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| **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 under relevant statutes 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 |  |
|  | 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 | 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  Provide details if 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. |  |
| 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 | 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.  In case, 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 provide the details |  |
| 20 | Information on registration of chargesheet(s), trials, conviction by courts, etc., if any, against key managerial personnel/ the promoters/ the controlling shareholders/ beneficial owners, as applicable, for the offences under Chapter VI, VII, VIII, IX, and X of the Bhartiya Nyaya Sanhita, 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, Unlawful Activities Prevention Act, 1967 and/or aiding and/or abetting or engaging in a conspiracy for the commission of any of the foregoing offences, or such other offences or laws as notified by IN-SPACe. |  |
| 21 | 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. |  |
| 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 | Foreign direct investment (Yes/No)  If Yes, 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 |  |
| 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 | 1st contact person (Should be authorized signatory for subsequent agreement/documents/declaration) |  |
| Name |
| Designation |
| Mobile |
| Email |
| 30 | 2nd 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, as applicable, are not named as an accused in any chargesheet(s) or trails and conviction by court in respect of any criminal offence punishable under Chapter VI, VII, IX and X of the Bharatiya Nyaya Sanhita, the provisions of the Prevention of Corruption Act, 1988, Prevention of Money Laundering Act, 2002 and/or Unlawful Activities Prevention Act, 1967 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 into account such offences, and in accordance with the Criminal Antecedents Clause (Para 20 of Chapter-III) of the extant version of the Norms, Guidelines and Procedures for implementation of the Indian Space Policy 2023 in respect of Authorization of Space Activities issued by IN-SPACe (NGP) (presently Version 1.0 Document no. IN:ISP2023:NGP2024/V1.0 dated May 03, 2024). | |
| 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: |  |

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| **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 (including hosted payloads, 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 | Hosted payloads: Yes / No If yes, then submit Annexure-4: |
| 51 | 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. |
| 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 | 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.  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** |
| 79 | 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)  Kindly also fill the Form as in Annexure-2 for consideration to register the Space Object in National Registry of Space Objects prescribed by IN-SPACe. |
| 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/In-process/Yet to apply  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 | 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.  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. |
| 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. |
|  | In case there are Hosted Payloads on the Satellite, following undertakings need to be provided:  We hereby affirm and undertake that we will ensure the availability of the requisite authorization/License/approvals from the concerned non-Indian administrations (for Non-Indian Hosted Payload(s)/IN-SPACe (for Indian Hosted Payload(s), before switching ON/operationalizing the concerned Hosted Payload onboard the proposed Satellite. |
|  | **Signature of the Authorized Signatory with Seal and Date** |

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| 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.)  Also, provide the details of shareholders having ultimate/significant beneficiary ownership or those having 10% or more shareholding of the entity owning/operating the satellite. |
| 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/In-process/Yet to apply  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** |

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| **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** |
|  | Whether multiple satellites or standalone satellite being proposed/planned? In case of multiple satellite or constellation, specify number of satellites |
|  | Name of satellite/Constellation. |
|  | No. of satellites for which Authorization is being sought |
|  | Mission objective (In case the mission is for the strategic /security/defence application and also for special payloads such as SIGINT / COMINT / ELINT then such details may also be provided) |
|  | 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.) |
|  | Type of propulsion system (electrical/chemical/other, pls specify) |
|  | Propellant mass details (e.g., monopropellant/bipropellant, specify others) |
|  | 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 (including hosted payloads, if any). |
|  | Satellite manufacturing details (own manufacturing/ procured, imported or indigenous) |
|  | 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. |
|  | 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. |
|  | Tentative schedule for satellite realization along with major milestones such as design reviews, AIT, environmental tests, etc. |
