPACE.
- g. Satellite Control Centre (SCC) consists of two elements viz., Mission Control Centre (MCC) which generates the telecommand data for operations & control of the satellite and Telemetry Tracking and Command (TT&C) Station for uplinking the telecommand and receiving the telemetry signals carrying the health parameters of the satellite and associated data.

TT&C and MCC stations, either self-owned or procured services, are to be located nominally within Indian Territory. However, IN-SPACE may permit the Applicant to

avail the services of TT&C and/or MCC stations located outside Indian Territory, provided that:

- i. the Applicant is able to demonstrate that, (a) the location of such stations outside the territorial jurisdiction of India provides significant technical or business advantages to the Applicant (b) the location of such stations outside the territorial jurisdiction of India does not pose a threat to the national security, foreign relations, national intelligence and security operations in the interests of the Republic of India; and that
 - ii. at least one MCC station is located within Indian Territory, and the Applicant is able to cease the operations of the identified satellite/constellation being controlled from the MCC station(s) outside India without any delay, as and when directed by IN-SPACe for national security and geopolitical considerations.
- h. The Applicant shall make available the data being received/transmitted from the TT&C and MCC stations, whether located within or outside Indian Territory, to IN-SPACe or other departments/agencies of Government of India, as and when demanded and without undue delay, for the reasons involving national security or such critical considerations.
- i. Government of India may designate such parts of the country, in which, the setting up of TT&C station and/or MCC station is not permitted. If any station is already set up in such notified prohibited areas, IN-SPACe, may direct, the shifting of such station to another location, provided, however, that such direction is found to be necessary in the national interest, security or in conformance to the prevailing regulations by the Government of India.
- j. Any change in the location of the TT&C or MCC station, whether within or outside Indian Territory, shall require approval of IN-SPACe.
- k. IN-SPACe Authorization shall be required in order to establish and/or operate a TT&C and/or MCC station within Indian Territory by an Indian Entity. The Norms, Guidelines & Procedures for seeking Authorization for these ground systems are provided in Chapter-IX.
- l. The data reception earth stations for acquisition of the payload data can be located within or outside Indian Territory. IN-SPACe may seek the details of such stations along with arrangements made with foreign data reception station operator, if necessary, to assess whether the location of such stations outside the territorial jurisdiction of India does not pose a threat to the national security, foreign relations, intelligence and security operations in the interests of the Republic of India.
- m. Any change in the location of the data reception earth station or additional data reception earth station to be used by the Applicant, shall require approval of IN-SPACe.

- n. The details of the launch vehicle and the launch service agreements, if applicable shall be provided by the Applicant. Any change in the launch date, lift-off timings, and nominal injection parameters of spacecraft shall be intimated to IN-SPACe.
- o. The information to be provided to IN-SPACe for seeking Authorization under this category is included in the application template provided in Appendix-II.
- p. The Applicant will be required to coordinate with the existing Indian satellite operators to manage the data reception from the satellite passes that clash with other Indian satellites over the same area of data reception station. The new-entrant and the incumbent operators shall collaborate, negotiate, coordinate and enter into an operational/coexistence arrangement in good faith for interference-free data reception and TT&C operations over India. If found necessary, IN-SPACe may facilitate discussions among the operators or make appropriate enforceable interventions.

Notwithstanding above, IN-SPACe, in coordination with WPC, WMO and NOCC, shall reserve the right to direct an operator to cease the emission in case the harmful interference from its satellite/constellation to other networks is not removed or resolved within the notice period provided by IN-SPACe.

- q. The Authorization shall be applicable for the specific satellite which is being authorized and shall be valid till the end of the declared operational life of the satellite. Any change or replacement of the satellite shall require a fresh Authorization. Further, the Authorized Entity may seek the extension of the operational life of the satellite and the extension of the validity of the Authorization subject to the assessment of the satellite health parameters and space situational awareness aspects by IN-SPACe, and the same shall be granted by IN-SPACe at its discretion.
- r. Dissemination of the Primary Data from the Authorized Satellite shall require IN-SPACe Authorization/intimation in accordance with Norms, Guidelines and Procedures in Chapter VII. Further, wherever applicable the Authorized Satellite operator shall also abide by the extant 'DST Guidelines for acquiring and producing geospatial data and geospatial services including maps', including the extant guidelines pertaining to prevailing negative list of sensitive attributes along with stipulated regulations, and as amended from time to time and IN-SPACe guidelines on dissemination of space-based earth observation/Remote Sensing data.

Chapter - VI

Framework and Guidelines for providing access of the available Indian Orbital Resources to Indian Entities, and making a new ITU Filing by Indian Entities

Introduction:

1. Any Indian Entity can establish and/or operate Space Objects in GSO and NGSO in order to service Indian Territory or areas beyond Indian Territory or both. Orbital Resource is the underlying requirement for establishing/operating such Space Objects. The ISP-2023 permits the use of Indian or Non-Indian Orbital Resources. The guidelines provided in the subsequent sections deal with the use of Indian Orbital Resources.
2. Three (3) scenarios arise out of this:
 - a) The Indian Entity makes use of unutilized coordinated / registered ITU Filing under Indian Administration or unutilized ITU allotment / assignment to Indian Administration (hereinafter referred to as 'Unutilized Coordinated/Allotted Orbital Resource'); OR
 - b) The Indian Entity makes use of unutilized ITU Filings which are in coordination stage under Indian Administration (hereinafter referred to as 'Unutilized ITU Filing'); OR
 - c) The Indian Entity applies for a fresh ITU Filing under Indian Administration through WPC.
3. For all the above scenarios, the Applicant shall seek the Authorization from IN-SPACe for establishment and/or operation of Space Objects for the intended services. The Applicant may utilize the Unutilized Coordinated/Allotted Orbital Resource or Unutilized ITU Filing or submit fresh ITU Filing under Indian Administration through WPC after obtaining an 'Advisory Note' from IN-SPACe.

I. Guidelines for the utilization of the existing Unutilized Coordinated/Allotted Orbital Resource or Unutilized ITU Filing by the Indian Entities:

- a) IN-SPACe shall consolidate the existing Indian Unutilized Coordinated/Allotted Orbital Resource or Unutilized ITU Filing in coordination with WPC, and identify those Unutilized Coordinated/Allotted Orbital Resource or Unutilized ITU Filing that can be made available to Indian Entities for their use through a consultative process.
- b) The Unutilized ITU Filing which are planned to be used for deploying the government approved satellites or the satellites for which government approval is under process shall not be identified for making them available to other Indian Entities. Similarly, the Unutilized Coordinated/Allotted Orbital Resource which are in use by M/s NSIL shall not be identified for use by other Indian Entities as long as M/s NSIL continues to use them or intend to use by bringing the replacement satellites and ensuring the protection of the orbital-resource. IN-SPACe shall ensure the protection of the Unutilized ITU Filing and Unutilized Coordinated/Allotted Orbital Resource, through a consultative process with WPC and the Indian Entity which made the ITU Filing. Any Unutilized ITU Filing and Unutilized Coordinated/Allotted Orbital resource for which definite plan of utilisation does not exist, may be considered for offering to other Indian Entities.
- c) Permission to use the identified existing Unutilized Coordinated/Allotted Orbital Resource or Unutilized ITU Filing to the Applicant shall be based on the outcome of an Announcement of Opportunity (AO) published by IN-SPACe. IN-SPACe shall bring out such an AO for inviting applications from the interested Applicants on its IDP.
- d) Such an AO shall be brought out by IN-SPACe from time-to-time or as and when Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource are identified for use by the Indian Entities.
- e) The AO document shall outline the following aspects:
 - i. Details of the identified Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource such as satellite network, date of receipt and validity, frequency band & frequencies, financial terms and conditions, etc., on which these Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource would be made available to Applicants.
 - ii. Criteria for evaluation of application and selection of the beneficiary for each of the identified Unutilized ITU Filing or Unutilized Coordinated/Allotted Orbital Resource could be based on parameters such as managerial, operational, infrastructural, technical & financial capability of the Applicant to realize launch and operate the satellite; readiness and present status of the satellite and its deployment (if any); mission objective or intended

applications; target users of the satellite capacity; coverage and service area; use of innovative or emerging technologies; indigenous component in realization of the satellite; value addition to India and Indian space sector; the price bid by the Applicant over and above the base price; and any other parameters as envisaged by IN-SPACe from time to time.

AO shall contain a predefined method to apply the above criteria for selecting the beneficiary. This could be in terms of assigning weightage to each of the selected criteria depending on the priority or any other transparent method as decided by IN-SPACe.

IN-SPACe shall, in consultation with DoT, decide the base price for the price bid and other financial terms and conditions for making such Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource available to Indian Entities for their use.

Certain considerations such as national security, international relations, geo-political considerations, etc., however, can be the basis for rejecting the application.

- f) Only those Indian Entities who have “Indian Management and Control” shall be permitted to participate in the AO.
- g) IN-SPACe may update the criteria of evaluation of the application and selection of the beneficiary from time to time based on the advancements in the technology, revision of national and international regulations, etc. But such updated criteria shall be brought in the AO issued subsequently.
- h) The selection made by IN-SPACe shall be final and binding at all times on the Applicants.
- i) IN-SPACe shall provide an ‘Advisory Note’ to the selected beneficiary permitting the use of the identified Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource with an advice to approach WPC for the subsequent processing and actions, as applicable, such as achieving coordination with priority satellite networks, making notification and Due Diligence filing, etc.

The Advisory Note shall not convey any right of the beneficiary over spectrum or Authorization for establishment and/or operations of the Space Object.

- j) The beneficiary shall make all the payments to WPC for the subsequent processes (such as Notification, Due Diligence, etc.), as applicable, and in accordance with the stipulated guidelines of WPC. The permitted use of the Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource is on a ‘As Is Where Is’ basis. The beneficiary shall be responsible for actions such as further coordination activity with foreign operators/administrations,

modification filings, notification/due diligence filing, etc, if any, and as applicable.

- k) WPC and IN-SPACE shall monitor the completion of various actions by the beneficiary to assess the progress made in coordination with other administrations/ satellite operators and registering of the satellite network filings, as applicable. The allocation of the Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource made to the beneficiary shall be liable for cancellation /revocation in the absence of satisfactory progress towards fulfilment of BIU/ BBIU within its validity.
- l) In case, the beneficiary is desirous of relinquishing/ surrendering the Unutilized ITU Filing or Unutilized Coordinated/ Allotted Orbital Resource at any given point in time, a clear communication on progress made with timelines and depicting reasons of relinquishment/ surrendering shall be communicated to IN-SPACE in writing and through email. IN-SPACE will identify such relinquished/surrendered Unutilized ITU Filing or Unutilized Coordinated/Allotted Orbital Resource for making them available to the next prospective Applicant shortlisted during the AO process. If the same is not materialised, a fresh AO will be released by IN-SPACE on the IDP. Any payment and/or Performance Bank Guarantee, if any, made by the Applicant towards availing such Unutilized ITU Filing or Unutilized Coordinated/Allotted Orbital Resource during the AO process will not be refunded to the Applicant in any circumstances.
- m) Subsequent to the deployment of the satellite in orbit, and successful registration of the satellite network in the Master International Frequency Register (MIFR) of ITU, as applicable, the beneficiary will continue to enjoy the 'rights of use' for this Orbital Resource/frequency assignment as long as it continues to operate the satellite. Beneficiary will be permitted to seek the suspension of the satellite network assignment, with the approval of IN-SPACE, if it is unable to bring up the replacement satellite in time. Such approval shall be given after assessing the readiness and possible in-time deployment of the replacement satellite. Otherwise, the satellite network assignment shall be considered by IN-SPACE for offering it to the other Indian Entities.
- n) As and when the satellite configuration, launcher, ground network and other necessary details are finalized, the beneficiary (who would be the Applicant in this case) shall submit a formal application to IN-SPACE seeking Authorization for establishment and/or operation of the Space Object for the intended services.

II. Guidelines for applying for a fresh ITU Filing under Indian Administration through WPC

- a) The Applicant, who intends to make new ITU Filing under Indian Administration for the establishment and/or operation of Space Object for communication services, shall apply to IN-SPACE on IDP in the stipulated format.
- b) IN-SPACE shall apply due-diligence while evaluating the applications for the new ITU Filings with regard to the possibility and potential of the fructification of the proposed ITU Filing by the Applicant within the stipulated period with a view to prevent hoarding / blocking of the orbit spectrum resources.
- c) IN-SPACE shall issue an 'Advisory Note' to the Applicant after evaluation of the application with an advice to submit the ITU Filing in the stipulated format of ITU to the WPC. "Guidelines and procedures for submission of satellite network filings to ITU by Indian Entities", being brought out by DoT, shall be followed by the Applicant for further actions.
- d) In case, the Applicant is desirous of relinquishing/surrendering the ITU Filing at any given point in time, a clear communication on progress made with timelines and reasons of relinquishment/surrender shall be communicated to IN-SPACE. IN-SPACE will identify the relinquished/surrendered ITU Filing for offering to the other Indian Entities through the AO process. However, the Applicant shall be given an opportunity to transfer/sublet the ITU Filing or the frequency assignment to any other Indian Entity (who intends to establish and/or operate space-based system for communication), subject to the approval of IN-SPACE and meeting other relevant criteria.
- e) Subsequent to the deployment of the satellite in orbit, and successful registration of the satellite network in the Master International Frequency Register (MIFR) of ITU, as applicable, the Applicant will continue to enjoy the 'rights of use' for this Orbital Resource/frequency assignment as long as it continues to operate the satellite. The Applicant will be permitted to seek the suspension of the satellite network assignment, with the approval of IN-SPACE, if it is unable to bring up the replacement satellite in time. Such approval shall be given after assessing the readiness and possible in-time deployment of the replacement satellite. Otherwise, the satellite network assignment shall be considered by IN-SPACE for offering it to the other Indian Entities (who intend to establish and/or operate space-based system for communication) through AO process. However, the Applicant shall be given an opportunity to transfer/sublet the satellite network assignment to any other Indian Entity (who intend to establish and/or operate space-based system for communication), subject to approval of IN-SPACE and meeting other relevant criteria.

The provisions and process described above in this paragraph shall also be applicable for a case wherein an Indian Entity has brought the operations of a Non-

Indian Satellite under Indian ITU Filing/satellite network through IN-SPACe Authorization, as referred in Section II & III of Chapter-IV.

- f) As and when the satellite configuration, launcher, ground network and other necessary details are finalized, the Applicant shall submit a formal application to IN-SPACe seeking Authorization for establishment and/or operation of the Space Object for the intended services.

Chapter - VII

Dissemination of Space Based Earth Observation/ Remote Sensing Data

I. Dissemination of high-resolution space-based earth observation/Remote Sensing data pertaining to Indian Territory:

- a. Any space-based earth observation/Remote Sensing Primary Data which is of ≤ 30 cm Ground Sampling Distance (GSD) at nadir shall be treated as 'High Resolution Data'. Dissemination of High Resolution Primary Data pertaining to Indian Territory shall need Authorization from IN-SPACE.

Dissemination for this purpose shall mean, "supply, sale or distribution of the data to a user for further usage, processing, developing data products, applications or application interface for the purpose of commercial or free of cost".

Providing direct download of data through cloud, website/portal, internet or any other means, whether at cost or free of cost, shall also be construed as 'dissemination'.

- b. Any dissemination of Primary Data pertaining to Indian Territory and of ≤ 30 cm GSD at nadir without IN-SPACE Authorization shall be deemed as non-compliance to the Indian Space Policy-2023.
- c. Indian Entities who wish to supply/disseminate such High Resolution Primary Data of Indian or non-Indian earth observation/Remote Sensing satellite(s) shall apply to IN-SPACE seeking its one-time Authorization as a Data Disseminator for the intended satellite(s) and payload(s).

No Value-Added Products pertaining to Indian Territory shall be generated, supplied, sold or disseminated within Indian Territory by an entity using the Primary Data of any earth observation/Remote Sensing satellite which is not permitted by IN-SPACE for Data Dissemination. However, dissemination or usage of those Value-Added Products, which are generated from the Primary Data received from the IN-SPACE Authorized Data Disseminators, does not need Authorization from IN-SPACE. The dissemination and/or usage of such Value-Added Products shall continue to be governed by the extant DST guidelines for acquiring and producing geospatial data and geospatial data services including maps, and as amended from time to time.

- d. Only Indian Entities can seek IN-SPACE Authorization as Data Disseminator for Indian or non-Indian satellite data. Hence, the Data Disseminator shall mean "An Indian Entity disseminating Primary Data (including providing direct download of data through cloud, website/portal, internet or any other means) to

a user for commercial purposes or free of cost". Such disseminator can be a satellite operator, its authorized dealer/representative or a data aggregator for the purpose of dissemination. The 'user' can be individuals, NGEs, government entities or non-Indian Entities.

- e. Only those Indian Entities who wish to act as a Data Disseminator for the Primary Data shall seek Authorization from IN-SPACE. The user of the Primary Data need not approach IN-SPACE for seeking Authorization.
- f. Consent/permission of the concerned satellite operator/owner is essential in order to seek IN-SPACE Authorization for acting as a Data Disseminator for the data of the proposed payload of the satellite. The Applicant shall submit the documentary evidence on the authority granted by, or contractual relationship if any, with the satellite operator or its authorized dealer/representative to disseminate the Primary Data to the users at the time of application submission. The IN-SPACE Authorization shall be cancelled/revoked in case the concerned satellite operator withdraws its authority granted to the Applicant or terminates its contractual relationship with the Applicant. Applicant shall inform in writing as well as through e-mail to IN-SPACE within 5 (five) working days about such cancellation of the authority or termination of the contractual relationship, along with reasons for such cancellation.
- g. In case a satellite operator/owner itself generates, supplies, sells or disseminates the Value-Added Products using its own satellite's Primary Data then such satellite operator/owner shall seek IN-SPACE Authorization as Data Disseminator. This is also applicable for the supply/sell/dissemination of the Value-Added Products, if any, generated on-board the satellite after real time or near real time processing of the Primary Data.
- h. The operator of a data reception station delivering the Primary Data, as received and without any processing in real time or near real time, through fibre/cloud or any other means, to a satellite operator or its authorized dealer shall not require IN-SPACE Authorization under this category. However, if such operator of data reception station intends to disseminate data, as per the Data Dissemination definition, then it shall be treated as Data Disseminator and needs IN-SPACE Authorization.
- i. The Applicant shall source the Primary Data only from the satellite operator or through its authorized dealer declared at the time of applying to IN-SPACE. Dissemination of the Primary Data that is sourced from other than the declared source shall not be permitted. Any change in the source of the Primary Data shall require IN-SPACE approval.
- j. Any entity seeking to provide value added services or Value-Added Products shall mandatorily source the Primary Data from the IN-SPACE authorised Data Disseminator. In case, no authorized Data Disseminator is available against a

particular satellite, the entity may itself seek Authorization from IN-SPACE as a Data Disseminator.

- k. Authorization shall be provided after considering and confirming the aspects such as registration of the satellite in UN database in accordance with the Registration Convention, security, geopolitical considerations & international relations, satellite/constellation ownership share holding pattern, national and strategic requirements, etc., as deemed appropriate by IN-SPACE.
- l. An Authorization Certificate carrying information on the permitted satellites and payloads, the Primary Data of which the Applicant can disseminate to the user, shall be issued by IN-SPACE, after assessment of the application.

IN-SPACE Authorization shall be valid for 5 (five) years or the period for which satellite operator has granted permission to its dealer/representative, whichever is earlier. A fresh application to IN-SPACE shall be submitted for further renewal of the Authorization, if required by the Applicant.

- m. The Authorization shall be applicable to the Entity who has applied to IN-SPACE for Data Dissemination. Except for the said person or Applicant, no other person including the subsidiaries of the Applicant, holding companies of the Applicant, or persons controlling the Applicant, controlled by the Applicant or under the control of the same person(s) who control the Applicant, either by virtue of shareholding or contract, can disseminate the Primary Data from IN-SPACE authorized Earth Observation/Remote Sensing satellites.
- n. The Authorization Certificate issued to the Applicant is non-transferrable to any third party, except with the prior written approval of IN-SPACE. IN-SPACE may grant such an approval in its sole discretion, subject to the third party meeting all applicable criteria.
- o. The authorized Data Disseminator shall inform IN-SPACE in writing and through email within 30 (thirty) days of any change in the jurisdiction & control pertaining to registration in UN data base in accordance with the Registration Convention. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may amend, revoke or issue fresh Authorization in such cases.
- p. The Applicant shall inform IN-SPACE in writing and through email, within 48 (forty-eight) hours, of any change in (i) Applicant's 'Management and Control' or in its partnership or trust, as applicable, or shareholding pattern, and/or (ii) the Authorized Satellite/Constellation ownership share holding pattern. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the Application or revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the

Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/ Entities or if the Applicant is no longer under Indian Management and Control.

- q. The authorized Data Disseminator shall verify the credentials of the user along with the veracity of the information provided by the user before disseminating the data. They shall also maintain a record of dissemination of all high-resolution data and provide this information periodically to IN-SPACe through the IDP or through any other means as prescribed by IN-SPACe pertaining to each of the Data Dissemination transactions carried out by them. The information to be sought and maintained by the authorized Data Disseminator along with frequency/period of submission is included in the application template given in Appendix-II. However, National Remote Sensing Centre, Hyderabad or any other centre/unit of ISRO are exempted from the requirement of periodic submission of the information in Appendix-II to IN-SPACe for dissemination of the Primary Data to the central and state government Entities.
- r. The authorized Data Disseminator shall ensure that the user who has obtained the Primary Data from them shall not further supply, re-disseminate, loan or copy this data to any third party. The authorized Data Disseminator shall undertake all possible measures to ensure that the Authorized High-Resolution Primary Data is not re-disseminated, whether through direct dissemination, or through loan, copying or any other means without Authorization from IN-SPACe. Further, they shall also adopt all possible measures to ensure, that the disseminated data is kept under safe custody of the responsible authority within the user's establishment in a secured manner to ensure that no unauthorized person/entity has access to it (one of the possible measures could be to disseminate the data under a legally tenable agreement/contract with the user that has the provisions to these effects). The information on such security measures proposed to be adopted along with the location and mechanism of archival of the Primary Data shall be provided at the time of submission of application to IN-SPACe. IN-SPACe or its representative reserves the right to check and verify such measures from time to time.
- s. The authorized Data Disseminator shall abide by the "DST Guidelines for acquiring and producing geospatial data and geospatial services including maps", and as amended from time to time including the extant guidelines pertaining to prevailing negative list of sensitive attributes along with stipulated regulations.
- t. Notwithstanding anything stated in this section, IN-SPACe shall retain the power to declare any High-Resolution Data as sensitive for securing national interests, national security, public order, the safety of people or their property,

national intelligence and security operations and prohibit the dissemination of such data.

II. Dissemination of Primary Data pertaining to Indian Territory and greater than 30 cm GSD at nadir from earth observation/Remote Sensing satellite

- a. Dissemination of Primary Data which is being commercially transacted and of >30 cm GSD at nadir pertaining to Indian Territory shall only be done through Data Disseminators registered with IN-SPACe. Dissemination of such Primary Data by an entity without registering with IN-SPACe shall be deemed as non-compliance of the Indian Space Policy – 2023. Indian Entities who wish to supply/disseminate such Primary Data of Indian or non-Indian Remote Sensing satellite(s) shall apply to IN-SPACe seeking one-time registration as Data Disseminator for the intended satellite(s) and payload(s).
- b. Dissemination for this purpose shall mean, “supply, sale or distribution of the data to a user for further usage, processing, developing data products, applications or application interface.”

Providing direct download of data through cloud, website/portal, internet or any other means shall also be construed as ‘dissemination’.

No Value-Added Products pertaining to Indian Territory shall be generated, supplied, sold or disseminated within Indian Territory by an entity using the Primary Data of any earth observation/Remote Sensing satellite which is not obtained from a Data Disseminator registered with IN-SPACe for that satellite and payload.

- c. Only Indian Entities can apply for registration with IN-SPACe as Data Disseminator for Indian or non-Indian satellite data. Hence, the Data Disseminator shall mean “An Indian Entity disseminating Primary Data (including providing direct download of data through cloud, website/portal, internet or any other means) to a user”. Such disseminator can be a satellite operator, its authorized dealer/representative or a data aggregator for the purpose of dissemination. The ‘user’ can be individuals, NGEs, government Entities or non-Indian Entities.
- d. Consent/permission of the concerned satellite operator/owner is essential in order to seek IN-SPACe registration for acting as a Data Disseminator for the data of the proposed payload of the satellite. The Applicant shall submit the documentary evidence on the authority granted by, or contractual relationship if any, with the satellite operator or its authorized dealer/representative to disseminate the Primary Data to the users at the time of application submission. The IN-SPACe registration shall be cancelled/revoked in case the concerned satellite operator withdraws its authority granted to the Applicant or terminates

its contractual relationship with the Applicant. Applicant shall inform in writing as well as through e-mail to IN-SPACE within 5 (five) working days about such cancellation of the authority or termination of the contractual relationship, along with reasons for such cancellation.

- e. Intimation of every Data Dissemination transaction shall be provided by the registered Data Disseminator to IN-SPACE periodically through the IDP or through any other means as prescribed by IN-SPACE.

The information required to be provided to IN-SPACE as part of 'intimation' is included in the application template for registration along with the frequency/period of intimation.

- f. The supply/sell/download/dissemination of the Primary Data at no cost to the user or for non-commercial purposes shall not require the Data Disseminator to register with IN-SPACE. Such transactions also need not be reported to IN-SPACE. Only commercial Primary Data Dissemination requires intimation to IN-SPACE by the registered Data Disseminator.
- g. The user need not provide the intimation to IN-SPACE. Similarly, the dissemination or usage of the Value-Added Products generated from the Primary Data obtained from IN-SPACE registered Data Disseminator of the corresponding satellites and payloads do not need intimation to IN-SPACE, and shall continue to be governed by the extant guidelines for acquiring and producing geospatial data and geospatial data services including maps by DST, and as amended from time to time.
- h. Any entity seeking to supply Value-Added Products shall mandatorily source the Primary Data from the IN-SPACE registered Data Disseminator. In case, no registered Data Disseminator is available against a particular satellite, the entity may itself register with IN-SPACE as a Data Disseminator.
- i. A registration certificate carrying the information on the permitted satellites and payloads the Primary Data of which the Data Disseminator can disseminate to the user shall be issued by IN-SPACE, after assessment of the application.
- j. The registration of the Data Disseminator for a satellite shall be valid for 5 (five) years or the period for which satellite operator has authorized its dealer in India (Applicant), whichever is earlier. A fresh application to IN-SPACE shall be submitted for further renewal of the registration, if required by the Applicant.
- k. The registration shall be applicable to the Entity who has applied to IN-SPACE for the registration as Data Disseminator. Except for the said person or Applicant, no other person including the subsidiaries of the Applicant, holding companies of the Applicant, or persons controlling the Applicant, controlled by the Applicant or under the control of the same person(s) who control the Applicant, either by virtue of shareholding or contract, can disseminate the

Primary Data from Earth Observation/Remote Sensing satellites for which it is registered with IN-SPACE.

- i. In case a satellite operator/owner itself generates, supplies, sells or disseminates the Value-Added Products using its own satellite's Primary Data then such satellite operator/owner shall seek IN-SPACE registration as Data Disseminator. This is also applicable for the supply/sell/dissemination of the Value-Added Products, if any, generated on-board the satellite after real time or near real time processing of the Primary Data.
- m. The operator of a data reception station delivering the Primary Data, as received and without any processing in real time or near real time, through fibre/cloud or any other means, to a satellite operator or its authorized dealer is not required to register with IN-SPACE under this category. However, if such operator of data reception station intends to disseminate data, as per the Data Dissemination definition, then it shall be treated as Data Disseminator and needs to register with IN-SPACE.
- n. The Applicant shall source the Primary Data only from the satellite operator or through its authorized dealer declared at the time of applying to IN-SPACE. Dissemination of the Primary Data that is sourced from other than the declared source shall not be permitted. Any change in the source of the Primary Data shall require fresh or amendment to IN-SPACE registration.
- o. The registration certificate issued to the Applicant is non-transferrable to any third party, except with the prior written approval of IN-SPACE. IN-SPACE may grant such an approval in its sole discretion, subject to the third party meeting all applicable criteria. Further, the Applicant/registered Data Disseminator shall inform IN-SPACE in writing and through email, within 48 (forty eight) hours of any change in its 'Management and Control' or shareholding pattern or in its partnership or trust, as applicable. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the Application or revoke, amend or issue fresh registration certificate in such cases.

A fresh registration shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust resulting in transfer of the 'Control' to non-Indian Entity/Entities or if the Applicant is no longer under Indian Management and Control.

- p. Registered Data Disseminator shall inform IN-SPACE in writing and through email within 30 (thirty) days of any change in the jurisdiction & control or registration in UN data base in accordance with the Registration Convention. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may amend, revoke or issue fresh registration certificate in such cases.

- q. The registered Data Disseminator shall abide by the “DST Guidelines for acquiring and producing geospatial data and geospatial services including maps”, and as amended from time to time including the extant guidelines pertaining to prevailing negative list of sensitive attributes along with stipulated regulations.
- r. Notwithstanding anything stated in this section, IN-SPACE shall retain the power to declare any data, mentioned in this section as sensitive for securing national interests, national security, public order, the safety of people or their property, national intelligence and security operations and prohibit the dissemination of such data.

Chapter – VIII

Operation of the Space Transportation Systems

I. Undertaking Sub-orbital and/or Orbital Launches by Indian Entities from Indian Territory and/or outside the territory of India

- a) Any launch (orbital or sub-orbital) of a space transportation system by an Indian Entity from Indian Territory and/or outside the territory of India needs Authorization from IN-SPACe. The launch could be from self-owned or leased Launch Facility including mobile platforms (land, sea or air).
- b) A non-Indian Launch Operator, who wishes to undertake the launch (orbital or sub-orbital) of their space transportation system from Indian Territory, shall seek IN-SPACe Authorization through an Indian Entity, which could be their subsidiary, joint venture, partnership, or using any other collaboration arrangements recognised by the government of India.
- c) Only those sub-orbital launches which have a total impulse equal to or more than 40960 Newton seconds, at lift-off, need Authorization from IN-SPACe.
- d) Any sub-orbital/sounding rocket launches undertaken by ISRO from its launch facilities, with established SOP/Guidelines by ISRO addressing safety consideration, are exempted from the IN-SPACe Authorization.
- e) The information to be provided to IN-SPACe for seeking Authorization under this category is included in the application template provided in Appendix-II.
- f) In case of launching of space transportation system from outside the territory of India, the Applicant shall also obtain necessary approvals/ clearances/ licenses from the administration of the concerned nation/territory under whose jurisdiction the Launch Facility is located, as per their applicable regulatory procedures, and provide copies of the substantiating documents in this regard to IN-SPACe, before undertaking the launch related activities.
- g) The Launch Operator shall adhere to the applicable Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space (UN-COPUOS) (2007), framework for safe and sustainable space operations as and when brought out by DOS, Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI and Third-Party Liability guidelines provided in the Chapter-X, and further guidelines issued by IN-SPACe from time to time.

- h) For each launch mission, the Launch Operator shall furnish information such as various failure scenarios, probability of failures, fragmentation pattern, reliability values, identification of impact and danger zones, etc. for the technical assessment by IN-SPACE.
- i) Authorization for each of the launches shall be provided by IN-SPACE after assessing various factors including the technical parameters, mission planning, and readiness of the launch vehicle (if using the ISRO launch base), through an expert committee constituted by IN-SPACE from the viewpoint of conducting a safe launch and minimizing the damages to third parties. The launch vehicle parameters or mission planning shall have to be optimised/changed appropriately by the Applicant, if recommended by the expert committee or IN-SPACE. Any change in the launch date, lift-off timings, and nominal injection parameters of spacecraft shall be intimated to IN-SPACE as soon as possible.
- j) For every launch, the Applicant shall obtain an 'Advisory Note' from IN-SPACE in order to get the NOTAM / 'Danger Zone Notification' including NAVAREA warnings (hereinafter referred to as NOTAM) issued from the relevant authorities, at least 45 (forty five) days before the launch. It is therefore advised that the Applicant approaches the relevant authorities well in advance to get NOTAM issued. Further, subsequent confirmations of NOTAM till and after launch are also the responsibility of the Applicant. IN-SPACE shall be copied on all such NOTAM and confirmations. Issuance of the NOTAM shall be one of the mandatory requirements to be complied by the Applicant before IN-SPACE Authorization.
- k) IN-SPACE Authorization shall specify a time period/window, within which the launch needs to be completed. Any change in this time period/window, rescheduling of the launch or change in Danger Zone shall require revised NOTAM (after another 'Advisory Note' from IN-SPACE) and corresponding amendment to the Authorization as decided by IN-SPACE.
- l) For any change in the aforesaid time period/window, rescheduling of the launch or change in Danger Zone for the launch mission, the Applicant shall immediately inform the NOTAM issuing authorities and IN-SPACE. The Applicant shall take action for issuance of revised NOTAM by seeking an 'Advisory Note' from IN-SPACE to this effect.
- m) The Authorization shall be applicable to a specific Indian Entity for the specified space transportation system and launch mission. Any change of ownership or "Management and Control", or in its partnership or trust, as applicable or shareholding pattern, of the Indian Entity or change in the space transportation system or mission (including the change in the

launch payload(s) or any of the payloads injection parameters) shall be intimated to IN-SPACE as soon as possible, and may require a fresh Authorization or amendment to the Authorization as decided by IN-SPACE.

The Applicant shall promptly inform IN-SPACE about any change in its ownership, shareholding pattern or control, or change in the space transportation system or mission through writing and email within 48 (forty-eight) hours or before the launch date, whichever is earlier. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the Application or revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/ Entities or if the Applicant is no longer under Indian Management and Control.

- n) The Launch Operator shall adhere to the national and international regulatory provisions and procedures with regard to use/assignment of frequencies and spectrum used in the operation of the space transportation system.
- o) Where the Space Object being launched by the space transportation system is owned by a non-Indian Entity, the Launch Operator shall ensure through a legally valid contract with such entity that:
 - i. as soon as the Space Object is separated from the space transportation system/launch vehicle, all risks in respect of such Space Object including the damages covered under the Convention on International Liability for Damage Caused by Space Objects, Liability Convention (1972), shall unconditionally and fully lie with the Non-Indian Entity; and the Non-Indian Entity shall agree to fully indemnify the Launch Operator and the Government of India for any liability, costs and expenses in respect thereof;
 - ii. the responsibility towards effecting the registration of the Space Object as per the Registration Convention (1974) through the concerned administration shall lie with the non-Indian Entity.
 - iii. the Space Object of the non-Indian Entity being launched operates under valid ITU Filing when in orbit. Launch Operator shall ensure that such ITU Filing is identified by the non-Indian Entity before undertaking the launch, and the same shall be informed to IN-SPACE before the launch.

- p) Where a Space Object owned by an Indian Entity is being launched by the space transportation system, the Launch Operator shall ensure that IN-SPACE Authorization for establishment and/or operation of such Space Object is in place before undertaking the launch.
- q) The Launch Operator shall provide requisite information towards registration of the launch vehicle stages reaching orbit as a Space Object in the National Registry as per the Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI, as part of seeking IN-SPACE Authorization.
- r) Applicant shall obtain the requisite approvals/licences from other government departments/ministries or authorities such as, PESO licence, export/import clearance, etc., as applicable before commencing the launch activities.
- s) Applicant shall ensure that the launch activities being undertaken do not expose the government of India to any liability under the Liability Convention (1972). Applicant shall undertake the launches at its own risks and peril, and shall be liable for any third-party damage or any other claims arising in consequence of the launch or the associated launch-activities for which IN-SPACE Authorization is issued. The Applicant shall be liable to indemnify the government of India and any of its agencies for any liability incurred under India’s international commitments. The Applicant is therefore advised to obtain adequate insurances, including mandatory third-party liability insurance if prescribed/required by IN-SPACE at time of Authorization, to cover all such risks and eventualities.

II. Establishment and operation of Launch Facility by Indian Entity which could be self-owned, leased or be a mobile platform within or outside the territory of India [IN:AU:02.02]

- a) Only an Indian Entity is entitled to seek Authorization from IN-SPACE to establish and operate Launch Facility within or outside the territory of India. A non-Indian Launch Facility operator, who wishes to establish and operate Launch Facility for operation of space transportation system (orbital or sub-orbital) from Indian Territory, shall seek IN-SPACE Authorization through an Indian Entity, which could be their subsidiary, joint venture, partnership, or using any other collaboration arrangements recognised by the government of India.
- b) The proposal shall be submitted in a prescribed format for Authorization for establishment of Launch Facility. The technical details such as the layout of the facilities planned within the Launch Facility along with the relevant

details of the related space transportation systems and missions planned to be launched from the site shall be enclosed. The specification and configuration of various facilities such as MCC, TT&C, AIT, propellant storage, etc. shall be provided.

- c) Applicant shall obtain and produce to IN-SPACE approval/licences from other government departments/ministries or authorities such as requisite PESO licence, WPC/DoT licence for the operation of TT&C ground station, DGCA clearance, environmental clearance, etc.
- d) In case of the establishment of facility or taking the mobile launch platform outside the Indian Territory the requisite approval/ Authorization/ licence/regulatory clearance from the concerned non- Indian Administration shall be obtained and produced to IN-SPACE by the Applicant.
- e) The Authorization shall be applicable to a specific configuration of the Launch Facility, and any change to the layout, facilities or establishments shall require a fresh Authorization or amendment to the Authorization.

The Authorization shall be applicable to the Applicant only and any change of ownership or “Management and Control”, or in its partnership or trust, as applicable, or shareholding pattern of the Applicant shall be informed to IN-SPACE within 48 (forty-eight) hours. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the Application or revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the ‘Control’ to non-Indian Entity/Entities or if the Applicant is no longer under Indian Management and Control.

- f) The Launch Facility operator can provide its launch facilities including launch pad as service to other Launch Operators. However, the Launch Facility operator shall ensure that such Launch Operator has the requisite Authorization from IN-SPACE for undertaking the launch.

Chapter IX

Establishment and/or Operation of the Ground Systems

- a. Authorization from IN-SPACe shall be required for establishment and/or operations of the following category of ground stations:
 - i. Satellite Control Centre (SCC)
 - ii. Telemetry, Tracking and Command (TT&C)
 - iii. Mission Control Centre (MCC)
 - iv. Remote Sensing Data reception station
 - v. Ground stations for supporting operations of the space-based services such as Space Situational Awareness (SSA), astronomical, space science or navigation missions, etc.
 - vi. Any other category, as decided by IN-SPACe
- b. Applicant shall obtain the requisite clearance/approval/license from the relevant Government department(s)/ministries, as applicable and necessary for operationalization of such ground station(s), after obtaining IN-SPACe Authorization.
- c. IN-SPACe Authorization is not required for setting up of gateways or hubs supporting satellite communication services such as Direct-to-Home (DTH), TV Uplink, Digital Satellite News Gathering Service (DSNG), Very Small Aperture Terminal (VSATs), broadband, Inflight and Maritime connectivity (IFMC), etc. Establishment and operations of such gateways/hubs including those required for supporting the operations of the high throughput GSO or NGSO satellites/constellations shall be governed by the prevailing licensing/approvals process by the respective government departments/ministries.
- d. Indian Entities are permitted to establish and operate the ground station(s), such as TT&C, MCC, Remote Sensing data reception stations, etc. for providing commercial services to their customers (Ground Station As A Service or GSAAS), with the Authorization of IN-SPACe.
- e. Indian Entities are permitted to establish and operationalize the station within or outside Indian Territory. In the latter case, the Applicant shall seek IN-SPACe Authorization by demonstrating the significant technical or business advantages gained by them for choosing the location outside the territorial jurisdiction of India, and that the desired location outside the territorial jurisdiction of India does not pose a threat to the national security, foreign relations, national intelligence and security operations in the interests of the Republic of India. Further, the Applicant shall abide by the rules, regulations and clearances of the concerned foreign land for such purpose.

- f. Indian Entities are permitted to procure/acquire an already operational Ground Station from Indian or non-Indian Entities, within or outside Indian Territory, or to transfer the ownership of their established station to other Indian or non-Indian Entities, after obtaining Authorization of IN-SPACE.
- g. Government of India may designate certain parts of the country, wherein the setting up of TT&C station and/or MCC is not permitted. If any station is already set up in such prohibited areas notified by the Government of India, IN-SPACE, may direct, the shifting of such station to another location, provided, however, that such direction is found to be necessary in the national interest, security or in conformance to the prevailing regulations by the Government of India.
- h. Any change in the location of the ground station, whether within or outside Indian Territory, shall require approval of IN-SPACE.
- i. The application shall be evaluated considering the compliances to national and international (ITU) regulatory/ licensing provisions for the proposed frequency bands and other parameters of the ground station as amended from time to time. Any material change/upgradation in the parameters or specifications, such as antenna size/type, frequencies, maximum EIRP, G/T, baseband systems, etc that affect the capability of the ground station shall require fresh or amendment to the Authorization.
- j. The Authorized Entity shall maintain complete details of the satellite(s) and satellite operator(s)/owner which are being supported by the authorized station(s). The Authorized Entity shall promptly furnish such information to IN-SPACE or any other government agencies as and when demanded.
- k. The Authorized Entity shall ensure that the operation of the authorized station at any time does not cause harmful interference to other satellite networks or launch vehicle operations, as applicable. IN-SPACE, in coordination with WPC, WMO and NOCC, shall reserve the right to direct the Authorized Entity to cease the emission in case the harmful interference from its authorized ground station to other satellite networks is not removed or resolved after a notice period.

The Authorized Entity shall be responsible for confirming and ensuring, through legally valid contract/agreement wherever applicable such as in case of GSAAS, that the requisite approvals/Authorization from the concerned Indian and/or non-Indian government/regulatory authorities, as applicable, are in place and all national and international radio regulations are complied with including obtaining the copy of ITU Filing(s), in respect of operations of the satellite/constellation/Launch Vehicle being controlled/supported by the authorized ground station.

- l. The Authorized Entity shall be able to, and shall cease the operations of the identified satellite/constellation/Launch vehicle being controlled from the authorized MCC and/or TT&C station(s) or cease the emission from such authorized stations, whether within or outside Indian Territory, without any delay

as and when directed by IN-SPACe, in consultation with other relevant departments/ministries, for the reasons involving national security, geopolitical considerations or harmful interference to other satellite network.

- m. The Authorized Entity shall be vigilant and responsible for incorporating security mechanisms towards transfer of satellite data between TT&C station and MCC or between remote sensing data reception station to the concerned satellite operator or its authorized dealer. Also, they shall fully comply with all the security conditions in MCC including, but not limited to, making provision for the RF signals monitoring and providing feed to DoT, security to traffic, Lawful Interception Management System (LIM) and lawful interception by Law Enforcement Agencies (LEAs), as needed by the DoT and other departments/ministries.
- n. The Authorized Entity shall provide/supply the data being received by the authorized TT&C, MCC or remote sensing data reception station, as applicable, only to the concerned satellite operator/owner or its authorized dealer through secured mechanism, and not to any other entity or user. However, the Authorized Entity shall make available the data being received/transmitted from the Ground Station to IN-SPACe or other Departments/Agencies of Government of India, as and when demanded and without undue delay, for the reasons involving national security or such critical considerations.
- o. The Authorized Entity shall inform IN-SPACe in writing and through email, within 48 (forty-eight) hours, of any change in Applicant's 'Management and Control' or in its partnership or trust, as applicable or shareholding pattern. IN-SPACe in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the Application or revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/Entities or if the Applicant is no longer under Indian Management and Control.

Chapter – X

Liability-Related Aspects

Activities in space sector have an appreciable amount of risk and high element of damage causing potential – on ground, in air or even in outer space.

Further, Government of India is signatory to various international treaties in space domain including the Outer Space Treaty (1967), the Rescue Agreement (1968), the Liability Convention (1972), and the Registration Convention (1976), the Moon Agreement (1979) and the Artemis Accords (2023). The Outer Space Treaty (1967) outline the state's international responsibility for national activities in outer space and make it internationally liable.

The Liability Convention (1972) makes the Launching State absolutely liable for damages occurring on Earth or in air and resorts to a fault-based liability for damages occurring in outer space. Thus, a Launching State may be exposed to unlimited liability for third-party damages caused by Space Activities, irrespective of whether such activities are carried out by Government or Non-Government Entities (NGEs).

The Liability Convention (1972) further describes the Launching State as:

- (i) A State which launches or procures the launching of a Space Object;
- (ii) A State from whose territory or facility a Space Object is launched;

Hence, in order to address the third-party liability aspects arising out of potential damages due to the Space Activities undertaken by Indian Entities, the following guidelines shall be followed:

1. Sub-orbital and orbital launches from Indian Territory:

- i. State's liability shall be addressed appropriately through the requirement of third-party liability insurance, to be maintained by the Launch Operator, if found necessary by IN-SPACE as part of processing of Authorization, along with the following broad guidelines:
 - a. The minimum amount of insurance, insurance period, and other terms & conditions of the insurance shall be as prescribed by IN-SPACE.
 - b. The insurance amount shall be capped at a value, to be prescribed by IN-SPACE.
 - c. The third-party liability insurance shall be maintained by the Launch Operator for a duration, prescribed by IN-SPACE, ensuring validity of the insurance during the re-entry phase of the spent rocket components / stages. The insurance period shall be prescribed by IN-SPACE depending upon the nature of the launch such as sub-orbital launch, launch vehicle

stage being used as a stabilized platform in-orbit, etc., that could have different potential third-party damage risk duration.

- d. The third-party liability insurance shall cover the damages caused by launch vehicle and/or any of its payloads (Space Objects) onboard. The customer with whom the Launch Operator has entered into the agreement for launching their Space Objects shall also be included as insured in addition to the Launch Operator.
 - e. Government of India shall be added as one of the insured entities in addition to the Launch Operator.
 - f. The insurance shall cover the damage to all the government properties and its employees except for the exclusions, if any, mandated by the insurers in respect of the government launch base and employees involved in the launch activities being undertaken as per global standard practice.
 - g. IN-SPACe may permit the standard exclusions normally practiced worldwide by the insurers, as per global standard business practice. Applicants are advised to share the draft insurance policy document with IN-SPACe for its examination and clearance before obtaining the insurance in order to avoid subsequent modifications, if any.
- ii. The launch vehicle operator shall adhere to the Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI.
 - iii. In case the Space Object of non-Indian Entity is being launched, the launch service agreement/ launch contract between the Launch Operator and such non-Indian Entity shall have a suitable clause (a) transferring the third-party liability arising due to such Space Objects to the respective non-Indian Entity, (b) transferring the responsibility of registering the Space Objects as per the Registration Convention (1976) to the respective non-Indian Entity, and (c) ensuring that the Space Object operates under valid ITU Filing.