|  | **Payload details** |
|  | Type of Payloads (Optical / Microwave / Thermal / Meteorology etc.) |
|  | No. of payloads per satellite |
|  | Description of Each payload (specifications, Objective, etc.) |
|  | Hosted Payloads: Yes / No If Yes, then submit Annexure-4 |
|  | Spectral, spatial, radiometric, temporal resolutions and swath |
|  | Onboard data security/encryption mechanism in case of the payload is ≤30 cm GSD |
|  | Remote Sensing/EO Payload, Communication Payload and TT&C payload frequencies, bandwidth, data rate, modulations, etc. |
|  | Specifications of communication payload(s) such as EIRP, coverage, etc. |
|  | Whether provision for switching off the Payload(s) transmission exists? |
|  | **Ground Segment** |
|  | 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) |
|  | In case TT&C station located outside India, provide the location wise justification for using station(s) outside India. |
|  | 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.) |
|  | In case MCC station is located outside India, provide the location wise justification for using station(s) outside India. |
|  | Details of data security mechanism in the MCC (security to Indian traffic, access of data to security agencies, etc.) |
|  | 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** |
|  | Whether the proposal is to use the existing Indian filing or new ITU Filing is proposed. Provide details |
|  | Name of the ITU Filing for Amateur/Remote Sensing/EO payload, communication payload & TT&C payload, if already filed |
|  | Amateur/Remote sensing/EO payload, communication payload & TT&C payload frequency band and frequencies, data rate, bandwidth, modulation as per the ITU Filing |
|  | 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. |
|  | 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 |
|  | Coordination status with IARU, if applicable |
|  | Orbit Parameters & Coverage as per ITU Filing |
|  | 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** |
|  | 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 of Space Objects |
|  | 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** |
|  | Launcher and relevant details (including Launch Facility) |
|  | Status and copy of Launch Service Agreement |
|  | Tentative Launch timeframe |
|  | Insurance(s) details, if any, taken by launch service provider including third party insurance along with copy of insurance(s) policy |
|  | Is the satellite already launched?  If yes: launch date, launcher and other relevant details |
|  | **Regulatory License Details and Requirement** |
|  | DoT operating & service licenses including clearances for ground stations –  Obtained/In-process/Yet to apply  In case of 'Obtained' upload the copies |
|  | **Service Details** |
|  | Intended service(s) & applications |
|  | Target users and service area |
|  | **Miscellaneous** |
|  | Details of indigenous elements, if any (Manufacturing/fabrication/testing/AIT/launch etc. may be highlighted) |
|  | Proposed / desired timeframe along with milestones, for the completion of the proposal. |
|  | Planned deployment schedule of satellite/constellation |
|  | Details, if any, of international / national collaborations, joint development, joint venture for this proposal. |
|  | Intellectual Property Rights, if any available with the NGE related to the proposal |
|  | Estimated cost of the project |
|  | Source of funding for this project |
|  | Clearance / approval / license of any other government department/ agencies obtained/under process, if any, for this proposal (details may be provided). |
|  | 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. |
|  | In case there are Hosted Payloads on the Satellite, following undertakings need to be provided:  We hereby affirm and undertake that we will ensure the availability of the requisite authorization/License/approvals from the concerned non-Indian administrations (for Non-Indian Hosted Payload(s)/IN-SPACe (for Indian Hosted Payload(s), before switching ON/operationalizing the concerned Hosted Payload onboard the proposed Satellite. |
|  | **Signature of the Authorized Signatory with Seal and Date** |

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| **Establishment and/or operation of Hosted Payload of Indian entities hosted on Indian/non-Indian Host Space Object**  **Application form No. IN:APP:01.05 Authorization guidelines no. IN:AU:01.05, IN:AU:01.06 and IN:AU:01.07** | | |
| ***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.*** | | |
| **Host Space Object details** | | |
|  | Name of the Host Space Object |  |
|  | Host Space Object is owned by Indian or non-Indian entity |  |
| If the Host Space Object is owned by Indian Entity, the status of IN-SPACe authorization, |  |
| If the Host Space Object is owned by Non-Indian Entity, the copy of authorization/approvals/licenses from the concerned non-Indian administration |  |
|  | Name, address of the Host Entity |  |
|  | Provide the details of the shareholders or partners of the Host Entity who hold ultimate/significant beneficiary ownership including those having 10% or more shareholding |  |
|  | Copy of agreement/contract between Applicant and Host Entity |  |
| Validity Period of the above-mentioned agreement/contract |  |
|  | Mechanism of operations and control of Hosted Payload and Host Space Object |  |
|  | 1. Whether Hosted Payload is planned to be operated independently by the Hosted Payload owner (Applicant) 2. Whether Hosted Payload operates with its own independent TT&C, MCC and communication channel or will share the Host Space Object resources 3. Provide data flow and operation schematic diagram |  |