2. Sub-orbital and orbital launches from outside Indian Territory:

- i. Indian Launch Operators are permitted to undertake sub-orbital and orbital launches from outside Indian Territory with Authorization from IN-SPACe.
- ii. Third-party liability as part of Outer Space Treaty (1967) and Liability Convention (1972) shall be appropriately addressed with the responsible Nation/Government from whose territory the launch is undertaken, through appropriate mechanism (agreement/MoU/contract, etc.), wherever feasible and legally tenable.
- iii. In case the Space Object of Non-Indian Entity is being launched, the launch service agreement/ launch contract between the Launch Operator and such non-Indian Entity shall have a suitable clause (a) asking the respective non-

Indian Entity to own all risks, unconditionally and fully, in respect of such Space Object including the damages covered under the Liability Convention (1972), (b) transferring the responsibility for effecting the registration of the Space Objects as per the Registration Convention (1976), through the concerned administration, to the respective non-Indian Entity, and (c) ensuring that the Space Object operates under the valid ITU Filing.

3. Space Objects owned and controlled by Indian Entity being launched from Indian Launch Vehicle;

- i. The Launch Operator shall ensure the availability of IN-SPACe Authorization for the establishment and operation of the Space Object, from the entity owning the Space Object, before undertaking the launch.
- ii. The Space Object being launched shall adhere to the Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI.

4. Space Objects owned and controlled by Indian Entity being launched from non-Indian Launch Vehicle;

- i. The Indian Entity owning the Space Object shall ensure that the launch service agreement/launch contract with the Launch Operator includes an appropriate clause making the Launch Operator liable for the third-party liability arising due to launch vehicle and launch activities up to the separation of the Space Object from the launch vehicle, in accordance with the Outer Space Treaty (1967) and Liability Convention (1972).
- ii. In case a third-party insurance is maintained by the Launch Operator, it is required that Government of India is included as one of the insureds in addition to the Indian Entity owing the Space Object.
- iii. The Space Object being launched shall adhere to the Norms, Guidelines and Procedures for “registration of the Space Objects” provided in the Chapter-XI.

5. Planned re-entry of Space Objects;

- i. IN-SPACe may decide on the requirement of maintaining a third-party liability insurance by the Indian Entity attempting the re-entry on case-by-case basis, at time of processing the Authorization.

6. General guidelines and directions

- i. The launch and satellite operators shall adhere to the applicable Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space (UN-COPUOS) (2007) and the framework for safe and sustainable space operations as and when brought out by DOS.

- i. IN-SPACe shall bring out further guidelines on addressing third-party liability aspects, time-to-time.
- ii. Applicant shall comply with these guidelines on the third-party liability aspect. If on an investigation conducted by IN-SPACe, the Applicant is found guilty of wilful misconduct or gross negligence resulting in any third-party liability, then the Applicant shall be liable to IN-SPACe and/or Government of India for such damages as are necessary to remedy losses directly or indirectly arising out of such misconduct or negligence.

Chapter-XI

Registration of the Space Objects

1. Scope and Applicability

These Norms, Guidelines and Procedures are applicable to those applying for registration of their Space Object in the National Registry, and are intended to facilitate the understanding of the registration process and the subsequent reporting and recording mechanisms to be followed by the Applicant.

The application for the Registration of Space Object in the National Registry shall be submitted to IN-SPACE. During the registration process, the Applicants are advised to contact the IN-SPACE for seeking additional clarification or information in case of any queries. A Space Object shall be considered for registration by means of an entry in the National Registry only if its ownership and complete control is with an Indian Entity, which is seeking Authorization for operations of the Space Object from IN-SPACE.

2. Eligibility Criteria

- i. A Space Object that is owned by an Indian Entity, who has the control of the Space Object, shall normally be considered for registration in the National Registry. If the Applicant Indian Entity is a Subsidiary /Joint Venture/ Franchise/Partnership with a non-Indian Entity, the consent from both Applicant and such non-Indian Entity shall be furnished affirming that the complete control over the Space Object shall be with the Applicant and the jurisdiction being under Indian government and law.

Normally the payloads, which are integral part of the spacecraft and will not be separated from the spacecraft as an independent object, shall not be registered in the National Registry. However, IN-SPACE may recommend to DoS to include a payload as a separate Space Object in the National Registry depending on the specific circumstances of its operations, jurisdiction and control.

- ii. Any Space Object which is manufactured by an Indian Entity and supplied to the other non-Indian Entity, who will have the ownership, jurisdiction and control of this Space Object, shall normally not be considered for registration in the National Registry. Similarly, if an Indian Entity provides either or all services such as launch, operations, TT&C or mission control to a Space Object, which is owned by a non-Indian Entity who has the jurisdiction and control of the Space Object, then such Space Objects shall normally not be considered for registration in the National Registry.
- iii. General: All Space Objects belonging to the Government of India either through departments/ministries or PSEs or any such entities formed by the

government as per extant rules regardless of the country of launch or Launch Vehicle shall normally be considered for registering in the National Registry.

3. Guidelines to be followed for Registration

Indian space actors are expected to be aware of certain guidelines and best practices that are aimed to protect the Indian space assets and ensure safe, secure, sustainable, and responsible space operations. These guidelines are recommended to be followed during the design, operational, and end-of-life phases of launch vehicles and spacecraft. The applications for registration of a Space Object will be evaluated based on the compliance of these guidelines and associated due-diligence. Any deviations would be reviewed and approved on a case-by-case basis.

The Applicants undertaking the launch and satellite operations activities shall adhere to the applicable Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space (UN-COPUOS) (2007) and the framework for safe and sustainable space operations as and when brought out by DOS.

A. Guidelines for Launch Vehicles

- i. Perform Failure Mode Effects and Criticality Analysis (FMECA) for assessment of reliability of launch vehicle. In particular, perform failure mode analysis for assessment of orbital stages.
- ii. Carry out Launch Collision Avoidance Analysis (Launch – COLA) with best available data of the catalogued Space Objects before launch to select collision free lift-off epoch, and methods for additional safety to be considered while transiting through inhabited zones (370-430 km band, inhabited by human space missions (such as International Space Station, upcoming Gaganyaan, etc.)
- iii. Perform survivability and ground casualty risk assessment for re-entering sub-orbital stages. The impact footprints of the jettisoned stages are to be restricted in areas excluding any landmass and foreign EEZ (Exclusive Economic Zone).
- iv. Avoid inserting orbital stages with solid motor, wherever feasible.
- v. In case of multiple satellite injection, design the separation sequence in consideration of long-term relative motion to 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 to minimize the long-term presence. Carry out controlled re-entry of orbital stages to a safe impact point, wherever feasible, to minimize the on-ground casualty risk.
- vii. Passivate all upper orbital stages of launch vehicles to minimize the risk of accidental explosion at the end of mission.

B. Guidelines for Satellites

- i. Provide basic details about the satellite such as overall size, objectives, maneuvering capability and any anomaly/incapability during mission life preferably on an appropriate portal/organizational web site as part of best practices.
- ii. Carry out Failure Mode analysis to assess risks of on-orbit failures, explosions/break-ups during operational phases.
- iii. Ensure sufficient fuel budgeting for PMD operations.
- iv. Design should take into consideration minimizing debris creation during operational mission period and also during passivation.
- v. Assure cyber security including encryptions at design level and prevent unauthorized commandeering of satellite through adequate data security.
- vi. Ensure maneuvering capability for satellites with largest face area more than 0.1m^2 .
- vii. The satellite shall be capable of being tracked and be uniquely identifiable. Installation of passive tracking aids should be considered, wherever feasibility exists.

C. Selection of Orbit

- i. During the mission planning stages, determine collision risk based on the background Space Object density during transit phase, injection phase and the nominal operational phase of the satellite. The mission orbit should be selected by considering the Space Object density in the neighboring orbital regime so as to ensure that the cumulative collision probability over the mission life is less than 1 in 1000. It is recommended to avoid selecting mission orbits in densely populated orbital regions wherever feasible.
- ii. In case the mission orbit is selected in the vicinity of human space flight missions (370-430 km) or the spacecraft is expected to traverse the aforementioned orbital region during its mission life, then the satellite shall have the requisite maneuvering capability.

D. Safety of Satellite Operations

- i. Adopt a process for regular on-orbit conjunction risk assessment of the satellite.
- ii. Use best possible data available on Space Objects for conjunction analysis.
- iii. Estimate the likelihood of collision in terms of Probability of Collision (P_c), wherever feasible, as is globally prevalent in the industry. If P_c exceeds the pre-defined threshold, the conjunction is flagged as critical and warrants mitigation of collision risk.

- iv. Design, analyze, and execute Collision Avoidance Maneuver (CAM) for a maneuverable satellite, in case of consistent critical close conjunctions.
- v. If the secondary object is an active satellite, coordinate with its operator to ensure that only one of the satellites under conjunction is maneuvered for collision avoidance. Such coordination has to be initiated with the concerned operator well in advance of the conjunction epoch.
- vi. Document the relevant procedures for conjunction assessment, collision avoidance, and coordination to external entities, if any, and provide such information while submitting the application to IN-SPACe for Space Object registration.

4. Registration Procedure

The Standard Operating Procedure (SOP) for registration of Space Objects has two parts, namely

- Pre-Registration Procedures
- Post Registration Procedures

4.1 Pre-Registration Procedures

- i. The Indian Entity owning a Space Object shall apply for registration of their Space Object by providing all the information which is the part of its application to IN-SPACe seeking Authorization for establishment and/or operations or launch of a Space Object, which are available on the IDP.
- ii. The submitted information shall be evaluated for correctness, consistency, and compliance to the space debris mitigation requirements.
- iii. In case of any discrepancy/inadequacy in the information furnished by the Applicant, or lack of compliance to space debris mitigation requirements, IN-SPACe shall seek additional information or provide appropriate feedback to the Applicant for any necessary modifications in the application. The Applicant shall provide the required details and re-submit the updated application to the IDP.
- iv. Upon receipt of the registration form completed in all aspects and evaluation of its contents, IN-SPACe shall communicate the approval of registration to the Applicant. It is clarified that IN-SPACe does not guarantee that the Authorization application will be necessarily accepted by IN-SPACe, if the pre-registration procedures are completed.

4.2 Post Registration Procedures

Once their Space Objects are approved for registration in the National Registry, the operators are required to report to IN-SPACe certain events and provide periodic updates on their Space Activities. The details of the activities are as follows:

i. Before Launch

Any change in the launch date, lift-off timings, and nominal injection parameters of spacecraft to be intimated to IN-SPACe, as soon as possible. The validity of the registration approval intimated to the Applicant shall be subject to the clearance of the changed parameters after due evaluation and assessment by IN-SPACe.

ii. On-orbit Operational Phase

Post launch, the operators are required to furnish the following details as indicated below:

a) Immediately after the launch

Provide the following relevant inputs post launch (injection- within 1 (one) week)

1. Injected orbital elements (within 12 (twelve) hours of injection)
2. NORAD ID, International Designator (within 4 (four) weeks of injection)
3. Predicted ephemerides inclusive of orbit acquisition maneuvers (as applicable)
4. Any off-nominal performance/ anomalies and impact on space environment thereof

b) Periodic notifications (till end of mission)

Provide the following details once in 6 (six) months.

1. Orbital details, namely apogee, perigee, inclination, period (including changes)
2. Controllability
3. Maneuverability
4. Fuel Availability
5. Major configuration changes, if any
6. Project milestones achieved/ specific achievements that can be reported in international I like UN, IAA, IADC
7. Change in mission objective, if any
8. Change in user segments, if any

c) Special, high-priority, immediate notification

1. Critical close approach with other Space Objects
2. Event based declarations
 - 2.1. Change of ownership
 - 2.2. Orbital Migration
 - 2.3. Critical system failure
 - 2.4. Loss of control
 - 2.5. Loss of maneuverability (including fuel exhaustion)

- 2.6. Premature mission termination
- 2.7. End-of-life
- 2.8. Post Mission Disposal
- 2.9. Atmospheric re-entry (controlled/uncontrolled)

d) Regular Sharing of Ephemerides

1. Operational ephemerides of the satellites owned by NGEs shall be shared with IN-SPACE on IDP, or by any other means as advised by IN-SPACE. The latest updated ephemerides to be shared at least once in 3 days for LEO and once in a week for MEO, HEO and GEO objects.
2. For any planned maneuver, it is desirable to share the expected ephemeris during the burn and after the maneuver.

It is clarified that IN-SPACE does not guarantee that the Authorization application will be necessarily accepted by IN-SPACE, if the post-registration procedures are completed.

5. Extension of Mission Life

1. Any plan for mission life extension from the planned/design mission life shall be submitted to IN-SPACE with the necessary inputs no later than 6 months before the End of Life. Technical inputs from critical sub-systems, as enumerated below, & additional details life (health status, criticality, single point failures) to be provided to assess merits & feasibility of extending mission life
 - i. On-board computer
 - ii. Attitude control
 - Sensors (absolute and relative)
 - Actuators
 - iii. Propulsion System
 - Thruster performance
 - Fuel availability (Fuel availability for post mission de-orbiting/ re-orbiting)
 - iv. Power generation (any solar array string failure/battery degradation that may severely restrict keeping ON essential loads for de-orbiting/re-orbiting)
 - v. Thermal performance
 - vi. Communication (TT&C)
2. The application for an extension of mission would be dealt on a case-by-case basis based on the provided inputs. Successful post-mission disposal capability will be re-assessed considering critical subsystem performance and redundancy.

3. If the satellite is operational in a neighborhood immediately above the inhabited regime (currently in 370–430 km altitude range), then the satellite should be capable of orbit maintenance, collision avoidance, and be trackable. Mission extensions should not compromise such capabilities.

It is clarified that IN-SPACe does not guarantee that the application for mission life extension will be necessarily accepted by IN-SPACe.

6. Stakeholders & Responsibilities

A. Applicant seeking registration of its Space Object:

1. Prior to applying, the Applicants are advised to familiarize themselves with the guidelines and procedures to ease the process of registration and aid in a time bound completion of the pre and post registration activities
2. The Applicant shall adhere to the applicable Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space (UNCOPUOS) and the framework for safe and sustainable space operations as and when brought out by DOS
3. The Applicant shall adhere to the guidelines as elaborated in this Chapter and follow the steps detailed in the SOP.
4. The Applicant shall provide the predicted ephemerides (satellite position, velocity, and the associated uncertainty/covariance, if the latter is available) during on-orbit phase once in 3 days.
5. Carry out conjunction assessment and collision risk mitigation during Launch and Early Orbit Phase (LEOP) and in-orbit phases for satellites and launch vehicles, and should also be part of the information provided to IN-SPACe.
6. Any planned maneuver of a satellite apart from its regular orbit maintenance should be informed well in advance to IN-SPACe on IDP and wherever feasible, should be part of the information provided during application to IN-SPACe.
7. All critical conjunction related alerts and assessments shall be reported to IN-SPACe on IDP.
8. Identify a Point of Contact (POC) to coordinate responses for conjunction alerts and any associated queries related to operations, including on-orbit maneuvers, on a 24/7 basis.
9. Carry out the following activities for safe and sustainable space operations:
 - i. Orbit selection based on space environmental population/Space Objects density at the design level and mission planning, estimation of fuel budget

- ii. Conjunction assessment and collision risk mitigation during Launch and Early orbit Phase (LEOP) and in-orbit phases for satellites and launch vehicles, as applicable
- iii. Engage in discussions with other satellite owners/operators to arrive at processes/protocols for conjunction risk mitigation required by the Applicant post registration.
- iv. Design of CAM (Collision Avoidance Maneuver) and restitution/normalization maneuver, if necessary
- v. PMD operations

The above-mentioned activities may necessitate support of the concerned experts if the NGE does not have in-house expertise for the activities. If required, NGEs can seek the technical support of ISRO through IN-SPACE, and such support shall be provided on chargeable basis.

10. On-Orbit Collision Risk Mitigation: On-orbit collision risk mitigation is an important activity that shall be coordinated by ISRO's IS⁴OM unit. The NGE operators shall work in close coordination and consultation with IS⁴OM to jointly arrive at a strategy to resolve the close approach risks between their asset and another space debris. They shall
 - a) perform conjunction assessment (either by themselves or through another entity/expert/service provider) of their assets;
 - b) communicate to IS⁴OM and IN-SPACE conjunction alerts on regular basis;
 - c) if the alerts are critical and found to be within the alarm threshold, devise a suitable strategy to mitigate the risk. To do so, they shall:
 - i. Coordinate with external operators, if the threat object is another operational satellite, to jointly decide the collision avoidance strategy (which party would carry out the maneuver). If the primary asset is non maneuverable, inform the other operator to proceed with an avoidance maneuver.
 - ii. in case the threat object is a space debris/non-maneuverable, design and execute a collision avoidance maneuver.
 - d) Communicate to IS⁴OM and IN-SPACE on the resolution of the conjunction through writing and email within a period of 7 (seven) days.
11. Post Mission Disposal (PMD): The operator (NGE/government owned) shall apprise IN-SPACE of the commencement and termination of PMD activities, including the finally achieved orbit/ impact point in case of controlled re-entry.

If desired, IS⁴OM will provide support for PMD of an NGE owned Space Object on commercial terms, as per the JPIP.

B. IN-SPACE:

- i. Accept applications from both NGEs and government entities for registration of Space Objects in the National Registry through its IDP.
- ii. Provide the necessary inputs to IS⁴OM/ISRO to carry out assessment to fulfil various technical requirements and obligations that are required to be fulfilled by the Applicant.
- iii. Recommend the Applicant's Space Object to be registered in the National Registry of Space Objects after completing all due diligence in regard to the application and also verifying that the conditions for registration have been fulfilled.

C. IS⁴OM/ISRO:

- i. Derive various technical criteria that need to be fulfilled by the Applicant based on the details provided in the relevant application form.
- ii. Verify and evaluate the technical details provided in the registration pro forma and provide recommendations to IN-SPACE.
- iii. Carry out the following activities on a request from the Applicant (to be submitted through IN-SPACE) which shall be chargeable as per the JPIP, which shall be executed amongst IN-SPACE, IS⁴OM and the NGE as per the approved DOS guidelines and shall explicitly include the pricing aspects related to the technical services rendered:
 - a. Orbit selection based on space environmental population/Space Objects density at the design level and mission planning, estimation of fuel budget.
 - b. Conjunction assessment and collision risk mitigation during Launch and Early orbit Phase (LEOP) and in-orbit phases for satellites and launch vehicles, as applicable.
 - c. Engage in discussions with other satellite owners/operators on behalf of the Applicant to arrive at procedures for conjunction risk mitigation required by the Applicant post registration and provide relevant recommendations.
 - d. Provide CAM (Collision Avoidance Maneuver) design and clearance, design of restitution/normalization maneuver, if necessary.
 - e. Provide necessary guidelines/design aspect related inputs for PMD operations.
- iv. Carry out the monitoring of all the on-orbit Space Objects of the Indian Entities with a view to minimize the collision risk with other Space Objects, as part of the international obligations of India.

D. DOS:

- i. Register the Space Object and effect appropriate entries in the National Registry based on the recommendations from IN-SPACe, and assign the registration number in the National Registry.
- ii. Maintain the National Registry for the Space Objects and provide relevant inputs to various international bodies as required under the provisions of the international treaties.

Appendix-I

Sample Format

of

Authorization Certificate for

Conducting Space Activities

[The Authorization Certificate provided in this Appendix is of indicative nature, and there could be additions, deletions or changes in the text of the Articles/Clauses in the actual Authorization Certificate issued to an Applicant, depending upon the category of Authorization, the application submitted by the Applicant to the IN-SPACe and its evaluation.]

Left Blank Intentionally

Standard Proforma for the IN-SPACE Authorization

Authorization Certificate

[See The Gazette of India Notification dated 02nd of October, 2021 and Resolution of the Department of Space dated 06th of September, 2021]

Background: Reference is invited to the application submitted by you, (hereinafter referred to as the Applicant), seeking Authorization from IN-SPACE for conducting the Space Activity set out in SCHEDULE-A hereinbelow. As IN-SPACE being the nodal agency of the Government of India responsible for, inter alia, regulating Space Activities and granting Authorization for conducting the Space Activities, we have reviewed your application and hereby provide Authorization for conducting the Space Activity as per SCHEDULE-A and the terms set out in Exhibit-1.

SCHEDULE-A

Authorization for [Description of Space Activities]

[Note: This Section shall vary depending on the category of Authorization and the application submitted by the Applicant]

1. **Nature of the Activity:**
2. **Application No:** (The application number on IDP along with reference to all emails received from the Applicant during the entire Authorization process shall be made here)
3. **Authorized Entity:**
4. **Validity Period:**
5. **Objective/Intended Usage:**
6. **Details of Authorizations and approvals obtained from other agencies, departments and ministries of the Government:**
7. **Specific Regulations and Terms of Authorization, if any**

(Director, PMA)

DECLARATION

By counter signing this Authorization Certificate, the Applicant acknowledges that it shall be legally obligated to comply with, abide by and obey the terms set out in the Authorization Certificate including Schedule-A and the “Terms of Authorization” in Exhibit-1.

AGREED TO AND ACCEPTED THE TERMS OF THE AUTHORIZATION

[Signature with Seal OR digital signature recognised under Information Technology Act 2000 (IT Act), of the authorized signatory of the Applicant]

Name :

Designation :

Mobile No. :

Address :

Place :

Date :

EXHIBIT-1

TERMS OF AUTHORIZATION

(The paragraphs which are not relevant for the Authorization being issued shall be deleted)

1. Representations and Warranties:

- a. The Applicant represents and warrants that all the information provided by the Applicant as part of the application and process for securing Authorization is true and correct.
- b. The Applicant acknowledges that space remains a domain which has implications for national interests and national security. Therefore, if any of the information provided in the application or otherwise is found to be, or becomes incorrect or false at any stage, IN-SPACE reserves the right to, inter alia,
 - i. Withdraw the Authorization from the Applicant.
 - ii. Exercise any or all remedies available under law to recover the losses suffered by IN-SPACE or the Government of India and claim damages caused directly or indirectly from the Applicant, as a result of a breach of sub clause (a) above.

Provided that no decision shall be taken in this regard by IN-SPACE without providing an opportunity of hearing to the Applicant.

- c. The Applicant represents and warrants that it has the power and authority to execute this Authorization Certificate and to perform its obligations thereunder and such execution and performance of its obligations will not breach its memorandum or articles of association, or constitute default under or violation of applicable laws or other obligations to which it is bound or any order, judgment or decree of any judicial, quasi-judicial or government body.
- d. The Applicant represents and warrants that it has all necessary consents from its concerned satellite operator to the effect that the satellite operator would enter into coexistence-arrangements/agreements in good faith with other satellite systems providing services over India or those satellite system which are identified by IN-SPACE to provide services over India, as and when required during the Validity Period.
- e. The Applicant represents and warrants that it has full legal power and authority and all licenses, permits, and Authorizations necessary to carry on

the businesses in which it presently is engaged and in which it proposes to engage in, pursuant to this Authorization Certificate.

- f. The Applicant represents and warrants that the Applicant, its controlling shareholders, promoters, directors or officers, are not subject to any legal, quasi-legal, administrative, arbitration, mediation, conciliation or other proceedings, claims, actions, governmental investigations, orders, injunctions, judgments or decrees of any nature, existing or threatened which may prejudicially affect its ability to carry out the Space Activity specified in this Authorization Certificate.
- g. The Applicant represents and warrants that it shall comply with the Norms, Guidelines and Procedures for implementation of the Indian Space Policy 2023 in respect of Authorization of Space Activities issued by IN-SPACE (presently Version 1.0 Document no. IN:ISP2023:NGP2024/V1.0 dated May 03, 2024), and its revisions or other guidelines/directives issued from time to time.
- h. The Applicant represents and warrants that it meets the specified criteria, included but not limited to financial solvency, legal compliance, technical capability, and managerial capacity, amongst others.
- i. The Applicant represents and warrants that it is in compliance with the existing laws, rules, regulations, and policies, and is compliant with applicable with laws, rules, regulations and policies. The Applicant will commit to remain compliant with any amendments made to the extant new applicable laws, rules, regulations, and policies as and when they are notified, and with any new and applicable laws, rules, regulations, and policies. The Applicant further assures the accuracy and completeness of all the documentation and information submitted for consideration.

2. Scope of Authorization:

- a. The description and nature of the authorized Space Activity is set out in a SCHEDULE-A of this Authorization Certificate. The Authorization is confined only to the Space Activity described in the SCHEDULE-A and does not authorize any Space Activity which is not explicitly included in the SCHEDULE-A of the Authorization Certificate.
- b. In the Authorization Certificate, except for the Applicant and as provided in sub clause (d) of clause 2 herein, no other entity including the subsidiaries of the Applicant, holding companies of the Applicant, or persons controlling the Applicant, controlled by the Applicant or under the control of the same

person(s) who control the Applicant, either by virtue of shareholding or contract, can conduct the Space Activities set out in the Authorization Certificate.

However, the authorized capacity of a satellite/constellation can be provisioned to any of the end users/service providers through lease/sub-lease/sale/resale for providing communication services over India, subject to the stipulated regulatory provisions and requisite clearance/approval/license from the relevant Government department(s) such as DoT, Ministry of Information and Broadcasting etc.

- c. The Applicant shall inform IN-SPACE in writing and through email, within 48 (forty-eight) hours [or before the launch date, whichever is earlier, in case of launch Authorization] of any change in its 'Management and Control' or shareholding pattern or an equivalent change in a partnership or trust. IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to revoke, amend or issue fresh Authorization in such cases.

A fresh Authorization shall be required in case of any change in the Management and Control of the Applicant company or an equivalent change in the partnership or trust, resulting in transfer of the 'Control' to non-Indian Entity/ Entities or if the Applicant is no longer under Indian Management and Control.

- d. The Authorization is not transferrable to any third parties. ("prospective transferees"), except with the prior written approval of a duly empowered officer of IN-SPACE, which IN-SPACE in its sole discretion may grant. Provided, however, that such prior written approval shall not be granted, unless:
 - i. The prospective transferees have the same or better technical, financial and other capabilities, prescribed by IN-SPACE to conduct the Space Activity prescribed in the Authorization Certificate.
 - ii. The prospective transferees subscribe to and undertake to comply with the terms set out in the Authorization Certificate and the terms set out herein and all other applicable domestic and international law.
 - iii. The Applicant executes an unconditional performance guarantee for a term to be set out by IN-SPACE, acting as a surety for the compliance of and performance of the obligations set out in these

terms and other applicable, laws, rules and regulations by the prospective transferee.

- e. Provided further that in case of IN-SPACE approving in writing, the transfer of any Authorization pursuant to sub clause (d) of clause 2 herein, it shall reserve the right to a) impose such conditions on the transfer and the prospective transferee as well as the Applicant and/or b) suspend, withdraw or terminate any benefits or exemptions or waivers provided to the Applicant.

3. Effect of the Authorization:

In the event of any conflict between the terms and conditions set out in this Authorization, and any agreement executed by the Applicant, including but not limited to, the agreement for launching an object into space, license agreements with the DoT for the grant of frequency and/or operational license to deploy services, the terms of this Authorization shall prevail, in so far as the subject matter herein is concerned.

4. Terms of Authorization, in addition to and not in derogation of other laws:

The terms of the Authorization set out herein are in addition to and not in derogation of other laws or license terms or conditions applicable to the Applicant or the Applicant's Space Activities, including but not limited to rules, guidelines, notifications, circulars and regulations of the Department of Science and Technology, Ministry of Home Affairs, Ministry of Defense, Department of Telecommunications, Telecom Regulatory Authority of India and any other authority satisfying the definition of "State" under Article 12 of the Constitution of India.

5. Powers of Amendment: IN-SPACE reserves the right to amend or modify including add, substitute or repeal the terms of the Authorization, provided however that IN-SPACE will,

- a. Not retrospectively amend the terms of Authorization so as to render the Applicant ineligible for Authorization or for withdrawal of Authorization, unless it is, in IN-SPACE's discretion necessary in national interests to do so.

- b. Not amend the terms of the Authorization unless it is, in IN-SPACe's determination beneficial for national interests and national security.

All such amendments to the terms of the Authorization, shall, when communicated privately to the Applicant or when published on the official website of IN-SPACe, as the case maybe, deemed to be part and parcel of the Authorization granted to the Applicant.

6. Obligations of the Applicant:

[Note: Some of the paragraphs/points may be omitted/changed from this section depending on the category of Authorization and the application submitted by the Applicant]

While conducting Space Activities pursuant to the Authorization granted, the Applicant will be bound by the following obligations:

- a. The Applicant will sustain and maintain the technical and financial abilities as demonstrated at the time of receiving the Authorization for conducting the Space Activities, throughout the duration of the Space Activity within the Validity Period. For the sake of clarity and for purposes of illustration only, it is clarified as follows
 - i. Explanation a: The duration of the Space Activity commences from the time an object is made fit for integration into the vehicle launching it into space, until the time that it is safely disposed of in accordance with orbital debris remediation measures promulgated by the state from time to time.
 - ii. Explanation b: For the proposed downstream Space Activities, the time from when the infrastructure necessary to uplink and downlink or transmit data to and/or from the object in space is established, until the time its technical abilities to uplink and downlink or impact or affect the Space Object ceases, shall be considered as the duration of the Space Activity.
- b. However, the Applicant shall seek a separate Authorization from IN-SPACe to conduct the Space Activity beyond the duration of the Space Activity authorized by IN-SPACe under this Authorization Certificate. Unless the Authorization for the extension of the duration of the Space Activity is provided separately by IN-SPACe, in writing, the Applicant must not presume that the Authorization is deemed to be extended. Applications for extension of the duration of the Space Activity originally authorised must be filed 12 (twelve) months prior to expiry of the term or duration of the Space Activity

originally authorized. However, if such extension of the Authorization is not granted by IN-SPACE in spite of the expiry of 12 (twelve) months of the receipt of the application for such extension, the Authorization shall be deemed to be extended until such time IN-SPACE conveys its decision on the Authorization for the extended duration of the Space Activity. While calculating the time limit of 12 (twelve) months for IN-SPACE to make its decision, any time taken by the Applicant to furnish information or clarification pursuant to a written query from IN-SPACE, shall be excluded.

- c. The Applicant shall conduct the Space Activities in a transparent manner with due regard to the rights of other person(s) and states for conducting Space Activities and in the interest of maintaining international peace and security and promoting international co-operation and understanding. The Applicant shall ensure that its Space Activities do not cause any damage to the surface of the earth, any aircraft, other Space Object or to any property or person.
- d. The Applicant shall conform to the Standard Operating Procedures, Norms, Guidelines and Procedures for registration of a Space Object brought out by IN-SPACE and shall not do any act, deed or thing to vitiate such registration or violate the conditions of such registration.
- e. The Applicant shall conform to the framework for safe and sustainable space operations as and when brought out by DOS.
- f. The Applicant shall comply with, shall assist and enable the Government of India in complying with its obligations under, and shall not cause the Government of India to be breach of, or incur any liability, under, applicable international law, and applicable international space-related treaties, agreements, guidelines, principles or standards (“**International Treaties**”) to which India is a signatory, or becomes a signatory during the term of this Authorization, or adopted by India, including but not limited to:
 - i. the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (“Outer Space Treaty”);
 - ii. Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space (“Rescue Treaty”);
 - iii. Convention on International Liability for Damage Caused by Space Objects (“Liability Convention”);

- iv. Convention on Registration of Objects Launched into Outer Space (“Registration Convention”);
 - v. Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (“Moon Agreement”);
 - vi. Artemis Accords;
 - vii. Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space.
- g. Where any act, omission, information received or discovery by the Applicant places an obligation on the Government of India, including but not limited to an obligation to register a Space Object, or to notify an international authority, under international law or International Treaties, the Applicant shall notify IN-SPACE immediately, and no later than 24 (twenty-four) hours after such act, omission, intimation or discovery.
- h. Where any act or omission of the Applicant exposes the Government of India to any liability under international law or International Treaties, IN-SPACE or the Government of India shall be entitled to issue directions to the Applicant for providing mitigation measures or assistance, financial or otherwise, in accordance with Norms, Guidelines and Procedures issued by IN-SPACE, from time to time, in furtherance of the Indian Space Policy, 2023 or otherwise, and the Applicant shall comply with the same. This is without prejudice to any claim that the Government of India or IN-SPACE may make against the Applicant.
- i. The Applicant acknowledges its responsibility to remain updated on any additions, changes or amendments to applicable international law and International Treaties during the term of this Authorization Certificate, and agrees to comply therewith.
- j. The Applicant shall ensure compliance with any domestic legislations, rules, regulations or policies formulated, from time to time, by the Government of India to comply with applicable international law and International Treaties.
- k. During the validity period of the Authorization, the Applicant shall provide information to IN-SPACE, in writing as well as by email, regarding filing of any criminal complaint or report, including first information report, registration of criminal case(s), allegations, chargesheets, trials, conviction by courts, etc., if any, against the Applicant, its controlling shareholders or promoters or beneficial owners or directors or officers or partners or

trustees of the Applicant company for the offences under Chapter VI, VII, VIII, IX, IXA, XIV, XVI and XXII of the Indian Penal Code, 1860, offences under the Official Secrets Act, 1923, offences under the Prevention of Corruption Act, 1988 and/or offences under the Prevention of Money Laundering Act, 2002 and/or aiding and/or abetting, or engaging in a conspiracy for the commission of any of the foregoing offences and/or such other offences that may be considered serious offences or as may be notified by IN-SPACE from time to time in writing.

Change in the status of the declaration made by the Applicant if any in the application or during the processing of IN-SPACE Authorization in respect of such offences as stated above, shall be promptly updated and informed to IN-SPACE by the Applicant in writing as well as by email during the validity period of this IN-SPACE Authorization.

IN-SPACE, taking note of such offences or status provided by the Applicant, reserves the right to terminate/suspend/revoke the Authorization. The Applicant may be given prior notice of such termination/suspension, wherever possible.

- I. The Applicant shall cooperate with IN-SPACE, the Government of India and its agencies in demonstrating compliance with international law and International Treaties, including transparency and confidence building measures.
- m. The Applicant shall promptly notify IN-SPACE of any changes in its operations or services that may affect its compliance with international law or International Treaties, through a written notice as well as by email within 24 (twenty-four) hours.
- n. Applicant desiring to discontinue/terminate/withdraw, partially or fully, the Space Activity authorized by IN-SPACE anytime during the term of the Authorization granted by IN-SPACE shall provide a prior notice, in writing and through e-mail, to IN-SPACE giving reason/s for such discontinuation/termination/withdrawal.

{OR [Note: Below clause will be used for those Space Activity which results in provisioning of services to the masses, affects public interest or national security]}

Applicant desiring to discontinue/terminate/withdraw, partially or fully, the Space Activity authorized by IN-SPACE anytime during the term of the Authorization granted by IN-SPACE shall provide a prior notice of at least

30/60/180 days [**Note:** *depending on the type of the Authorized activity*], in writing and through e-mail, to IN-SPACE giving reason/s for such discontinuation/termination/withdrawal.

In the event that the Applicant unilaterally discontinues/terminates/withdraws the provision of services, partially or fully, during the term of the Authorization provided by IN-SPACE, without such notice period or for the reasons that are not justifiable in the sole determination of IN-SPACE, IN-SPACE reserves the right to terminate the Authorization immediately and impose a financial penalty depending on the nature of authorized Space Activity, loss, damage, impact on Indian users due to discontinuation of service, expenses or any harm or prejudice to the interests of India's national security caused by such actions of the Applicant.

Provided that imposition of financial penalty will be without prejudice to any legal claims or remedies that IN-SPACE or the Government of India or its agencies may have against the Applicant.

Provided further that while imposing the penalty, IN-SPACE may consider a) the nature and gravity of the actions of the Applicant, b) the intent and motives of the Applicant's actions, c) whether or not the Applicant's actions or omissions were caused by reasons beyond the control of the Applicant, d) penalties already imposed or likely to be imposed by any other state authority and e) the impact of the Applicant's actions on India's national interests including impact on Indian users due to discontinuation of service.

Provided however, that if the Applicant rectifies or remedies the discontinuation or withdrawal of services or breach to the satisfaction of IN-SPACE, IN-SPACE reserves the right but not an obligation to restore this Authorization so terminated and/or not to levy the financial penalty.}

The Applicant shall notify such discontinuation/ termination/ withdrawal of its Space Activity, in writing and through e-mail, to IN-SPACE as soon as possible, in any case no later than 30 (thirty) days after the actual date of discontinuation/ termination/ withdrawal.

In case of such discontinuance, withdrawal or termination, the Applicant shall provide appropriate assistance to IN-SPACE, including but not limited to support, transition assistance, sharing of data, as may be determined by IN-SPACE in its sole discretion, and such obligation shall be specifically enforceable.

- o. The Applicant shall comply with the plan outlined for the Space Activity in its application for Authorization to IN-SPACE and in its applications before international organizations such as for obtaining orbital slot and/or frequency from the International Telecommunication Union.

Any deviation from the plan, which could materially affect space situational awareness and also the Space Activities of other nations, such deviations shall not be undertaken without the prior written approval of IN-SPACE, which may be provided, if IN-SPACE is satisfied of the following,

- i. The deviation does not pose a threat to the sustainability of space or to the Space Objects of other nations or to lives or property within the air space or in the territory of Earth.
 - ii. The Deviation is unlikely to trigger security concerns among other nations whose Space Activities could be affected by the Applicant's Space Activity.
- p. The Applicant shall not carry out any Space Activities or leveraging the Authorization for conducting Space Activities to perpetrate any act or omission that violates any international or applicable domestic law(s).
 - q. The Applicant shall refrain from asserting sovereign claims on the whole or portion of outer space, including over resources extracted from space. However, it is understood that not all forms of extraction and utilization of resources in space, qualify as appropriation. Therefore, any plans to extract or utilize resources in space requires separate Authorization from IN-SPACE, which IN-SPACE may authorize or reject, subject to considerations, including the necessity of the extraction and utilization of resources in space ("EUR Activities") for conducting the Space Activities in accordance with applicable international law and the likelihood of the EUR Activities causing harmful interference to the Space Activities of other states or persons authorized by other states.
 - r. The Space Activity shall not be conducted in violation or contrary to public health, public policy and morality. For example, if upon a finding of any violation of public health, policy and morality concerns, any other government agency or authority revokes the licenses of the Applicant or raises a concern with IN-SPACE, then IN-SPACE, reserves the right to revoke its Authorization after affording the Applicant an opportunity of being heard.

- s. The Applicant acknowledges that IN-SPACe, in its sole discretion, if it is satisfied that it is necessary and expedient to do so in the interest of national security, friendly relations with foreign states, or in the event of war or emergency can:
- i. Use the equipment, services, network, and infrastructure of the Applicant used to provide the services authorized by this Authorization (“Applicant Infrastructure”);
 - ii. Suspend or prohibit the use of the Applicant Infrastructure from specified countries or persons;
 - iii. Take over the control, management, and operation of the Applicant Infrastructure; and
- Take any other action that IN-SPACe deems expedient to do so in the interest of national security.
- t. The Applicant shall not carry out any activities which can jeopardize the sovereignty and security of India or friendly or diplomatic relations with foreign states or actors.
- u. The Applicant shall comply with and be governed by Norms, Guidelines and Procedures for implementation of the Indian Space Policy 2023 in respect of Authorization of Space Activities issued by IN-SPACe (presently Version 1.0 Document no. IN:ISP2023:NGP2024/V1.0 dated May 03, 2024), and its revisions or other guidelines/directives issued from time to time.

7. Material Adverse Events and Change Events

- a. Material Adverse Events for the purposes of this Authorization are those events or incidents which
- i. Threaten human life, environment or property in the territory of the earth
 - ii. Threaten the security or territorial integrity of the Republic of India
 - iii. Pose a threat to other objects in space.
 - iv. Pose a risk to the public order and national security
 - v. Expose the Republic of India to liability under International Law or International Treaties or to a third party.
- b. In the event of a Material Adverse Event occurring in respect of a Space Activity, the Applicant shall take immediate measures to mitigate and avoid any damage from such a material adverse event and shall report to

IN-SPACe in writing and through email about such event within 24 (twenty-four) hours of the occurrence, and also shall report to IN-SPACe within 7(seven) days about the mitigation measures taken.

- c. For any incident or event occurring in respect of a Space Activity which does not qualify as a material adverse event but could impact the design, intent and overall nature of the Space Activity authorized by IN-SPACe (“Change Event”), the same shall be reported to IN-SPACe within 30 (thirty) days of the occurrence of the Change Event.

8. Liability from Space Activities:

- a. IN-SPACe shall, from time to time, promulgate policies, rules, guidelines and regulations governing the Applicant’s liability for conducting Space Activities (“liability guidelines”) and the same shall **and always be treated as part and parcel** of the terms of the Authorization, including any amendments to such liability guidelines.
- b. However, notwithstanding any liability guidelines, if on an investigation conducted by IN-SPACe, the Applicant is found guilty of willful misconduct or neglect resulting in liability, then IN-SPACe reserves the right to direct the Applicant to pay such damages as are necessary to remedy losses directly arising out of such misconduct or negligence, after providing the Applicant an opportunity of being heard.
- c. Any loss, damage, cost, fees or other expenses incurred by IN-SPACe or the Government of India or its agencies under the Convention on International Liability for Damage Caused by Space Objects (“Liability Convention”) or otherwise, which are attributable to the Applicant shall be recoverable from the Applicant in full, along with legal costs and expenses incurred for such recovery, in accordance with Norms, Guidelines and Procedures issued by IN-SPACe, from time to time, in furtherance of the Indian Space Policy, 2023 or otherwise.

- 9. Termination for breach of the conditions of Authorization:** IN-SPACe reserves the right to withdraw and/or terminate the Authorization after providing prior written notice of 7 (seven) working days in writing/e-mail to the Applicant, in the event of a breach of any of the terms, conditions, representations or warranties of this Authorization or any law, rules, regulations or applicable guidelines issued by IN-SPACe or DOS including but not limited to the

guidelines provided in respect of the Authorization of Space Activities including those provided in Document no. IN:ISP2023:NGP2024/V1.0, and other guidelines or in the event of default by the Applicant in carrying out activities under this Authorization Certificate or on occurrence of a Material Adverse Event or Change Event; or in the event of any change in its 'Management and Control' or shareholding pattern or an equivalent change in a partnership or trust, as applicable of the Applicant or in the event that the Applicant violates the guidelines provided in the Authorization.

Provided however, that if the Applicant is able to rectify or remedy the breach to the satisfaction of IN-SPACE, IN-SPACE reserves the right but not the obligation to restore the Authorization so terminated or revoked.

Provided further that IN-SPACE or the Government of India or its agencies shall not be liable for any damage or loss caused or arisen out of aforesaid termination or withdrawal of Authorization.

10. Termination of Authorization during national emergencies or in the interest of national security:

(1) In specific circumstances, such as

- a. During times of conflict or natural disasters or times of emergency declared in accordance with the constitution of India or law,
- b. Where a criminal complaint or report, including first information report is registered/filed, or a criminal case is registered, or a chargesheet is filed, or a trial is conducted and a conviction is made against the Applicant, its controlling shareholders or promoters or beneficial owners or directors or officers or partners or trustees in respect of offences under Chapter VI, VII, VIII, IX, IXA, XIV, XVI and XXII of the Indian Penal Code, 1860, offences under the Official Secrets Act, 1923, offences under the Prevention of Corruption Act, 1988 and/or offences under the Prevention of Money Laundering Act, 2002 and/or aiding and/or abetting, or engaging in a conspiracy for the commission of any of the foregoing offences and/or such other offences that may be considered serious offences or as may be notified by IN-SPACE from time to time, in writing, or
- c. Such other contingencies as may be specified by IN-SPACE or otherwise, or determined by IN-SPACE in writing, as being reasons

beyond its control or the control of the Government of India (collectively referred to as “Legitimate Withdrawal Contingencies”),

IN-SPACe reserves the right to withdraw this Authorization for conducting Space Activities or exercise, or take the exclusive, sole and complete control (“control measure/s”) over a Space Object or Space Activities, as applicable.

Provided further that IN-SPACe or the Government of India or its agencies shall not be liable for any damage or loss caused or arisen out of aforesaid actions.

(2) While exercising such a right, IN-SPACe will consider:

- a. Providing a reasonable prior notice to the Applicant, wherever possible.
- b. The nature and extent of the Legitimate Withdrawal Contingencies and the necessity for withdrawing the Authorization or imposing control measures to effectively respond to the Legitimate Withdrawal Contingencies.
- c. The period or the extent to which the Authorization so granted ought to be withdrawn or control measures to be imposed, in order to effectively address and respond to the Legitimate Withdrawal Contingencies; and
- d. The nature and extent of the costs and the expenses and investments incurred by the Applicant to act upon the Authorization and whether such losses are irrecoverable in nature.

(3) In case of termination/revocation of the Authorization under clauses (9) or (10), the Applicant shall provide appropriate assistance to IN-SPACe, including but not limited to support, transition assistance, sharing of data, as may be determined by IN-SPACe in its sole discretion, and such obligation shall be specifically enforceable.

11. Limitation of Liability:

In the event of any termination or revocation of this Authorization by IN-SPACe, neither IN-SPACe nor the Government of India shall be liable for any loss of profits, revenue, or any indirect or consequential damages incurred by the Applicant, its contractors, subcontractors, or customers as a result of any termination of this Authorization.

12. Other rights of IN-SPACe

IN-SPACe reserves the right to conduct periodic inspections or audits of the Applicant's premises and operations by itself or through its authorized representative to ensure compliance with the terms of this Authorization Certificate and relevant laws and regulations.