|  | Host Space Object details: lift-off mass, orbital slot/orbit parameters, orbital planes, satellites per plane, number and type of other payload(s) |  |
|  | Intended operational life of the Host Space Object |  |
| **Hosted Payload details** | | |
|  | In case the Hosted Payload is planned as part of the constellation,   1. Number of Hosted Payloads in the constellation 2. Planned Schedule for completion of the constellation |  |
|  | Number of Hosted Payloads for which authorization is being sought |  |
|  | Name of Hosted Payload(s) |  |
|  | Objectives of Hosted Payload(s) |  |
|  | Service Details: Target users and service area, if applicable |  |
|  | Identify the shared resources/systems of the Host Space Object for operations of the Hosted Payload |  |
|  | Provide details of data security mechanisms to prevent any unauthorized access to the Hosted Payload by the Host Entity as well as the other payloads owners hosted in the Host Space Object. |  |
|  | Provide configuration document including detailed technical specifications:   1. Type of Hosted Payload:   (Earth Observation/ Communication / Scientific/ Special Purpose Payloads such as SIGINT/COMINT/ELINT/Thruster or attitude control system, etc.)   1. Mass in Kgs (dry & wet, if applicable) 2. Dimensions of the Hosted Payload in Stowed and deployed condition, if applicable, 3. Intended operational life 4. Specifications of the Hosted Payload: 5. In case of EO payloads, provide Specifications: Type of sensors, Imaging mode, Spectral, spatial, radiometric, temporal resolutions and swath, revisit time, onboard storage/recorder if any, onboard data security/encryption mechanism in case of the payload has ≤30 cm GSD, etc.   Provide details of data communication channel between Host Space Object and Hosted Payload data receive stations (whether communication channel is part of the Host Space Object or Hosted Payload itself): Data rate, carrier frequencies and modulation   1. In case of communication payloads: 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. 2. In case of Scientific Payloads/Special Purpose Payload such as SIGINT, COMINT, ELINT, thrusters, Propulsion systems, etc.,: Instrument details, detector/sensor specifications, Type of propulsion system (electrical/chemical/other), Propellant mass details. For motion control systems (Servo/wheels), provide broad technical details, etc, as applicable   Provide details of data communication channel between Host Space Object and Hosted Payload data receive stations (whether communication channel is part of the Host Space Object or Hosted Payload itself): Data rate, carrier frequencies and modulation, if applicable |  |
|  | Whether the Hosted Payload is planned to be separated from the Host Space Object. If yes, provide details. |  |
|  | Hosted Payload manufacturing details (own manufacturing/ procured, imported or indigenous) |  |
|  | **Host Space Object Ground Segment details** | |
|  | Details of TT&C Stations being used (such as locations, global operator services if any, etc) |  |
|  | Details of the MCC being used (such as locations and addresses, if any) |  |
|  | **Hosted Payload Ground Segment details** | |
|  | Confirm if Hosted Payload is having TT&C independent of the Host Space Object, If yes, Provide the following details:   1. Details of Hosted Payload TT&C Stations being 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) 2. In case TT&C station located outside India, provide the location wise justification for using station(s) outside India. 3. 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.) 4. In case MCC station is located outside India, provide the location wise justification for using station(s) outside India. 5. Details of data security mechanism in the MCC (security to Indian traffic, access of data to security agencies, etc.) |  |
|  | In case of communication Hosted Payload: Details of 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. |  |
|  | In case of EO Hosted Payloads: 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** | |
|  | Name, administration and status of the ITU filing(s) for:     * 1. Hosted Payload frequencies   2. TT&C   3. Communication channel frequencies if applicable   In case of non-Indian ITU filing being used for Hosted Payload operations, arrangements made with concerned foreign administration and copy of Authorization/frequency assignment from the administration.   1. Coordination status with IARU, if applicable 2. Orbit Parameters & Coverage as per ITU Filing 3. In case of new Indian ITU filing, 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) |  |
|  | **Information on Space Situational Awareness** | |
|  | Details of appendages (if any) |  |
|  | Orbital parameters at which appendages are proposed to be deployed (if applicable): |  |
|  | Expected in-orbit lifetime of Host Space Object   1. Mission life: 2. Post-mission life till atmospheric re-entry, if applicable |  |
|  | Please provide safety assessment report w.r.t use of propellant, pressurant systems, any hazardous material such as explosives, radioactive material, or biological material etc. in the Hosted Payload. Safety Data Sheet (SDS) may be provided for each of such hazardous material, if any  (if yes, full details with supplementary document,): |  |
|  | On-board energy sources (battery, rotating mechanisms, propellant etc.): |  |
|  | Plan for passivation of energy sources at end of mission, if applicable |  |
|  | Potential hardware/failure during mission life, if any: |  |
|  | Any other important information/remarks |  |