13. Jurisdiction & Governing Law: By applying for and/or acting upon the Authorization, the Applicant agrees to irrevocably and unconditionally submit to the exclusive jurisdiction of the Republic of India and the laws existing in force by the Republic of India concerning the Authorization and the Space Activities. This Authorization and any dispute or claim arising out of or in connection with it or its subject matter, existence, negotiation, validity, termination or enforceability (including non-contractual disputes or claims) shall be governed by, and construed in accordance with, the laws of the Republic of India.

14. Dispute Resolution: Any dispute arising out of or in connection with this Authorization or the terms set out herein or the conducting of the Space Activities pursuant thereto, shall be resolved amicably through mediation and intervention by an independent committee constituted by IN-SPACe Board, as far as possible. If the resolution is still not achieved, Arbitration proceedings under the Arbitration and Conciliation Act, 1996 shall be initiated. Arbitration panel will include three (3) arbitrators, and each party shall appoint one arbitrator having technical experience in the field of Space science and technology. The two appointed arbitrators shall appoint the presiding arbitrator having experience in the field of international law/arbitration. The arbitration shall be conducted by the Gujarat High Court Arbitration Centre, Ahmedabad. The seat of arbitration shall be Ahmedabad, and courts of Ahmedabad shall have exclusive jurisdiction over any disputes.

15. Notices: Any notice in connection with the terms of the Authorization shall be provided in writing **as well as through email** to the address mentioned below

- a. To IN-SPACe: Director, PMA, [Address and email id]

- b. To Applicant: The address and email id mentioned in the Application seeking Authorization.

16. Indemnification

The Applicant shall defend, indemnify IN-SPACE and Government of India, their respective officers, directors, employees, consultants, affiliates, subsidiaries and agents (“IN-SPACE Indemnitees”) harmless against any direct or indirect loss, damage or costs (including attorneys’ fees incurred for national and international courts representation) incurred in connection with claims, demands, suits, or proceedings (“Claims”) arising out of conducting the authorized Space Activities under this Authorization, including by way of (i) breach of terms, conditions, representations and warranties of this Authorization; (ii) breach of any applicable domestic and international law and International Treaties; (iii) violation of any third party rights; (iv) claims of bodily injury to any person or damage to property; or (v) wilful negligence or misconduct of the Applicant.

17. General:

The Applicant shall extend all assistance, co-operation and compliance as required by IN-SPACE in the exercise of IN-SPACE and the Government of India’s functions under this Authorization.

Appendix-II

Application Templates for Different Categories of Authorization

[The application templates provided in this Appendix are merely indicative of the type of information and undertakings that an Applicant may have to furnish to IN-SPACe while seeking the Authorization. IN-SPACe may seek additional information and undertakings from the Applicant to satisfy itself that all conditions and pre-requisites are met by the Applicant, before considering granting the Authorization.]

Left Blank Intentionally

Information and Credentials of the Applicant	
(This general form shall be filled by the Applicant for all categories of Authorization)	
	Note: Applicant may identify/declare the information and content of this application, if any, as commercial confidence or trade/technical secrets, which may be treated by IN-SPACE with due diligence.
1	Name of the entity
	a) Legal Name
	b) Trade/Brand Name (if any)
2	Brief profile (nature of business presently conducted by the Applicant and expertise in the relevant field for which application is filed)
3	Whether the application has been rejected by IN-SPACE earlier? If so, provide details
4	Whether the application is for the amendment or extension of the Authorization issued by IN-SPACE previously? If so, provide details and the ground on which such amendment/extension is being sought.
5	Provide details of previous IN-SPACE Authorization issued to the Applicant, if any
6	Applicable Category of NGE/Government Entity (a) Company incorporated under the Companies Act, 2013 (b) Partnership firm established under the Indian Partnership Act and Limited Liability Partnership Act, 2008 (c) Trust under the Indian Trust Act, 1882 (d) Association of persons or body of individuals incorporated in India.
7	Constitution of the entity
	(LLP / Public Ltd / Pvt Ltd/ Trust/ PSU/CPSE/ or other legal entity (please specify)
8	Date of Incorporation/Establishment
9	Registration Number (CIN / LLPIN / Partnership Registration Number / Such Other Registration Number provided by the appropriate Government Agencies)
10	PAN / TAN Number
11	GSTIN Number
12	Specify whether recognized as a
	Start up
	Small Enterprise
	Micro Enterprise
	Medium Enterprise

	if yes, provide Registration Number and Date and upload certificate provided by DPIIT and Ministry of MSME	
13	Details of Incubator (if incubated)	
14	If Joint Venture, details of other partners and their share in the business	
15	Management and Control, Financial and Technical Credentials of the Applicant pertaining to the Space Activities for which the Authorization is being sought.	
16	Charter document such as MOA and AOA, LLP agreement, as applicable	
17	<p>Details of the Applicant's directors and key managerial personnel, including proof of address, proof of identity, contact details, nationality, current residence, other directorships and shareholding held by such individuals</p> <p>Whether the Applicant has a Chairperson, Managing Director, Chief Executive Officer, and/ or Chief Financial Officer, or a partner, or a trustee, as applicable who is a foreign national?</p>	
18	The details of shareholders or partners of the Applicant who hold ultimate/significant beneficiary ownership including those registered and unregistered in the Company Register, and including those having 10% or more shareholding.	
19	<p>Whether the Applicant is under Indian Management and Control as defined in IN-SPACE Norms, Guidelines and Procedures for implementation of the Indian Space Policy 2023 in respect of Authorization of Space Activities.</p> <p>Whether the Management and Control (as defined in Company Act 2013 or under IN-SPACE Norms, Guidelines and Procedures for ISP-2023 implementation) is with Non-Indian Resident, if so provide the details</p>	
20	Information on registration of criminal complaints, FIRs, criminal case(s), chargesheet, trials, conviction by courts, etc., if any, against key managerial personnel/ the promoters/ the controlling shareholders/ the partners/ beneficial owners/ trustees, as applicable, for the offences under Chapter VI, VII, VIII, IX, IXA, XIV, XVI and XXII of the Indian Penal Code, 1860, offences under the Official Secrets Act, 1923, offences under the Prevention of Corruption Act, 1988 and/or offences under the Prevention of Money Laundering Act, 2002 and/or aiding and/or abetting or engaging in a conspiracy for the commission of any of the foregoing offences , or other offences as notified by IN-SPACE.	

21	<p>Applicant's Net worth. Net worth shall be as defined in Companies Act, 2013 and as amended from time to time. The net worth of promoters/ directors/ partners/ trustees or the equity shares of the applicable personnel shall not be counted for determining the net worth of the Applicant. While calculating the net worth, the foreign currency shall be converted to Indian rupees at the prevalent rate, as indicated by the Reserve Bank of India as on the date of the Application received.</p>	
22	Annual Report for last 3 (three) years	
23	Income tax returns filed for last 3 (three) years	
24	GST returns filed for last 6 (six) months	
25	<p>Foreign direct investment (if any) If so, please provide shareholding (%) of the foreign investor along with Date of receipt, amount (absolute and %), Sector under which investment was received, and route (automatic/ Govt approval). Copy of the FDI approval, if any, should also be submitted</p>	
26	Operational, Infrastructural and Technical capabilities of the Applicant including the details of the facilities for carrying out the Space Activities for which the Authorization is being sought.	
27	Whether Applicant possesses any special approvals (like explosives/ chemicals / radiation/ Import Export Code (IEC) Number etc.) relevant to this application? If yes, upload applicable license/clearance documents.	
28	Registered office and address	
	Corporate office and address (if different from registered office)	
	Address for correspondence	
	Phone	
	Email	
	Website	
29	1 st contact person (Should be authorized signatory for subsequent agreement/documents/declaration)	
	Name	
	Designation	
	Mobile	
	Email	
30	2 nd contact person	
	Name	
	Designation	
	Mobile	
	Email	

31	Provide additional information as per the Security Clearance Proforma given in Annexure-1, if sought by IN-SPACE	
32	Provide documentary evidence to substantiate whether the person, who is submitting this application, is authorized to submit this application to IN-SPACE on behalf of the Applicant.	
UNDERTAKING/DECLARATION		
A	We hereby affirm that we have read and understood the existing laws, rules, regulations, and policies, and are compliant with applicable laws, rules, regulations and policies. We commit to remain compliant with any amendments made to the extant new applicable laws, rules, regulations, and policies as and when they are notified, and with any new and applicable laws, rules, regulations, and policies including the "Indian Space Policy – 2023" and associated Norms, Guidelines and Procedures issued by IN-SPACE towards implementation of this policy in respect of the Authorization of the Space Activities. We undertake that we shall fully comply with the conditions and directives given therein.	
B	We hereby declare that the above statements, information and data provided by us in this application form are true and correct to the best of our knowledge and belief. We understand that IN-SPACE reserves the right to terminate/suspend the Authorization, approval or any other permission provided to us, in case any of the information provided hereby is found to be incorrect or false at any point of time during the conduct of the said Space Activity	
C	We hereby declare that the Applicant and its key managerial personnel/ the promoters/ the controlling shareholders/ beneficial owners /the partners /trustees, as applicable, have not been convicted or are not subject to any proceedings, accused or charge sheeted for any of the offences under Chapter VI, VII, VIII, IX, IXA, XIV, XVI and XXII of the Indian Penal Code, 1860, offences under the Official Secrets Act, 1923, offences under the Prevention of Corruption Act, 1988 and/or offences under the Prevention of Money Laundering Act, 2002 and/or aiding and/or abetting or engaging in a conspiracy for the commission of the foregoing offences, other than declared in this application form. We also hereby undertake that we shall promptly inform IN-SPACE about the changes, if any, in the status of the above declaration during the processing of the application or after the issue of IN-SPACE Authorization till its validity period, as applicable. We also understand that IN-SPACE reserves the right to either reject/short-close the application or terminate/suspend/revoke the Authorization taking cognizance of such offences.	
D	We hereby declare that Applicant (i) is not bankrupt or being wound up / liquidated; (ii) does not have its affairs administered by the courts; (iii) has not entered into an arrangement with creditors or suspended business activities, and (iv) is not the subject matter of proceedings concerning the aforementioned matters arising from a under the Insolvency and Bankruptcy Code, 2016 or any other applicable law.	
E	We undertake that we shall inform IN-SPACE in writing and through email, within 48 (forty-eight) hours of any change in 'Management and Control' or shareholding pattern or an equivalent change in a partnership or trust of our company/entity. We understand that IN-SPACE in its sole discretion or in consultation with the relevant departments/ministries wherever necessary, may decide to reject the application, revoke, amend or issue fresh Authorization in such cases.	
	Signature of the Applicant:	
	Name in Block Letters:	Full Address:
	Official Seal/Stamp	Place:
	Tel: No:	Date:
	E-mail:	
	Website:	

Sl. No.	Establishment and/or Operation of Satellite/Constellation for Communication Services in GSO and/or NGSO using Indian or Non-Indian Orbital Resources. Application form No. IN:APP:01.01 Authorization Guidelines no. IN:AU:01.01 and IN:AU:01.02
33	Whether the application is for seeking extension of the operational life of the satellite and the previous Authorization
34	Select the orbit of the proposed satellite(s): GSO / MEO / LEO
Satellite/Constellation Details	
35	Whether multiple satellites or standalone satellite being proposed/planned. In case of multiple satellites, specify number of satellites
36	In case of NGSO constellation, provide number of satellites planned in the constellation (active & backup satellites, No. of Phases, if any)
37	Name of satellite(s)/constellation
38	No. of satellites for which Authorization is being sought
39	Mission objective
40	Satellite/constellation configuration, architecture and mission profile mass (dry & wet), Orbital parameters intended operational life spacecraft dimension (stowed & deployed) Bus configuration ((Bus type, solar panel, battery type & power, type of stabilization, pointing sensors, network architecture, Launch & Early Operation Phase and station keeping strategy, In-orbit testing plan etc.)
41	In case of NGSO constellation, provide orbital planes / satellites per plane, constellation configuration and architecture
42	Type of propulsion system (electrical/chemical/other, pls specify)
43	Propellant mass details (Eg. monopropellant/bipropellant, specify others) propellant for station keeping & orbit raising
44	Please provide safety assessment report w.r.t use of propellant, pressurant systems, any hazardous material such as explosives, radioactive material, etc. in the satellite. MSDS may be provided for each of such hazardous material, if any.
45	Satellite manufacturing details (own manufacturing/ procured, imported or indigenous)
46	Whether procurement/acquisition/transfer of ownership of the already operational in-orbit satellite is proposed. If so, please provide all the details with regard to previous ownership, orbital slot, ITU Filing under which the satellite was operating and health parameters and operational life of the satellite.
47	If the Applicant is a Subsidiary /Joint Venture/ Franchise/collaboration with a non-Indian Entity, the consent from both Applicant and such non-Indian Entity is to be furnished affirming that the complete control over the satellite/constellation shall be with the Applicant and the jurisdiction being under Indian government and law.
48	Tentative schedule for satellite realization along with major milestones such as design reviews, AIT, environmental tests, etc.
Payload details	
49	Number of payloads per satellite

50	<p>Hosted payloads: Yes / No If Yes - provide details of ownership of payload In case of hosted payloads from other NGEs, status of IN-SPACe Authorization, presence of any hazardous material in the payload. If so, MSDS and safety assessment report. Share the copy of agreement between satellite owner/operator and the hosted payload owner (whether other NGE or foreign entity), if applicable. Share the copy of declaration from the hosted payload owner that the payload does not contain any radioactive source.</p>
51	<p>Each payload configuration & architecture (channelization plan/transponder frequencies & bandwidth, user link & gateway link frequencies, data rate per transponder, modulation, throughput, number of beams, spot beams/single beam, coverage area, EIRP and G/T chart over coverage area, etc., as applicable) In case of NGSO, provide EIRP & G/T chart over India.</p>
52	TT&C frequencies, modulation, data rate, bandwidth
Ground Segment	
53	Details of satellite TT&C stations being proposed to be used (such as locations, ownership - self owned or service provider. Provide details of service provider like name, address, if applicable. If self-owned, provide the copy of IN-SPACe Authorization)
54	In case TT&C station located outside India, provide the location wise justification for using station(s) outside India.
55	Details of the Mission Control Centre [MCC] being proposed to be used (such as locations, Ownership - self owned or service provider. If self-owned, provide the copy of IN-SPACe Authorization. Provide details of service provider like name, address, if applicable.)
56	In case MCC station is located outside India, provide the location wise justification for using station(s) outside India.
57	Details of data security mechanism in the MCC (security to Indian traffic, access of data to security agency, etc)
58	Details of satellite hubs / gateways (locations, no. of gateways, configuration /architecture), Constellation Management Network Centre (Location, capability, configuration, network architecture etc.) and User terminal Details (terminal size, network architecture), as applicable.
ITU Filing, Frequency & Orbital Slot Details (For Indian Orbital Resources)	
59	Whether the proposal is to use the existing Indian ITU Filing or the new ITU Filing is proposed? Provide details
60	Name of the ITU Filing for payload & TT&C, if already filed
61	ITU Filing status for Payload (filing/coordination/BIU/Due Diligence status) along with strategy to achieve coordination with senior filings
62	ITU Filing status - for TT&C frequencies (filing/coordination/BIU/Due Diligence status) along with strategy to achieve coordination with senior filings
63	Payload frequency band and frequencies as per ITU Filing
64	Coverage details including latitude-longitude coordinates and EIRP & G/T chart over coverage & service area as per ITU Filing
65	TT&C frequency details as per ITU Filing (Carrier frequency, BW, beacon if any, data rate, modulation, encoding scheme, etc.)
66	Orbital slot / orbit parameters & coverage as per ITU Filing

67	Interference analysis with a view to protect incumbent Indian & IN-SPACE Authorized Satellite/Constellations and existing Indian ITU Filings in GSO & NGSO with overlapping frequencies, coverage for providing services over the intended service area without harmful interference. No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application. In case the Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/- 5 degrees of the proposed GSO orbital slot.
	ITU Filing, Frequency & Orbital Slot Details (if use of Non-Indian Orbital Resource is proposed)
68	Name of the ITU Filing for payload & TT&C along with name of the administration
69	ITU Filing status for payload (filing/coordination/BIU/Due Diligence status) along with strategy to achieve pending frequency coordination with satellite networks identified by ITU
70	ITU Filing status - for TT&C frequencies (filing/coordination/BIU/Due Diligence status) along with strategy to achieve pending frequency coordination with satellite networks identified by ITU
71	Details of frequency coordination agreements made for the proposed Orbital Resources, and pending frequency coordination with satellite networks identified by ITU
72	Payload frequency band and frequencies as per ITU Filing
73	Coverage details including latitude-longitude coordinates and EIRP & G/T chart over coverage & service area as per ITU Filing
74	TT&C frequencies, modulation, data rate, bandwidth as per ITU Filing
75	Orbital slot / Orbit parameters & coverage as per ITU Filing
76	Details of arrangements made with concerned foreign administration for using their Orbital Resources (Please enclose agreement, Authorization or relevant documents issued by respective administration)
77	Whether willing to operate the satellite under Indian ITU Filing eventually with appropriate arrangement within the ambit of ITU regulations and in consultation with Indian Administration, if feasible and applicable
78	<p>Interference analysis along with coordination status, if any, with a view to safeguard (a) operational services provided by incumbent Indian and IN-SPACE authorized Non-Indian Satellites/constellations, in GSO & NGSO, over India and (b) those existing Indian ITU Filings in GSO & NGSO with overlapping frequencies and coverage which are under consideration by IN-SPACE as potential candidates for the planned satellites by Indian Entities. Also outline the additional measures and its strategy, if required, to coexist with other satellite/constellation systems for providing services over India without harmful interference.</p> <p>No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application. In case the Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/- 5 degrees of the proposed GSO orbital slot.</p>

	Space Object registration
79	<p>Confirmation on the following: (a) Compliance to UN Debris Mitigation guidelines: complied /Not complied to be specified, (b) Compliance to DOS framework for safe & sustainable space operations: Complied/ Not complied / Not-Applicable to be specified, (Not applicable till the framework is released)</p> <p>Kindly also fill the Form as in Annexure-2 for consideration to register the Space Object in National Registry prescribed by IN-SPACE.</p>
80	Space Object registration details in case of in-orbit procurement/transfer of ownership is being proposed (launching state and registration number as per UNOOSA website as per the Registration Convention (1976))
	LAUNCH DETAILS
81	Launcher and relevant details (including Launch Facility)
82	Status and copy of Launch Service Agreement
83	Tentative Launch timeframe
84	Insurance(s) details, if any, taken by launch service provider including third party insurance along with copy of insurance(s) policy
85	Is the satellite already launched? If yes: launch date, launcher and other relevant details
	Regulatory License Details and Requirement
86	DoT operating & service licenses including clearances for ground stations - Obtained / Not-Obtained / In-process In case of 'Obtained' upload the copies
	SERVICE DETAILS
87	Intended users, application/ services, mobile or fixed services or both, etc.
88	Service Area (Please also indicate whether the intended service area is beyond Indian Territory)
	Miscellaneous
89	Details of indigenous elements, if any (Manufacturing/fabrication/testing/AIT/launch etc. may be highlighted)
90	Proposed / desired timeframe along with milestones, for the completion of the proposal.
91	Details, if any, of international / national collaborations, joint development, joint venture for this proposal.
92	Intellectual Property Rights, if any available with the NGE related to the proposal
91	Estimated cost of the project
92	Source of funding for this project
93	Clearance / approval / license of any other government department/ agencies obtained/under process, if any, for this proposal (details may be provided).
94	Any other information or specific details which IN-SPACE should know for processing the application
	UNDERTAKING/DECLARATION
F	<p>We agree to engage with the incumbent or new entrant satellite/constellation operator(s), as applicable, providing services over India for entering into coordination agreement or coexistence arrangement/agreement in good faith in order to co-exist and provide interference free services over India.</p> <p>We also undertake to carry out the requisite coordination, if any, for LEOP and In-orbit testing operations ensuring no harmful interference to other satellite networks.</p>

G	We agree to cease the emission from the Authorized Satellite/Constellation, as and when directed by IN-SPACe, in coordination with WPC, WMO and NOCC in case of the harmful interference to other satellite/constellation services not being resolved within the reasonable notice period.
H	We hereby agree to inform IN-SPACe and seek fresh/amendment to the Authorization, as decided by IN-SPACe and in accordance with the Norms, Guidelines and Procedures brought out by IN-SPACe for implementation of ISP-2023 in respect of Authorization, in case of change/replacement of the satellite/constellation.
I	We agree and understand that the Government may impose control on operations of the proposed satellite(s) or can instruct to switch-off the payload of the Authorized Satellite, in case of situation arising out due to conflict or natural disasters or times of emergency as declared or specified by Government of India or other such contingencies as may be specified by IN-SPACe.
J	We hereby submit our application to IN-SPACe for due consideration for authorizing us for establishment & operations of the satellite/constellation for communication services in GSO and/or NGSO using Indian or non-Indian Orbital resources mentioned in the application.
K	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACe and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
	Signature of the Authorized Signatory with Seal and Date

Sl. No.	Authorization of Non-Indian GSO and/or NGSO Satellite/Constellation to enable provisioning of its capacity in India for Communication Services Application form no. IN:APP:01.02 Authorization guidelines no. IN:AU:01.03
33	Whether the application is for seeking renewal/extension/amendment of the previous Authorization? If so, provide details
34	Whether satellite capacity is already being provisioned to provide service over India? If so, provide details such as total bandwidth/capacity (in MHz) being presently provisioned in India, frequencies, type of service for which the capacity is being provisioned, etc.
35	Select the orbit of the proposed satellite(s): GSO / MEO / LEO
SATELLITE/CONSTELLATION DETAILS:	
36	Whether the Applicant is Indian subsidiary, having joint venture/collaboration with the satellite operator or their authorized dealer/representative in India? Please specify. Documentary evidence to substantiate the contractual relationship, if any, of the Applicant with the satellite operator may be provided.
37	Whether the Non-Indian Satellite capacity is already being used in India either through lease agreement involving NSIL/Antrix (DoS) or through direct lease from the Non-Indian Satellite operators. If so, the details (such as copy of lease contract, validity, etc.) may be provided
38	Name of the satellite(s) (Constellation, in case of NGSO)
39	In case of NGSO, number of satellites planned in the constellation and number of satellites for which the Authorization is being sought
40	Details of the satellite operator who owns and controls the satellite operations (such as name, address, contact details, etc.)
41	In case the space asset is leased, the details of lease like Lease Agreement, Lease period, details of the satellite operator and payload proposed for utilization over India (Please furnish the relevant documents or Authorization letter from the lessor)
42	Satellite(s) details such as manufacturer, lift-off mass, orbital slot/orbit parameters, orbital planes / satellite per plane, constellation configuration & architecture, bus type, station keeping propellant, power, etc., as applicable.
43	Intended operational life of the satellite(s)/constellation and the duration for which the Authorization is sought (operational life should be confirmed by the satellite operator)
44	In case of NGSO, tentative schedule for constellation completion
Payload details	
45	Number of payloads in the satellite (provide brief description such as frequencies, coverage, number of channels/transponders/beams, etc.).
46	Satellite payload(s) for which the IN-SPACE Authorization is being sought for providing capacity over India. Please provide details for each of the payload such as payload configuration & architecture, channelization plan, transponder frequencies & bandwidth, user link & gateway link frequencies, throughput, number of beams, spot beams/single beam, etc., as applicable Coverage details including latitude-longitude coordinates and EIRP & G/T chart over coverage & service area. Separate EIRP and G/T chart over India.
47	Payload capacity for which Authorization is being sought (Partial or Full capacity)
48	Whether the satellite capacity is proposed to be provided through hosted payloads: yes / no If Yes - provide details of ownership of payload

	Share the copy of agreement between satellite owner/operator and the hosted payload owner In case of hosted payloads from other NGEs, copy of IN-SPACE Authorization to be provided
49	TT&C frequencies/band being used in satellite
	Ground Segment
50	Details of satellite TT&C Stations being used (such as locations, service provider details, if any)
51	Details of the MCC being used (such as locations and addresses, if any)
52	Details of satellite hubs / gateways (locations, no. of gateways, configuration/architecture), Constellation Management Network Centre (Location, capability, configuration, network architecture etc.) and user terminal Details (terminal size, network architecture), as applicable.
	ITU Filing Details
53	Name of the ITU Filing for payload & TT&C
54	ITU Filing status for payload & TT&C (filling/coordination/BIU/Due Diligence Status, as applicable)
55	Orbit parameters & coverage as per ITU Filing
56	Whether frequency coordination for the Orbital Resources is completed with all senior satellite networks identified by the ITU? If not, provide the details of the satellite networks with which the coordination is pending
57	Approval of the concerned foreign administration, which made the ITU Filing, for using their Orbital Resources (Please enclose agreement, Authorization or relevant documents issued by the respective administration)
58	Whether willing to operate the satellite under Indian ITU Filing eventually with appropriate arrangement within the ambit of ITU regulations
59	Interference analysis along with coordination status, if any, with a view to protect (a) operational services provided by incumbent Indian and IN-SPACE authorized Non-Indian Satellites/constellations, in GSO & NGSO, over India and (b) those existing Indian ITU Filings in GSO & NGSO with overlapping frequencies and coverage which are under consideration by IN-SPACE as potential candidates for the planned satellites by Indian Entities. Also outline the additional measures and its strategy, if required, to coexist with other satellite/constellation systems for providing services over India without harmful interference. No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application. In case the Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/- 5 degrees of the proposed GSO orbital slot.
	Space Object registration
60	Space Object registration details including the launching state and registration number as per UNOOSA website as per the Registration Convention (1976).
61	Copy of the license / Authorization from the respective non-Indian Government/regulatory authority for establishment & operations of the satellite
62	Confirmation of compliance to UN Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space in the operation of the satellite
	Launch Details
63	Launch date and launcher (including Launch Facility)

Regulatory License Details and Requirement	
64	DoT operating & service licenses including clearances for ground stations - Obtained / Not-Obtained / In-process In case of 'Obtained' upload the copies
SERVICE DETAILS	
65	Intended users, application/ services, mobile or fixed services or both, etc.
66	Service Area
Miscellaneous	
67	Proposed value addition to Indian space sector or Indian economy in general, if any (in terms of economy / employment / willingness to operate the satellite eventually under Indian ITU Filing, wherever feasible & applicable / local manufacturing of user terminals, launches by Indian Launch Vehicle, manufacturing in India and operations under Indian ITU Filing for the replacement satellites, etc., as applicable) Please elaborate.
68	Clearance / approval / license of any other government department/ agencies obtained/under process, if any, for this proposal (details may be provided).
69	Details, if any, of international / national collaborations, joint development, joint venture for this proposal.
70	Any other information or specific details which IN-SPACE should know for processing the application
UNDERTAKING/DECLARATION	
F	We hereby affirm that we have been authorized by the concerned satellite operator for providing the satellite capacity within Indian Territory to the users. We also undertake that we will inform IN-SPACE in writing as well as e-mail within 5 (five) working days in case such Authorization is withdrawn/discontinued anytime by the satellite operator along with the reason for such withdrawal.
G	We along with our satellite operator agree to engage with the incumbent or new entrant satellite operator(s), as applicable, providing services over India, for entering into coordination agreement or coexistence arrangement/agreement in good faith in order to co-exist and provide services over India without any harmful interference, failing which we understand that IN-SPACE reserves the right to take appropriate enforceable actions including rejection of the application or termination/suspension of the accorded Authorization as applicable.
H	We agree to cease the emission from the Authorized Satellite, as and when directed by IN-SPACE, in coordination with WPC, WMO and NOCC in case of the harmful interference to other satellite services not being resolved within the reasonable notice period.
I	We hereby agree to inform IN-SPACE within 48 (forty-eight) hours in case of any change in ownership, Management and Control of the satellite owner/operator or change/replacement of the satellite/constellation, and seek fresh/amendment to the Authorization, as decided by IN-SPACE and in accordance with the Norms, Guidelines and Procedures brought out by IN-SPACE for implementation of ISP-2023 in respect of Authorization.
J	We understand that the Authorization is liable for termination/suspension in case of situation arising out due to national security, conflict or times of emergency as declared or specified by Government of India or other such contingencies as may be specified by IN-SPACE.
K	We agree that the Authorization will be valid for the period authorised by IN-SPACE. We shall submit the application for fresh/extension/renewal of this Authorization for the extended period, if any. We also understand that a separate an amendment to this Authorization issued would be needed for provisioning the additional capacity, if required, over and above what is authorized by IN-SPACE.

L	We hereby submit our application to IN-SPACe for due consideration for Authorization of non-Indian GSO and/or NGSO satellite/constellation to enable provisioning of its capacity in India for communication services as mentioned in the application.
M	We hereby affirm that the application is in conformity with all the conditions and clauses, as given by IN-SPACe in the NGP and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
	Signature of the Authorized Signatory with Seal and Date

Establishment and/or Operation of Remote Sensing Satellite Systems and Amateur Satellite Systems Application form No. IN:APP:01.03 Authorization guidelines no. IN:AU:01.04	
33.	Whether the application is for seeking extension of the operational life of the satellite and the previous Authorization
34.	Select the orbit: GSO / MEO / LEO:
Satellite Details	
35.	Whether multiple satellites or standalone satellite being proposed/planned? In case of multiple satellite or constellation, specify number of satellites
36.	Name of satellite/Constellation.
37.	No. of satellites for which Authorization is being sought
38.	Mission objective (In case the mission is for the strategic applications such as SIGINT / COMINT / ELINT then such details may also be provided)
39.	Satellite Configuration, Mass (dry & wet), Orbital Parameters, Intended operational life, Spacecraft dimension (stowed & deployed), Bus configuration (Bus type, solar panel, battery type & power, type of stabilization, pointing sensors, Launch & Early Operation Phase and Station keeping strategy, In-orbit testing (IOT) plan etc.)
40.	Type of propulsion system (electrical/chemical/other, pls specify)
41.	Propellant mass details (e.g., monopropellant/bipropellant, specify others)
42.	Please provide safety assessment report w.r.t use of propellant, pressurant systems, any hazardous material such as explosives, radioactive material, etc. in the satellite. MSDS may be provided for each of such hazardous material, if any.
43.	Satellite manufacturing details (own manufacturing/ procured, imported or indigenous)
44.	Whether procurement/acquisition/transfer of ownership of the already operational in-orbit satellite is proposed. If so, please provide all the details with regard to previous ownership, orbital slot/orbital parameters and health parameters and operational life of the satellite.
45.	If the Applicant is a Subsidiary /Joint Venture/ Franchise/collaboration with a non-Indian Entity, the consent from both Applicant and such non-Indian Entity is to be furnished affirming that the complete control & jurisdiction over the satellite/constellation shall reside with the Applicant.
46.	Tentative schedule for satellite realization along with major milestones such as design reviews, AIT, environmental tests, etc.
Payload details	
47.	Type of Payloads (Optical / Microwave / Thermal / Meteorology etc.)
48.	No. of payloads per satellite
49.	Description of Each payload (specifications, Objective, etc.)

50.	<p>Hosted Payloads: Yes / No If Yes - provide details of ownership of payload/Satellite In case of hosted payloads from other NGEs, status of IN-SPACE Authorization Availability of agreement between satellite owner/operator and the hosted payload owner (whether other NGE or foreign entity) Presence of any hazardous material in the hosted payload. If so, submit Material Safety Data Sheet (MSDS) and Safety assessment report.</p>
51.	Spectral, spatial, radiometric, temporal resolutions and swath
52.	Onboard data security/encryption mechanism in case of the payload is ≤ 30 cm GSD
53.	Remote Sensing/EO Payload, Communication Payload and TT&C payload frequencies, bandwidth, data rate, modulations, etc.
54.	Specifications of communication payload(s) such as EIRP, coverage, etc.
	Ground Segment
55.	Details of satellite TT&C Stations being proposed to be used (such as locations, Ownership - self owned or through service provider. Provide details of service provider like name, address, if applicable. If self-owned, provide the copy of IN-SPACE Authorization)
56.	In case TT&C station located outside India, provide the location wise justification for using station(s) outside India.
57.	Details of the Mission Control Centre [MCC] being proposed to be used (such as locations, Ownership - self owned or service provider. If self-owned, provide the copy of IN-SPACE Authorization. Provide details of service provider like name, address, if applicable.)
58.	In case MCC station is located outside India, provide the location wise justification for using station(s) outside India.
59.	Details of data security mechanism in the MCC (security to Indian traffic, access of data to security agencies, etc.)
60.	Details of EO data reception ground stations (such as locations, Ownership - self owned or service provider. If self-owned, provide the copy of IN-SPACE Authorization. Provide details of service provider like name, address, if applicable.)
	ITU Filing Details
61.	Whether the proposal is to use the existing Indian filing or new ITU Filing is proposed. Provide details
62.	Name of the ITU Filing for Amateur/Remote Sensing/EO payload, communication payload & TT&C payload, if already filed
63.	Amateur/Remote sensing/EO payload, communication payload & TT&C payload frequency band and frequencies, data rate, bandwidth, modulation as per the ITU Filing
64.	Whether intend to use non-Indian ITU Filing. If so, please provide details along with the arrangements made with foreign administration and copy of Authorization/frequency assignment from the administration.
65.	ITU Filing status for Amateur/Remote Sensing/EO payload, communication payload & TT&C payload (filling/coordination/BIU/Due Diligence Status) along with strategy to achieve coordination with senior filings

66.	Coordination status with IARU, if applicable
67.	Orbit Parameters & Coverage as per ITU Filing
68.	Interference analysis with a view to protect incumbent Indian & IN-SPACe Authorized Satellite/Constellations and existing Indian ITU Filings with overlapping frequencies which are under consideration by IN-SPACe as potential candidates for the planned satellites by Indian Entities, along with underlining additional measures and strategy to coexist with other satellite systems serving India to provide interference free services. No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application
Space Object Registration	
69.	Confirmation on the following: (a) Confirmation on compliance to UN Debris Mitigation guidelines: Complied /Not complied to be specified, (b) Compliance to DOS framework for safe & sustainable space operations: Complied/ Not complied / Not-Applicable to be specified, (Not applicable till the framework is released) Kindly also fill the Form as in Annexure-2 for considering the Registration of Space Object in National Registry
70.	Space Object registration details in case of in-orbit procurement/transfer of ownership is being proposed (launching state and registration number as per UNOOSA website)
Launch Details	
71.	Launcher and relevant details (including Launch Facility)
72.	Status and copy of Launch Service Agreement
73.	Tentative Launch timeframe
74.	Insurance(s) details, if any, taken by launch service provider including third party insurance along with copy of insurance(s) policy
75.	Is the satellite already launched? If yes: launch date, launcher and other relevant details
Regulatory License Details and Requirement	
76.	DoT operating & service licenses including clearances for ground stations - Obtained / Not-Obtained / In-process In case of 'Obtained' upload the copies
Service Details	
77.	Intended service(s) & applications
78.	Target users and service area
Miscellaneous	
79.	Details of indigenous elements, if any (Manufacturing/fabrication/testing/AIT/launch etc. may be highlighted)
80.	Proposed / desired timeframe along with milestones, for the completion of the proposal.
81.	Planned deployment schedule of satellite/constellation
82.	Details, if any, of international / national collaborations, joint development, joint venture for this proposal.
83.	Intellectual Property Rights, if any available with the NGE related to the proposal
84.	Estimated cost of the project
85.	Source of funding for this project

86.	Clearance / approval / license of any other government department/ agencies obtained/under process, if any, for this proposal (details may be provided).
87.	Any other information or specific details which IN-SPACe should know for processing the application
UNDERTAKING/DECLARATION	
F	We agree to engage with the incumbent or new entrant satellite operator(s), as applicable, providing services over India for entering into coordination agreement or coexistence arrangement/agreement in good faith in order to co-exist and provide interference free services over India.
G	We agree to cease the emission from the Authorized Satellite, as and when directed by IN-SPACe in case of the harmful interference to other satellite services not being resolved within the reasonable notice period.
H	We also agree to abide by the “DST Guidelines for acquiring and producing geospatial data and geospatial services including maps” and as amended from time to time more specifically the extant guidelines pertaining to prevailing negative list of sensitive attributes along with stipulated regulations. We understand that IN-SPACe reserves the right to take appropriate action including termination/suspension of the Authorization issued by IN-SPACe in case of any violation of these guidelines by us.
I	We hereby agree to inform IN-SPACe and seek fresh/amendment to the Authorization, as decided by IN-SPACe and in accordance with the Norms, Guidelines and Procedures brought out by IN-SPACe for implementation of ISP-2023 in respect of Authorization, in case of change/replacement of the satellite/constellation.
J	We agree and understand that the Government may impose control on operations of the proposed satellite(s) or can instruct to switch-off the payload of the Authorized Satellite, in case of situation arising out due to conflict or natural disasters or times of emergency as declared or specified by Government of India or other such contingencies as may be specified by IN-SPACe.
K	We hereby submit our application to IN-SPACe for due consideration for authorizing us for establishment & operations of the Remote Sensing satellite systems using Indian or Non-Indian Orbital Resources mentioned in the application.
L	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACe and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
Signature of the Authorized Signatory with Seal and Date	

Sl. No.	Application for seeking advisory-note from IN-SPACE for making fresh ITU Filing for space-based systems under Indian Administration Application form No. IN:APP:01.04
33	Orbital Slot, type of orbit: SSO, polar, GSO, NGSO etc
34	Frequencies in all applicable frequency bands
35	Other parameters such as Bandwidth, data rate, modulation, coverage & service area contour, EIRP & G/T Contours
36	Intended applications & services
37	In case of the filing is for TT&C operations, provide the detailed specifications/parameters of the TT&C payload - such as spot frequencies, data rate, bandwidth, modulations, EIRP, etc.
38	Orbital plane & Inclination - in case of NGSO satellite
39	Planned number of satellites/constellation size, as applicable
40	Downlink & Uplink earth station / TT&C Station locations
41	Timeline for establishment of satellite and realization plan with major milestones (CDR, Dis-assembled mode IST, AIT, environmental tests and launch)
42	<ul style="list-style-type: none"> • Interference analysis with a view to protect incumbent Indian & IN-SPACE Authorized Satellites/Constellations and existing Indian ITU Filings in GSO & NGSO with overlapping frequencies, coverage along with explaining the strategy for the coexistence or achieving the coordination with other senior satellite networks for providing services over the intended service area without harmful interference. • No analysis would be required to be submitted, if a coordination/coexistence agreement with the relevant satellite system(s) already exists, although reference to such agreement(s) shall be brought out in the application. In case the Authorization is being sought for a GSO satellite, the interference analysis shall be carried out by the Applicant for those satellites/ITU Filings which are within +/- 5 degrees of the proposed GSO orbital slot.
43	Whether already applied for Authorization for establishment and/or operations of Space Based systems for communication from IN-SPACE. If yes, details thereof
44	Major parameters of the intended satellite(s) such as payload details, lift off mass, throughput, number of transponders/beams, resolution, as applicable, optimal/microwave/hyperspectral/amateur satellite payloads, etc.
UNDERTAKING/DECLARATION	
F	We hereby submit our application to IN-SPACE for due consideration for approving to apply for fresh ITU Filing for space-based systems under Indian Administration as mentioned in the application.
G	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACE and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
Signature of the Authorized Signatory with Seal and Date	

Sl. No.	Operation of the Space Transportation Systems: Undertaking Sub-orbital and/or Orbital Launches from Indian Territory and/or outside the territory of India. Application form no. IN:APP:02.01 Authorization Guidelines No. IN:AU:02.01	
33	Provide details of the previous IN-SPACe Authorization, if any, for the same or similar launch vehicle	Changes to be highlighted
34	Category of Launch mission: a) Guided orbital LV b) Guided sub-orbital LV c) Unguided sub-orbital LV d) Others	
LAUNCH FACILITY DETAILS		
35.	Launch Facility details such as location, type, ownership, etc. and identification of facilities that will be utilised for the launch	<p>NGE to upload copy of the “agreement for sharing of facilities” too in case ISRO facility is being utilised for launch.</p> <p>The clauses covering damage to ISRO property/ personnel present during the launch activity to be highlighted.</p>
36.	<p>In case the launch is undertaken from outside Indian Territory, then provide the copy of the agreement with the concerned non-Indian Entity and the approval/license from the concerned non-Indian regulatory authority.</p> <p>Whether Third-Party Liability arising due to launch has been appropriately transferred/shared to the concerned non-Indian Launching State</p>	Attach if applicable
Mission Details		
37.	Mission objectives	
38.	<p>Mission details</p> <p>a) Mission Trajectory (Launch trajectory, orbital inclination, orbit altitude etc.)</p> <p>b) Staging event with time</p> <p>c) Impact location</p>	Attach adequate details to verify the authenticity of trajectory and impact points
39.	Launch window and NOTAM status along with coordinates and polygons of NOTAM/Danger zone	Attach copy of NOTAM, if issued, or provide clearance of the relevant review committee on launch window, impact location and reliability pending issuance of NOTAM.

Broad configuration of Launch Vehicle Systems		
40.	Description of the launch vehicle including: (a) the structural system; (b) the propulsion system; (c) communication and guidance system including flight control, data acquisition; (d) the electrical system, including the power supply and power distribution; (e) Safety systems including flight termination system and identification of hazard	A configuration control document may be submitted for each LV and only changes may be highlighted in future
41.	Data and analysis w.r.t reliability of each stage and integrated launch vehicle.	
42.	FMECA analysis for the launch vehicle	
43.	Confirmation on the following: (a) Compliance to UN Debris Mitigation guidelines: complied /Not complied to be specified, (b) Compliance to DOS framework for safe & sustainable space operations: Complied/ Not complied / Not-Applicable to be specified, (Not applicable till the framework is released) including (i) Submission of debris (spent stages) related information in the stipulated format as per Annexure-3. (ii) Measures to minimize potential for post-mission break-ups resulting from stored energy. (iii) Measures to limit the long-term presence of launch vehicle upper stage in orbital region after the end of the mission.	Complied : ____ (Yes/ No to be filled by Applicant) Attach SSA details in stipulated format
44.	Compliance to national (NFAP) and international (ITU-R) regulatory guidelines with respect to usage of frequencies and availability of operating licenses/necessary clearance of DoT on the ground stations being used to support the launch mission along with information on: (i) Carrier Frequencies, modulation, bandwidth, and data rate used for TTC; (ii) List of TT&C stations being used along with its geographical location; (iii) Ownership details of the TT&C stations (iv) DoT Operating license for ground stations – Obtained / Not Obtained / In-process; (v) ITU-R filing name and its status for TTC frequencies if applicable	Complied : ____ (Yes/ No to be filled by Applicant) Attach details on Carrier Frequencies, modulation, bandwidth, and data rate used for TTC; along with a list of TTC stations being used (DoT licence details to be included for Indian stations)
Satellite/Payload details		
45.	a) Name, class, configuration, physical dimensions and weight of each Satellite/Payload b) Owner(s) of each Satellite/Payload and end user(s) or operators of Satellite/Payload c) Orbit Injection parameters of all the satellites d) List of other payloads, if any e) Type, quantity of Hazardous materials and radioactive materials in the satellite, if any, along with safety assessment report.	submitted for each LV and only changes

46.	<p>In case of launch vehicle carrying the satellite from Indian Entities:</p> <ul style="list-style-type: none"> i. Copy of Launch Service Agreement (LSA) containing suitable clauses on third-party liability, transfer of liability and satellite registration aspects; ii. Information on the ownership of the satellite and registration as Space Object as per UN Registration Convention (1976); iii. Confirmation on availability of IN-SPACE Authorization iv. Confirmation on completion of safety consideration checks v. Presence of any hazardous material in the Satellite/payload. If so, submit Material Safety Data Sheet (MSDS) and Safety assessment report. 	Attachment to be included
47.	<p>In case of launch vehicle carrying the foreign satellite:</p> <ul style="list-style-type: none"> i. Copy of Launch Service Agreement (LSA) containing suitable clauses on third-party liability, transfer of liability and satellite registration aspects; ii. Information on the ownership of the satellite and registration as Space Object as per UN Registration Convention; iii. Confirmation on completion of safety consideration checks. iv. ITU Filing details v. Whether Authorization from the respective Nation for undertaking this activity is obtained, If so, copy of such approval to be provided. vi. Intended objective of the satellite, post injection orbit plan and life, planned re-entry to Earth atmosphere, if any. 	Attachment to be included
48.	Upload/attach third party and other insurance policy document, if any, containing suitable clauses as prescribed in the guidelines on liability related aspects	
49.	Details of the Indigenous element, if any (Manufacturing/fabrication/ Testing of hardware & software etc. in India may be highlighted)	
50.	Proposed / desired timeframe along with milestones, for the completion of the proposal.	
51.	Details, if any, of International / National Collaborations, Joint Development, Joint Venture for this proposal.	
52.	Intellectual Property Rights, if any available with the Applicant related to the proposal	
53.	Estimated cost of the project	
54.	Source of funding	

55.	Confirmation on availability of PESO clearance/license for handling the explosives, as applicable; (Exempted for launches happening from ISRO launch facility under the supervision of ISRO experts)	
56.	Clearance / Approval / License of any other Government Department/ Agencies obtained/under process, if any, for this proposal (Details may be provided).	
57.	Any other information or specific details which IN-SPACE should know for processing the application	
	UNDERTAKING/DECLARATION	
F	We hereby submit our application to IN-SPACE for due consideration for authorizing Sub-orbital and/or Orbital Launches from Indian Territory and/or outside the territory of India.	_____ (Yes/ No to be filled by Applicant)
G	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACE and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.	
	Signature of the Authorized Signatory with Seal and Date	

Sl. No.	Establishment and Operation of Satellite Control Centre (SCC) / TT&C Earth Station / Remote Sensing Data reception station / Mission Control Centre Application form No. IN:APP:04.01 Authorization Guidelines no. IN:AU:04
33.	Whether the application is for seeking renewal/extension/amendment of the previous Authorization? If so, provide details.
	Station Details:
34.	Make the relevant selection: a) Satellite Control Centre (SCC) [consists of two elements – MCC and TT&C]; b) Only Mission Control Centre (MCC) c) Only TT&C Earth Station d) Only Remote Sensing Data reception station e) Any other category (such as radars, telescope for SSA etc.), please specify <i>(Multiple selections is allowed, details are to be furnished for each of the selection)</i>
35.	Fixed, Mobile or transportable Station?
36.	Intended purpose/type of the proposed station, such as GSO, NGSO, Communication, Remote sensing services; Deep space missions (Interplanetary), SSA, for launch support, etc.
37.	Establishment and Operation of Ground station for self-use or GSAAS (Ground Station as a Service) or both
38.	Location (complete Address, landmark, latitude, longitude, area)
39.	Details of land leased / owned / procured / rented for establishment and operation of Ground Station. Furnish the documentary evidence, if any.
40.	In case Ground station located outside Indian Territory, provide the location wise justification in respect of the significant technical or business advantages that the location of such stations outside the Indian Territory provides and does not pose a threat to the security of the Republic of India or its interests.
41.	Ownership - self owned, partnership or any other arrangement
	Technical Information
42.	Specification and Configuration of the Ground Station (RF and Baseband details)
43.	Ground System Architecture including: ✓ Ground station terminal, ✓ Mission Operation Centre (MOC), ✓ Ground station data storage and network
44.	Frequency band and Frequency Range being supported for Uplink purpose (Both the capability of the station and the actual band of operations and carrier frequencies & BW)
45.	Frequency band and Frequency Range being supported for Downlink purpose (Both the capability of the station and the actual band of operations and carrier frequencies & BW)
46.	Antenna Size, Height above the Ground, Gain (Tx & Rx), G/T, Max uplink power & EIRP, tracking system configuration & specifications/capabilities, RF and Baseband details including Data rate, modulation capability, etc.
47.	Mode of signal transfer between TT&C and MCC and its security mechanism. Details of Data security mechanism in the MCC (security to Indian traffic, access of data to security agencies, provision for the RF signals monitoring and providing feed to DoT, etc). Please provide communication networking flow diagram.

48.	Mode of transmission of the received Remote Sensing Satellites data to the Satellite Operator/Owner or its authorized dealer for Data Dissemination and its security aspects. Please provide communication networking flow diagram.
49.	Details of deployed software, hardware, encryption, data security mechanism, network, 24x7 support system, respond time, escalation matrix etc.
50.	Details of provisions to cease the operations of the identified satellite/constellation/Launch vehicle being controlled from the MCC station(s), whether within or outside Indian Territory, as and when directed by IN-SPACE for any national security or geopolitical considerations, arise if any.
Regulatory License Details and Frequency assignment Requirement	
51.	Clearance / Approval / License of any other Government Department/ Agencies including DoT obtained/under process, if any, for this proposal (Details may be provided). Details of SACFA clearance and DoT Operating license for ground station - Obtained/ Non-Obtained/ In-process
Miscellaneous	
52.	Details of Indigenous Elements, if any (Manufacturing/fabrication/testing etc. may be highlighted)
53.	Proposed / desired timeframe along with milestones, for the completion and operationalization of the Ground Station.
54.	Details, if any, of International / National Collaborations, Joint Development, Joint Venture for this proposal.
55.	Intellectual Property Rights, if any available with the NGE related to the proposal
56.	Expected date of commencement of operations
57.	Estimated cost of the project
58.	Source of funding for this project
59.	Any other information or specific details which IN-SPACE should know for processing the application
Declarations/Undertakings	
F	<p>We agree to cease the operations of the identified satellite/constellation/Launch vehicle being controlled from the authorized MCC and/or TT&C station(s) or cease the emission from such authorized stations, whether within or outside Indian Territory, without any delay as and when directed by IN-SPACE for the reasons involving national security, geopolitical considerations or harmful interference to other satellite network.</p> <p>We understand that IN-SPACE reserves the right to take appropriate action including termination/suspension of the Authorization issued by IN-SPACE in case of any violation of these guidelines by us</p>
G	<p>We hereby agree that we shall provide/supply the data being received by the proposed ground station only to the concerned satellite operator/owner or its authorized dealer through secured mechanism, and not to any other entity or user. However, we shall make available the data being received/transmitted from the Ground Station to IN-SPACE or other Departments/Agencies of Government of India, as and when demanded and without undue delay, for the reasons involving national security or such critical considerations.</p>
H	<p>We hereby undertake that we shall ensure that the operation of the authorized station at any time does not cause harmful interference to other satellite networks or launch vehicle operations, as applicable. We shall be responsible for confirming and ensuring that the requisite approvals/Authorization from the concerned Indian and/or non-Indian government/regulatory authorities, as applicable, are in place and all national and international radio regulations are complied with, in respect of operations of the satellite/constellation/Launch vehicle being controlled/supported by the authorized ground station.</p>

I	If any station is already set up in the prohibited areas as notified by Government of India, we undertake the shifting of such station to another location if asked by IN-SPACe/ Government of India.
J	We agree and undertake that we shall maintain complete details of the satellite(s)/launch vehicle missions and satellite operator(s)/owner(s) or Launch Operator which are being supported by the authorized station(s), and shall promptly furnish such information to IN-SPACe or any other government agencies as and when demanded.
K	We agree and understand that the Government may impose control on operations of the proposed ground station, in case of situation arising out due to conflict or natural disasters or times of emergency as declared or specified by Government of India or other such contingencies as may be specified by IN-SPACe.
L	We hereby submit our application to IN-SPACe for due consideration for authorizing us for establishment & operations of the ground system.
M	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACe and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
	Signature of the Authorized Signatory with Seal and Date

Application Form for seeking the Authorization for Data Disseminator for dissemination of high-resolution data (primary EO data pertaining to Indian Territory and of GSD at nadir <=30cm)

**Application form no. IN:APP:05.01
Authorization guidelines no. IN:AU:05.01**

Sl. No.	Information sought
33.	Provide the details of the previous Authorization Certificate by IN-SPACE, if any
34.	Whether the application is for the renewal of the Authorization after expiry of the validity or is it due to change in ownership, Management and Control of your Entity/Company. If so, provide the details
Satellite and Satellite Owner / Operator information	
35.	Number of satellites for which the Authorization is being sought (for multiple satellites, pls provide the details pertaining to each satellite given in the following rows)
36.	Satellite name
37.	Whether satellite is a part of a Constellation (if so, provide details)
38.	Payload(s) details/specifications (such as resolution/GSD, swath, revisit time) for which Authorization is being sought
39.	Satellite owner/Operator Name Name of the contact person Email Address for correspondence
40.	Shareholding pattern of the satellite owner
41.	Details of all registered or unregistered entities/individuals which are holding more than 10% shareholding directly or indirectly or exercising control over the Satellite Owner
42.	Space Object registration details as per UNOOSA including country of registration
43.	Whether the satellite is operational in-orbit? If so, estimated operational life of the satellite
44.	Consent of the Satellite operator permitting the Applicant Data Disseminator to sell/disseminate its satellite data (share copy), along with validity of such permission
Information on Mechanism for Data Sourcing, Archival, Retrieval and Dissemination	
45.	Whether Source of Data is satellite operator itself or Data Disseminator authorized by the satellite operator? Provide the name, address and contact details of the entities from which data is being sourced.
46.	Mode of sourcing the Primary Data from the satellite operator and the associated security mechanism to prevent unauthorised access.
47.	Details of data archival & retrieval mechanism and location (physical storage, cloud etc.) along with security measures proposed to be adopted to prevent unauthorised access to the Primary Data
48.	Mechanism for data dissemination to the user (i.e. download from the website/cloud by the user, physical handing over etc.) along with measures in place to prevent re-dissemination, secure custody of the data.
49.	Any other information or specific details which IN-SPACE should know for processing the application

UNDERTAKING/DECLARATION	
F	We hereby affirm that we have been authorized by the concerned satellite operator/OEM/owner for selling/disseminating the concerned satellite data pertaining to Indian Territory to the users. We also undertake that we will inform IN-SPACE in writing/e-mail within 5 (five) working days in case such Authorization is withdrawn/discontinued anytime by the satellite operator/OEM/owner along with reasons for such withdrawal.
G	We hereby affirm that we have read and understood the existing laws, rules, regulations, and policies, and are compliant with applicable with laws, rules, regulations and policies. We commit to remain compliant with any amendments made to the extant new applicable laws, rules, regulations, and policies as and when they are notified, and with any new and applicable laws, rules, regulations, and policies including “National Geospatial Policy, 2022”, “Guidelines for acquiring and producing geospatial data and geospatial data services including maps”, “Indian Space Policy – 2023” and associated Norms, Guidelines and Procedures issued by IN-SPACE towards implementation of this policy in respect of the Authorization of the Space Activities. We undertake that we shall fully comply with the conditions and directives given therein.
H	We also agree to abide by the “DST Guidelines for acquiring and producing geospatial data and geospatial services including maps” and as amended from time to time more specifically the extant guidelines pertaining to prevailing negative list of sensitive attributes along with stipulated regulations. We understand that IN-SPACE reserves the right to take appropriate action including termination/suspension of the Authorization issued by IN-SPACE in case of any violation of these guidelines by us.
I	We undertake that we shall verify the credentials of the user along with the veracity of the information provided by the user, as given in the Annexure-A, before disseminating the data. We shall also maintain record of dissemination of all high-resolution data as per Annexure-A, and provide this information to IN-SPACE pertaining to each of the Data Dissemination transaction carried out by us for every quarter of the calendar year, latest by one month after the end of that quarter (e.g., The record of the quarter Jan – Mar shall be submitted to IN-SPACE before 30th April of that calendar year).
J	We hereby undertake to take all possible measures to ensure that the authorized high-resolution data is not re-disseminated, whether through direct dissemination, loan, copy or any other means. Further we also undertake to adopt all possible measures to ensure, that the disseminated data is kept under safe custody of the responsible authority within the user’s establishment in a secured manner to ensure that no un-authorized person / entity has access to it (one of the possible measures could be to disseminate the data under a legally tenable agreement/contract with the user that has the provisions to these effect). We understand that IN-SPACE has the right to check and verify such measures from time to time or as and when necessary.
K	We hereby agree to inform IN-SPACE within 48 (forty-eight) hours in case of any change in ownership, Management and Control of the satellite owner/operator or change/replacement of the satellite/constellation, and seek fresh/amendment to the Authorization, as decided by IN-SPACE and in accordance with the Norms, Guidelines and Procedures brought out by IN-SPACE for implementation of ISP-2023 in respect of Authorization.
L	We hereby agree to inform IN-SPACE in writing and through email within 30 (thirty) days of any change in the jurisdiction & control pertaining to registration in UN data base in accordance with the Registration Convention.

M	We hereby agree to abide by the guidelines issued by IN-SPACe time to time on dissemination of high-resolution data. We also hereby understand that dissemination of high-resolution data without IN-SPACe Authorization would be in non-compliance to Indian Space Policy - 2023.
N	We agree that the Primary Data and the Value-Added Products concerning the areas of national security shall be made accessible to the Government on demand, on a non-discriminatory basis.
O	We hereby submit our application to IN-SPACe for due consideration for authorizing us as Data Disseminator for the satellite(s)/payload(s) mentioned in the application.
P	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACe and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
	Signature of the Authorized Signatory with Seal and Date

Annexure-A to Application form no. IN:APP:05.01	
Section 1 (Information/Record to be provided to IN-SPACE periodically)	
<p>For each Data Dissemination transaction (whether commercial or free of cost) of the Primary Data of GSD at nadir $\leq 30^\circ$, below information needs to be collected by the Authorized Data Disseminator and submitted to IN-SPACE on IN-SPACE Digital Platform (IDP) every quarter of the calendar year, latest by one month after the end of that quarter (e.g., The record of the quarter Jan – Mar shall be submitted to IN-SPACE before 30th April of that calendar year).</p>	
1	Details of the User to whom the Primary Data is being provided or Primary Data being used for the self consumption
a.	Whether self-consumption or dissemination to other users
b.	Type (Govt./PSU/Pvt. Etc.)
c.	Legal Name of the Entity
d.	Brand & Trade name, if any:
e.	Address
f.	<p>Copy of Identification in case of Indian NGE (Registration Number (CIN / LLPIN / Partnership Registration Number / Such Other Registration Number provided by the appropriate Government Agencies)</p> <p>Copy of identification provided by the appropriate Govt. Authority for Non-Indian Entity</p>
g.	<p>For Indian NGE, Foreign Direct Investment, if any, if so provide details including whether the Management and Control is with Indian Citizen or not</p> <p>For Non-Indian Entity, please provide the details of the Officer(s)/Executive(s)/ Partner(s)/ Trustee(s) and their citizenship, having the Management and Control of the entity.</p>
h.	Name and contact details of the Authorized person under whose custody the data is being kept.
i.	Project Name & End use of the data
j.	Data Dissemination date and time
Information on data disseminated	
a.	Name of the Satellite & Payload
b.	Area of Interest depicted on India Map (including Lat, long, polygon):
c.	Name of the shape file:
d.	Size of the shape file in sq. Km.:
e.	Fresh tasking/Archive data (share details of satellite pass, date etc.):
f.	Period of interest:
g.	Frequency of Data:
h.	cloud %:
i.	Off Nadir Angle (ONA) in deg.:
Section 2 (Information to be maintained by the Authorized Data Disseminator in their safe custody and to be provided to IN-SPACE as and when asked.)	
Additional Details of the User to whom the data is being provided	
a.	Copy of PAN / TAN Number (for Indian Entity)
b.	Copy of GSTIN Number (for Indian Entity)

c.	In case of Non-Indian Entity, credentials of the Non-Indian Entity to be verified as per the extant regulations of the respective foreign nation
d.	Copy of Memorandum of Association and Articles of Association of the company (in case of NGE/Non-Indian Entity)
e.	Copy of Annual report of the company for the previous two Financial Years/ Financial profile (in case of NGE/Non-Indian Entity)

Application Form for the Registration of the Data Disseminator with IN-SPACE for dissemination of Primary Data pertaining to Indian Territory and greater than 30cm GSD at nadir from earth observation/Remote Sensing satellite.

**Application form No. IN:APP:05.02
Authorization guidelines No. IN:AU:05.02**

Sl. No.	Information
33	Provide the details of the previous registration certificate by IN-SPACE, if any
34	Whether the application is for the renewal of the registration after expiry of the validity or is it due to change in ownership, Management and Control of your Entity/Company. If so, provide the details
Space Object information	
35.	Names of the Satellite(s) the data of which the Applicant intends to disseminate (in case of multiple satellite, pls provide details in the rows given below for each of the satellites)
36.	Payload(s) details/specifications (such as resolution/GSD, swath, revisit time) for which the Applicant intends to register as a Data Disseminator
37.	Satellite owner/Operator Name Name of the contact person Email Address for correspondence
38.	Space Object registration details as per UNOOSA including country of registration
39.	Estimated operational life of the satellite
40.	Whether Applicant is the satellite operator/owner for which it intends to register as a Data Disseminator.
41.	Whether Source of Data is satellite operator itself or Data Disseminator authorized by the satellite operator? Provide the name, address and contact details of the entities from which data is being sourced.
42.	Consent of the Satellite operator permitting the Applicant Data Disseminator to sell/disseminate its satellite data (share copy), along with validity of such permission
43.	Any other information or specific details which IN-SPACE should know for processing the application
UNDERTAKING/DECLARATION	
F	We hereby affirm that we have been authorized by the concerned satellite operator/OEM/owner for selling/disseminating the concerned satellite data pertaining to Indian Territory to the users. We also undertake that we will inform IN-SPACE in writing/e-mail within 5 (five) working days in case such Authorization is withdrawn/discontinued anytime by the satellite operator/OEM/owner along with reasons for such withdrawal.
G	We hereby affirm that we have read and understood the existing laws, rules, regulations, and policies, and are compliant with applicable with laws, rules, regulations and policies. We commit to remain compliant with any amendments made to the extant new applicable laws, rules, regulations, and policies as and when they are notified, and with any new and applicable laws, rules, regulations, and policies including “National Geospatial Policy, 2022”, “Guidelines for acquiring and producing geospatial data and geospatial data services including maps”, “Indian Space Policy – 2023” and associated Norms, Guidelines and

	Procedures issued by IN-SPACE towards implementation of this policy in respect of the Authorization of the Space Activities. We undertake that we shall fully comply with the conditions and directives given therein.
H	We also agree to abide by the “DST Guidelines for acquiring and producing geospatial data and geospatial services including maps”, and as amended from time to time more specifically the extant guidelines pertaining to prevailing negative list of sensitive attributes along with stipulated regulations. We understand that our registration with IN-SPACE as Data Disseminator can be terminated/suspended in case of any violation of these guidelines by us.
I	We undertake that we shall maintain the record and provide intimation to IN-SPACE for each of the Data Dissemination transaction which is done on commercial terms periodically as per the guidelines in Annexure-A. The intimation carrying information as per Annexure-A, will be provided for every quarter of the calendar year, latest by one month after the end of that quarter (e.g., The record of the quarter Jan – Mar shall be submitted to IN-SPACE before 30th April of that calendar year). We understand that our registration with IN-SPACE as Data Disseminator can be terminated/suspended in case of any violation of these guidelines by us.
J	We hereby agree to abide by the guidelines issued by IN-SPACE time to time on dissemination of data. We also hereby understand that dissemination of data on commercial terms, will be non-compliance to the Indian Space Policy-2023 without registration with IN-SPACE as a Data Disseminator.
K	We agree that the Primary Data and the Value-Added Products concerning the areas of national security shall be made accessible to the Government on demand, on a non-discriminatory basis.
L	We understand that the registration with IN-SPACE as Data Disseminator is liable for termination/suspension in case of situation arising out due to national security, conflict or natural disasters or times of emergency as declared or specified by Government of India or other such contingencies as may be specified by IN-SPACE.
M	We hereby submit our application to IN-SPACE for due consideration for registering us as Data Disseminator for the satellite(s)/payload(s) mentioned in the application.
N	We hereby affirm that the application is in conformity with all the all the conditions and clauses, as given by IN-SPACE and in conformity with all the applicable laws, policies, rules, and regulations of the Government of India.
	Signature of the Authorized Signatory with Seal and Date

Annexure-A to Application form No. IN:APP:05.02

(Information/Record to be provided to IN-SPACe periodically)

For each Data Dissemination **transaction on commercial terms for the Primary Data pertaining to Indian Territory of GSD at nadir >30cm**, below information needs to be provided by the Registered Data Disseminator to IN-SPACe on IN-SPACe Digital Platform (IDP) every quarter, latest by one month after the end of that quarter (e.g., The record of the quarter Jan – Mar shall be submitted to IN-SPACe before 30th April of that calendar year).

1. Details of the User to whom the Primary Data is being provided

- a. whether the end user is an Indian Entity or Non-Indian Entity
- b. In case of Non-Indian Entity, country of Origin
- c. Type (Govt./PSU/Pvt. etc)
- d. Legal Name of the Entity
- e. Brand & Trade name, if any:
- f. Address
- g. Project Name & End use of the data/data product

2. Information on Primary Data disseminated

- a) Name of the Satellite & Payload
- b) geographical location of data (Landmarks, Latitude, Longitude, area)
- c) Fresh tasking/Archive data (provide details such as satellite pass, date etc.):
- d) Period of interest:
- e) Frequency of Data:
- f) Data Dissemination date and time (may have multiple entries)

Annexure-1

Security Clearance Proforma

Application proforma for security clearance (other proposals)

I. Details in respect of Company/Firm (Indian/Foreign):

Sl.No.	Full Name of the Company and its foreign collaborators, if any.	Date of Registration of The company	Address of Head office, Regional offices and registered office	Previous name of the company If any	Details of earlier Approvals, if any (ref.no. & date)	Complete details About the Proposed Activities.

II. Details in respect of Director/ key executives:

Sl.No	Full name of Board of Director and Key executives (wherever applicable)	Present position Held with date (since when)	Date of birth	Parentage	Present & Permanent address	Nationality	Passport no. And issue date, If any	Contact address & Telephone number

III. Details of shareholders having more than 10% shareholding in the Applicant company (all firms/ companies/entities/Individuals):

Sl.No	Full Name	Parentage (father/mother Names)	Date of birth	Permanent address	Present address	Present Position held	Nationality (if Holding dual Nationality, both must be Clearly mentioned)	% of Shares held in the Company

IV. Details of criminal cases, if any, against the Company / Director(s) as per Annexure

Self-declaration for company and director (s) for whom security clearance is sought

- a. Name & address and registration number of the company
b. Name & address of owners (in case of proprietorship firm) / directors of the company

1. _____

2. _____

3. _____

4. _____

- c. Is the company owners (in case of proprietorship firm) directors listed above, the subject of any

- | | |
|--|--------|
| 1. Preventive detention proceedings under Public safety Act / National security Act etc. | Yes/No |
| 2. Criminal investigation in which charge sheet Has been filed | Yes/No |

- d. If Yes, please provide following details

1. Case/ FIR number
2. Detention / warrant number, if any
3. Police station / district / agency
4. Sections of law under which case (s) has / have been filed
5. Name and place of the court

- e. The above-mentioned details are in respect in respect of both India and an y other foreign country

(Signature)

Note. The above self-declaration is required to be filed and signed by the authorized signatory of the company

Annexure- 2
SSA Related Pro forma for satellites

Sl. No.	Part-A: General Information	
1.	Name of Satellite/Constellation:	
a.	Name of the ITU Filing for payload & TT&C, if already filed	
b.	Name of Administration	
2.	Owner (Name of the entity)	
a.	Name	
b.	Address	
c.	Contact No/Email	
3.	Name of authorized operator (Name of the satellite operator)	
4.	Point of Contact (POC) in Initial Phase and Normal Phase. For each point of contact, provide the following details:	
a.	Name	
b.	Designation	
c.	Phone	
d.	Email	
5.	Launch Vehicle related information	
a.	Launch vehicle name	
b.	Launch Facility	
c.	Launch date (window)	
	Part-B: Mission Related Information	
6.	Mission Objectives	
7.	Spacecraft dimension (preferable to be above 10 cm to enable tracking)	
a.	Stowed:	
b.	Post Deployment of all appendages:	
c.	Drag area	
d.	SRP area	
8.	Mass	
a.	Dry mass:	
b.	Wet mass	
c.	Mention propulsion system (electrical/chemical/ others, please specify) and propellant mass details (e.g., monopropellant/bipropellant, specify others):	
d.	Total fuel loaded at launch pad	
9.	Please provide safety assessment report w.r.t use of propellant, pressurant systems, any hazardous material such as explosives, radioactive material, etc. in the satellite. Material Safety Data Sheet (MSDS) may be provided for each of such hazardous material, if any (full details with supplementary document, if yes):	
10.	Number of payloads per satellite	
a.	Ownership details of each payload (applicable for the hosted payloads owned by the Entity other than the Applicant)	
b.	Each Payload Configuration and architecture	
c.	Payload TT&C frequencies, modulation, data rate, bandwidth	
11.	Satellite/constellation configuration, architecture and mission profile (provide reference of design documents, if already submitted):	
12.	Trackability (on-orbit position and velocity determination)	

	(Attach supplementary document)	
a.	Plan for maintenance of acquired observational data:	
b.	Plan for Spacecraft ephemeris data maintenance:	
c.	Unique identifiability (desirable feature):	
13.	Orbital regime(s) of operation throughout the mission life: Preferably avoid, with a dispersion of +/-15 km, the following altitude regimes; Regions around 400 km altitude meant for manned missions Already crowded regimes with denser debris flux (e.g., 550 km, 780 km) Operational orbits above 600 km, where orbital life time > 25 year; otherwise, spacecraft to be de-orbited at End-of-life to satisfy 25-year rule of IADC.	
14.	Ground segment	
a.	Details of satellite TT&C Stations being proposed to be used (such as location, Ownership - self owned or through service provider. Provide details of service provider like name, address, if applicable. If self-owned, provide the copy of IN-SPACe Authorization)	
b.	Details of the Mission Control Centre [MCC] being proposed to be used (such as location, Ownership - self owned or service provider. If self-owned, provide the copy of IN-SPACe Authorization. Provide details of service provider like name, address, if applicable.)	
Part-C: Space Situational Awareness Related Information		
15.	Expected in-orbit lifetime	
a.	Mission life:	
b.	Post-mission life till atmospheric re-entry:	
16.	Total number of objects to be released during normal mission phase	
a.	List of objects:	
b.	Orbit at which the object(s) will be released for each object: (Attach supplementary document)	
17.	Quantification of collision risks with small and large objects within +/-15 km altitude of proposed operational orbit (show that probability of collision with catalogues objects ≤ 0.001 , or have capability of collision avoidance): (Attach supplementary document)	
18.	Plans for regular conjunction assessment (CA) (Attach supplementary document)	
a.	Source of orbital elements of other Space Objects:	
b.	Agency/owner/operator which will be responsible for the CA:	
	Plan for sharing of ephemeris for collision avoidance/conjunction risk mitigation with DOS:	
19.	Maneuverability: capability to perform collision avoidance maneuver (Attach supplementary document)	
a.	Means of propulsion (ion/chemical/electrical) :	
b.	Fuel budget for space debris mitigation	
c.	Fuel budget for collision avoidance:	
d.	Fuel budget for post mission disposal:	
20.	Plan for orbit maintenance during mission life & notification on planned maneuver to DOS:	

21.	Space debris mitigation measures adopted during design, operation and post-mission disposal phase, expected time of completion of post mission disposal (PMD) (Attach supplementary document)	
22.	Overall design reliability to assess chances of on-orbit mission failure:	
23.	Plan for Failure Mode Effect Analysis to limit failure modes which can lead to accidental explosion during operational phase:	
24.	Detailed post mission disposal plan, including passivation,	
25.	Plans for Failure mode analysis and system reliability figures for successful PMD plan implementation:	
26.	Collision avoidance capability, maximum delta-V which can be imparted for Collision Avoidance Maneuver (CAM)	
27.	Confirmation on compliance with (a) UN Debris Mitigation guidelines: Complied /Not complied to be specified, (b) Compliance to DOS framework for safe & sustainable space operations: Complied/ Not complied / Not-Applicable to be specified, (Not applicable till the framework is released) (c) Space Object Registration guidelines prescribed by IN-SPACE (Attach supplementary document if needed) Reasons for non-compliance, if any, for the above and request for specific waiver	

Undertaking

We hereby declare that the above statements are true and correct to the best of our knowledge and belief. We shall abide by any other condition, which may be stipulated by the Department of Space. We hereby affirm that we have read and understood the registration of Space Object guidelines prescribed by IN-SPACE and other applicable rules/guidelines. We undertake that we shall fully comply with the conditions and directives given therein. In case any of the above statements or facts furnished are incorrect or false, any permission letter/approval granted to us on the basis of the statement furnished in this form is liable to cancellation, or any other action deemed appropriate with regard to the circumstances of the case.

Place: Signature of the Applicant:

Date: Name in Block Letters:

Official Seal/Stamp Designation:

Tel: No:

E-mail:

Website, if any:

Full Address:

For internal use only

Application Number :

Date of application receipt :

Approval status :

If approved, Registration Number issued :

If not approved, reason and follow up action details:

Signatory (Name & Designation)

Date

Annexure-3

SSA Related Pro forma for Operations of Launch Vehicles

Part-A: General Information																
1.	Name of Launch Vehicle:															
2.	Name of the Entity															
	Name															
	Address															
3.	Authorised operator															
4.	Point of Contact (POC) in Initial Phase and Normal Phase. For each point of contact, provide the following details:															
	Name															
	Designation															
	Phone															
	Email															
Part-B: Mission Related Information																
5.	Launch Facility															
	Name of launch pad															
	Coordinates (Geodetic): Latitude (deg), Longitude (deg), Altitude (km)															
6.	Launch date [Mention possible dates, dd-mm-yyyy format]															
7.	Launch window [Mention start and end timings (in yyyy-MM-dd hh:mm:ss UTC format)]															
8.	LV configuration															
	No. of stages:															
	For each stage, specify															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Total Mass (kg)</th> <th style="width: 15%;">Dry mass</th> <th style="width: 15%;">Propellant mass</th> <th style="width: 30%;">Type of propellant (mono/bi/semi-cryo/cryo)</th> <th style="width: 25%;">Dimension</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Total Mass (kg)	Dry mass	Propellant mass	Type of propellant (mono/bi/semi-cryo/cryo)	Dimension										
Total Mass (kg)	Dry mass	Propellant mass	Type of propellant (mono/bi/semi-cryo/cryo)	Dimension												
9.	Presence of radioactive, and /or biological material (if present, provide full details in supplementary attachment):															
10.	Nominal ascent trajectory and launch dispersion: (Attach supplementary document)															
11.	Expected impact points of re-entering stages (applicable for sub-orbital stages only):															
12.	List of payload(s) on-board the vehicle For each payload, provide the following details:															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 5%;">Sl. No</th> <th rowspan="2" style="width: 20%;">Name of Payload</th> <th rowspan="2" style="width: 20%;">Owner/Operator with Country</th> <th colspan="3" style="width: 55%;">Injection orbit</th> </tr> <tr> <th style="width: 15%;">Apogee (km)</th> <th style="width: 15%;">Perigee (km)</th> <th style="width: 25%;">Inclination (deg.)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sl. No	Name of Payload	Owner/Operator with Country	Injection orbit			Apogee (km)	Perigee (km)	Inclination (deg.)						
Sl. No	Name of Payload				Owner/Operator with Country	Injection orbit										
		Apogee (km)	Perigee (km)	Inclination (deg.)												
13.	Supporting ground station network for LV tracking															
	(i) Carrier Frequencies, modulation, bandwidth, and data rate used for TT&C; (ii) Details of TT&C stations being proposed to be used (such as geographical location, ownership – self owned or through service provider. Provide details of service provider like name, address if applicable. If self -owned, provide the copy of IN-SPACE Authorization) (iii) ITU Filing name and its status for TT&C frequencies, if applicable															

Part-C: Space Situational Awareness Related Information		
14.	Spaceflight safety	
	Plan for collision avoidance (COLA) with catalogued objects:	
	Agency responsible for COLA:	
15.	Total number of objects (other than payloads and rocket bodies) released	
	List of objects:	
	Size of each object:	
	Altitude of release of each object:	
16.	List of rocket bodies generated by LV	
	Sub-orbital stages	
	Orbital stages	
	Expected lifetime of each of the orbital stages under natural decay	
17.	Plan for passivation and post mission disposal of spent upper stage(s) as per Space Object registration guidelines prescribed by IN-SPACe (Attach supplementary document)	
18.	Plans for failure mode analysis to ensure that the probability of LV success more than 90% (Attach supplementary document)	
19.	Confirmation on compliance with (a) UN Debris Mitigation guidelines: Complied /Not complied to be specified, (b) Compliance to DOS framework for safe & sustainable space operations: Complied/ Not complied / Not-Applicable to be specified, (Not applicable till the framework is released) (c) Space Object Registration guidelines prescribed by IN-SPACe Reasons for non-compliance, if any, for the above and request for specific waiver (Attach supplementary document if needed)	
20.	List of attachments	

Undertaking

We hereby declare that the above statements are true and correct to the best of our knowledge and belief. We shall abide by any other condition, which may be stipulated by the Department of Space. We hereby affirm that we have read and understood the registration of Space Object guidelines prescribed by IN-SPACE and other applicable rules/guidelines. We undertake that we shall fully comply with the conditions and directives given therein. In case any of the above statements or facts furnished are incorrect or false, any permission letter/approval granted to us on the basis of the statement furnished in this form is liable to cancellation, or any other action deemed appropriate with regard to the circumstances of the case.

Place: _____ Signature of the Applicant: _____
Date: _____ Name in Block Letters: _____
Official Seal/Stamp _____ Designation: _____
Tel: No: _____

E-mail: _____
Website, if any: _____
Full Address: _____

For internal use only

Submission Number: _____	Date of receipt: _____
--------------------------	------------------------

Whether any waiver sought: _____

Follow up action details, if any: _____

Space Debris Mitigation compliance status : _____

Signatory (Name & Designation)

Date

Appendix – III

Indian Space Policy –

2023

Left Blank Intentionally

Indian Space Policy - 2023

Contents

List of Abbreviations.....	2
Definitions.....	3
1 Preamble	5
2 Vision	5
3 Strategy	5
4 Non-Governmental Entities	6
5 IN-SPACE- Indian National Space Promotion & Authorisation Centre	7
6 Indian Space Research Organization	9
7 NewSpace India Limited.....	10
8 Department of Space.....	10
9 Applicability and Implementation.....	11

List of Abbreviations

1. DOS : Department of Space
2. DOT : Department of Telecommunications
3. GSD : Ground Sampling Distance
4. GSO : Geo-Stationary Orbit
5. IN-SPACe : Indian National Space Promotion & Authorisation Centre
6. ISRO : Indian Space Research Organisation
7. ITU : International Telecommunication Union
8. NGE : Non-Government Entity
9. NGSO : Non Geo-Stationary Orbit
10. NSIL : NewSpace India Limited
11. SCC : Satellite Control Centre
12. TT&C : Telemetry, Tracking & Command
13. WPC : Wireless Planning and Coordination

Definitions

1. “Authorisation” shall mean the permission granted by IN-SPACe to any entity working in the Space sector;
2. “Free-To-Air Navigation Signals” shall mean the civilian navigation signals that are broadcast to all users within the service region free of cost by the satellite navigation systems;
3. “GSD” shall mean the distance between two consecutive pixel centres as measured on the ground;
4. “Indian Orbital Resource” shall mean any Orbital Resource acquired or in the process of being acquired by the Indian Administration through an ITU Filing;
5. “ITU Filing” shall mean an application submitted to ITU for acquiring the orbital resources;
6. “NGE” shall mean (i) a company incorporated under the Companies Act, 2013 or (ii) a partnership firm established under the Limited Liability Partnership Act, 2008, (iii) Trusts under the Indian Trusts Act 1882 (iv) Association of persons or body of individuals incorporated under relevant statutes in India.;
7. “Non-Indian Orbital Resource” shall mean any Orbital Resource acquired or in the process of being acquired by any country other than India;
8. “Orbital Resource” shall mean any GSO slot and/or NGSO along with the associated frequency spectrum and coverage acquired or in the process of being acquired through an appropriate ITU Filing;
9. “Remote Sensing” shall mean sensing the Earth’s surface and atmosphere from space for any purpose including improving natural resources management, land use and the protection of the environment;
10. “SCC” shall mean the satellite control facility for monitoring and control of the satellites and which shall comprise TT&C Earth Stations and associated processing equipment;
11. “Space Activity” shall mean an activity pertaining to the space sector, which shall include, inter-alia, launch, operation, guidance and/or re-entry of any Space Object from outer space.
12. “Space Object” shall mean:
 - (i) any object launched or intended to be launched into an orbital or sub-orbital trajectory around the earth or to a destination beyond earth orbit;
 - (ii) any constituent element of an object referred to in sub-clause (i), or
 - (iii) any other object as may be notified from time to time;
13. “TT&C Earth Station” shall mean an earth station for receiving telemetry from, tracking and command of a Space Object.

14. “WPC” shall mean the Wireless Planning & Coordination Wing of Department of Telecommunications, Ministry of Communications, which is the nodal agency that represents India at ITU. WPC Wing of DoT is responsible for radio spectrum management in the country and acts as the notifying administration for India at ITU for international frequency coordination, notification and recording in the Master International Frequency Register.

1. Preamble

The Government of India unleashed reforms in space domain in 2020, opening the doors for enhanced participation of NGEs in carrying out end-to-end activities in the space domain and with an aim to provide them a level playing field.

Subsequent to these reforms, the Government seeks to provide regulatory certainty to Space Activities by various stakeholders, in order to create a thriving space ecosystem.

The Indian Space Policy – 2023 has thus been formulated as an overarching, composite and dynamic framework to implement the reform vision approved by Cabinet.

2. Vision

To augment space capabilities; enable, encourage and develop a flourishing commercial presence in space; use space as a driver of technology development and derived benefits in allied areas; pursue international relations, and create an ecosystem for effective implementation of space applications among all stakeholders;

for,

the nation's socio-economic development and security, protection of environment and lives, pursuing peaceful exploration of outer space, stimulation of public awareness and scientific quest.

3. Strategy

In pursuance of the vision set out for the space sector, Government seeks to pursue a holistic approach by encouraging and promoting greater private sector participation in the entire value chain of the Space Economy, including in the creation of space and ground based assets.

Thus, Indian consumers of space technology or services (such as communication, remote sensing, data-services, launch-services, etc.), whether from public or private sectors, shall be free to directly procure them from any source, whether private or public.

Towards this end, the Government shall focus on:

- i. Encouraging advanced Research & Development in space sector to sustain and augment the space program.
- ii. Providing public goods and services using space technology for national priorities.
- iii. Creating a stable and predictable regulatory framework to provide a level playing field to Non-Government Entities in the Space sector through IN-SPACe.

- iv. Promoting space-related education and innovation, including support to space-sector start-ups.
- v. Using space as a driver for overall technology development, nurture scientific temperament in the society, and increase awareness on Space Activities.

4. Non-Governmental Entities.

NGEs shall be allowed to undertake end-to-end activities in space sector through establishment and operation of Space Objects, ground-based assets and related services, such as communication, remote sensing, navigation, etc. This would be subject to such guidelines/regulations as prescribed by IN-SPACE.

NGEs would be encouraged to:

1. offer national and international space-based communication services, through self-owned or procured or leased GSO/NGSO communication satellites.
2. establish and operate ground facilities for Space Objects operations, such as TT&C Earth Stations and Satellite Control Centres (SCCs).
3. use Indian Orbital Resources and/or Non-Indian Orbital Resources to establish Space Objects for communication services over India and outside India.
4. make new ITU filings through the WPC/DOT to acquire Orbital Resources. NGEs are free to make ITU filings through non-Indian Administrations also.
5. establish and operate remote sensing satellite systems within and outside India through self-owned or procured or leased satellites.
6. disseminate satellite-based remote sensing data, as well as applications based on such data, in India and/or outside.
7. develop and commercialise technologies and applications for enhancing and augmenting the satellite navigation, communication and remote-sensing developed and provided by the Government.
8. manufacture and operate space transportation systems, including launch vehicles, shuttles, etc., as well as design and develop reusable, recoverable and reconfigurable technologies and systems for space transportation.
9. establish and operate launch infrastructure.
10. develop space situational awareness capabilities for enhancing observation, modelling and analysis.
11. undertake research, innovation and technology development for long-term sustainability of Space Activities.
12. provide end-to-end services for safe operations and maintenance in space.
13. engage in the commercial recovery of an asteroid resource or a space resource. Any NGE engaged in such process shall be entitled to possess, own, transport,

use, and sell any such asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of India.

14. undertake any other IN-SPACe prescribed commercial Space Activity.

5. IN-SPACe- Indian National Space Promotion & Authorisation Centre.

IN-SPACe shall function as an autonomous Government organization, mandated to promote, hand-hold, guide and authorize Space Activities in the country. For this purpose, IN-SPACe shall periodically issue guidelines and procedures, that would among other things promote ease of doing business.

IN-SPACe shall:

1. act as the single window agency for the Authorization of Space Activities by government entities as well as NGEs, subject to relevant Government directives, keeping in mind safety, national security, international obligations and/or foreign policy considerations. It shall accord Authorizations for following Space Activities:
 - a. the establishment and/or operations of Space Object(s);
 - b. the launch and operation of launch vehicles including sub-orbital launches;
 - c. the establishment and operation of launch pads which could be self-owned, leased or be a mobile platform.
 - d. the planned re-entry of Space Objects with or without recovery.
 - e. the establishment and operation of TT&C Earth Stations;
 - f. the establishment and operation of SCCs and/or satellite data reception station(s).
 - g. dissemination of high-resolution space-based earth observation data.
 - h. in-orbit sale/ purchase/ transfer of Space Objects
 - i. any other kinds of Authorizations as required, which may be notified.
2. Promote industry clusters / zones/ manufacturing hubs/ incubation Centres/ accelerators / technical centres etc., for the space sector;
3. work with industry – both national and overseas – to promote identified Space Activities and establish India as a preferred service provider for global requirements of products/services in the space sector.
4. work with academia to widen the space ecosystem and enable industry-academia linkages.
5. develop and launch promotional schemes from time to time, as appropriate.
6. define frameworks for developing space industry standards, based on global benchmarks.

7. ensure a level playing field for the utilization of all facilities created using public expenditure, by prioritizing their use among Government entities and NGEs. For this, IN-SPACe will formulate appropriate procedures for prioritisation, and the decisions of IN-SPACe shall be binding on the operators of such facilities.
8. enable establishment of specialised technical facilities by NGEs within the premises of DOS.
9. enable easy access for Government entities and NGEs to space based remote sensing data collected through public expenditure.
10. enable sharing of best-practices with private entities for enabling technology ecosystem.
11. facilitate and incentivize those authorized NGEs:
 - 11.1. that acquire new orbital resources through Indian ITU filings to operate their Space Objects, in coordination with WPC/DOT and international agencies.
 - 11.2. that bring operations of their Space Objects that are using Non-Indian Orbital Resources, under a coordinated and registered Indian ITU filing, in accordance with the extant ITU Rules & Regulations.
12. judiciously balance the interests of Government entities and NGEs in ITU filings for Orbital Resources made through WPC/DOT and ensure their utilisation & protection.
13. authorise the use of Space Objects for communication/broadcast services to or from Indian Territory in coordination with other concerned Departments of Government of India. Use of Authorized Space Object(s)
 - 13.1. for broadcast services shall be governed by the rules, regulations & policies of Ministry of Information and Broadcasting (MoIB)
 - 13.2. for telecommunication services shall be governed by the rules, regulations and policies of Department of Telecommunications (DoT), Ministry of Communications.
14. identify technologies developed by ISRO that are ready for transfer to NGEs and facilitate the transfer of such technologies.
15. encourage NGEs to participate in space exploration and in having a human presence in outer space, including collaboration with domestic and international stakeholders.
16. authorise launch manifests for launch-infrastructure created through public expenditure, to ensure equitable access for NGEs to such infrastructure.
17. issue guidelines for meeting safety and security requirements for Space Objects.
18. prescribe guidelines to address liability aspects arising out of potential damages due to the Space Activities.

19. ensure registration and other necessary clearances for any Space Object intended to be launched.
20. make efforts to encourage the broadest possible dissemination of remote-sensing data and applications based on the same. IN-SPACe Authorization is required for dissemination of satellite based remote sensing data of high resolution (Ground Sampling Distance \leq 30 cm), owing to national security considerations. Data above GSD $>$ 30 cm needs intimation to IN-SPACe. The thresholds of data categorisation as high resolution shall be reviewed time-to time.
21. maintain an integrated launch manifest taking into consideration readiness of all stakeholders.
22. prescribe the conditions under which Authorizations accorded may be reviewed, revoked, or modified by IN-SPACe.
23. maintain a list of Space Activities that would require Authorization. The list of Space Activities requiring Authorization will be amended from time to time.

6. Indian Space Research Organization

ISRO, as the National Space Agency, will focus primarily on research and development of new space technologies and applications, and for expanding the human understanding of outer space.

Towards this ISRO shall:

1. carry out applied research and development of newer systems so as to maintain India's edge in the sector in the areas of space infrastructure, space transportation, space applications, capacity building and human spaceflight.
2. share technologies, products, processes and best practices with NGEs and/or Government companies.
3. enable open data access from remote sensing satellites of ISRO. In this regard, remote sensing data of GSD of 5 meters and higher shall be made easily accessible in a timely manner on 'free and open' basis to all while remote sensing data of GSD of less than 5 meter, shall be made available free of any charges to Government entities but at fair and transparent pricing to NGEs.
4. make available archived satellite data and satellite derived thematic data from remote sensing satellites of ISRO on 'free and open' basis for further value addition and for research and development purposes on 'as is where is' condition. The details of the archived remote sensing data in terms of resolution, latency etc., will be made known on public domain time-to-time.
5. demonstrate human spaceflight capability and develop a long term road-map for sustained human presence in space. Towards this, it shall identify and develop necessary technologies, infrastructure and ecosystem.
6. define and develop collaborative framework for scientific research in multidisciplinary domains linked to human Space Activities.

7. undertake studies and missions on in-situ resource utilization, celestial prospecting and other aspects of extra-terrestrial habitability.
8. transition out from the existing practice of being present in the manufacturing of operational space systems. Hereafter, mature systems shall be transferred to industries for commercial exploitation. ISRO shall focus on R&D in advanced technology, proving newer systems and realization of Space Objects for meeting national prerogatives.
9. foster collaborations and partnerships with industry and academia – both national and international – to pursue research & development in space science, technology and applications.

7. NewSpace India Limited

NSIL, as the Public Sector Undertaking under DOS, shall:

1. be responsible for commercialising space technologies and platforms created through public expenditure.
2. manufacture, lease, or procure space components, technologies, platforms and other assets from private or public sector, on sound commercial principles.
3. service the space-based needs of users, whether Government entities or NGEs, on sound commercial principles.

8. Department of Space:

DOS shall:

1. oversee the distribution of responsibilities outlined in this policy and ensure that the different stakeholders are suitably empowered to discharge their respective functions, without overlapping into others' domain.
2. be the nodal department for implementation of the Indian Space Policy-2023 through detailed policy directives, within the scope of which the various stakeholders shall carry out their assigned functions.
3. interpret and clarify any ambiguities arising in implementation of this policy.
4. ensure the availability of continuous & improved earth observation capability and data to fulfil the national requirements. In this regard, it shall plan and realize remote sensing systems, with the involvement of all stakeholders.
5. participate in international efforts by providing critical remote sensing satellite data for disaster management efforts and meeting the requirements of the sustainable development goals formulated by the United Nations in coordination with the Ministry of External Affairs.
6. ensure sustenance of existing and future satellite constellations, SCCs and ground segments for continuous and guaranteed availability of free-to-air and

secured navigation signals as well as space-based augmentation signals in the defined coverage area.

7. ensure the compatibility and interoperability of Indian satellite navigation and augmentation signals with the other navigation and augmentation signals and ensure their representation in relevant international organisations and standards bodies for the purpose of their recognition, certification and adoption.
8. establish framework to ensure safe and sustainable space operations, in compliance with relevant international space debris mitigation guidelines. It shall also enhance the national space situational awareness capabilities and share observation data with relevant stakeholders.
9. co-ordinate international cooperation and coordination in the area of global space governance and programmes in consultation with Ministry of External Affairs.
10. create appropriate mechanism to resolve any dispute arising out of Space Activity, as per the extant laws.

9. Applicability and Implementation:

This policy is applicable to any Space Activity to or from Indian Territory or within the jurisdiction of India including the area to the limit of its exclusive economic zone. Notwithstanding anything contained in this policy, GoI reserves its right to provide exemptions to the provisions contained herein on a case-to-case basis.