|  | **LAUNCH DETAILS** | |
|  | Launcher and relevant details (including Launch Facility, Territory/Location of Launch) |  |
|  | Tentative schedule for Hosted Payload realization, integration with Host Space Object and launch |  |
|  | **Regulatory License Details and Requirement** | |
|  | DoT operating & service licenses including clearances for Indian ground stations - Obtained/In-process/Yet to apply In case of 'Obtained' upload the copies (if Applicable) |  |
|  | **Miscellaneous** | |
|  | Details of indigenous elements, if any (Manufacturing/fabrication/testing/AIT/launch etc. may be highlighted) |  |
|  | Proposed / desired timeframe along with milestones, for the completion of the proposal. |  |
|  | Details, if any, of international / national collaborations, joint development, joint venture for this proposal. |  |
|  | Intellectual Property Rights, if any available with the NGE related to the proposal |  |
|  | Estimated cost of the project |  |
|  | Source of funding for this project |  |
|  | Clearance / approval / license of any other government department/ agencies obtained/under process, if any, for this proposal (details may be provided). |  |
|  | Any other information or specific details which IN-SPACe should know for processing the application |  |
|  | **UNDERTAKING/DECLARATION** | |
| G | We agree and understand that the Government may impose control on operations of the proposed Hosted Payload(s) or can instruct to switch-off the authorized Hosted Payload, 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, (if applicable). | |
| H | We agree to cease the emission from the Hosted Payload, 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, (if applicable). | |
| F | 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. 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, (if applicable). | |
| I | 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 (if applicable) | |
| J | We hereby undertake and confirm that the agreement/contract with the entity owning the Host Space object has been made complying the IN-SPACe NGP (IN:ISP2023:NGP2024/V1.0) addressing the third-party liability, registration of Space Object, Operations & control, etc.  Further, we also agree to promptly inform IN-SPACe in case of any modification in the aforesaid agreement/contract during the processing of this application or after the issuance of IN-SPACe Authorization till its validity period, as applicable. | |
| K | We hereby submit our application to IN-SPACe for due consideration for authorizing us for establishment and/or operation of the Hosted Payload(s) 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. | |

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| **Signature of the Authorized Signatory with Seal and Date** |

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| **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** | | | | |
|  | Proposed ITU Filing Name | | |  | |
|  | Type of orbit: GSO or NGSO | | |  | |
|  | Proposed Launch Date | | |  | |
|  | Life time of Satellite | | |  | |
|  | Planned number of satellites/constellation size, as applicable | | |  | |
|  | Orbital parameters such as orbital slot, orbital plane, altitude, period, inclination etc. - in case of GSO/NGSO | | |  | |
|  | Intended objective of the space system | | |  | |
|  | Intended radiocommunication services for this filing:  Space Research/  Earth Exploration/  Space Operation (TTC) /  Amateur Satellite/  FSS/MSS/Any other  *(Mention all which are applicable)* | | |  | |
|  | Intended usage of this filing:  Telemetry/Tracking/Beacon/  Telecommand/Data Downlink/Data uplink  *(Mention all which are applicable)* | | |  | |
|  | No. of Beams in each direction  a) space-to-earth  b) earth-to-space | | |  | |
|  | **OPERATION FREQUENCY DETAILS**  **[Fill for each beam(space-to-Earth) separately as applicable]** | | | | |
|  |  | Beam 1 | Beam 2 | Beam n… | |
|  | Purpose:  such as Telemetry, Tracking,  Beacon, Data Downlink |  |  |  | |
|  | Frequency band |  |  |  | |
|  | Bandwidth |  |  |  | |
|  | Minimum Frequency |  |  |  | |
|  | Maximum Frequency |  |  |  | |
|  | Spot Frequency |  |  |  | |
|  | Polarization |  |  |  | |
|  | Satellite Transmit Antenna Gain |  |  |  | |
| 1. Sa | Satellite Antenna Radiation Pattern |  |  |  | |
|  | Maximum EIRP |  |  |  | |
|  | Minimum EIRP |  |  |  | |
|  | Data rate |  |  |  | |
|  | Modulation technique |  |  |  | |
|  | Required C/No |  |  |  | |
|  | Receive Earth station size(s) |  |  |  | |
|  | Receive Earth Station Antenna Gain |  |  |  | |
|  | Receive Earth Station Antenna Pattern |  |  |  | |
|  | Receive earth station G/T |  |  |  | |
|  | Location of D/L E/s (Longitude, Latitude) |  |  |  | |
|  | Coverage area polygon |  |  |  | |
|  | Service area polygon |  |  |  | |
|  | EIRP & G/T Contours |  |  |  | |
|  | **OPERATION FREQUENCY DETAILS**  **[Fill for each beam (Earth-to-space) separately as applicable]** | | | | |
|  |  | Beam 1 | Beam 2 | | Beam n…. |
|  | Purpose:  such as Telecommand, Tracking, Data Uplink other than Telecommand |  |  | |  |
|  | Frequency band of operation |  |  | |  |
|  | Bandwidth |  |  | |  |
|  | Minimum Frequency |  |  | |  |
|  | Maximum Frequency |  |  | |  |
|  | Spot Frequency |  |  | |  |
|  | Polarization |  |  | |  |
|  | Satellite Receive Antenna Gain |  |  | |  |
|  | Satellite Antenna Radiation Pattern |  |  | |  |
|  | Satellite Receive Noise Temperature |  |  | |  |
|  | Maximum EIRP |  |  | |  |
|  | Minimum EIRP |  |  | |  |
|  | Data rate |  |  | |  |
|  | Modulation technique |  |  | |  |
|  | Required C/No |  |  | |  |
|  | Uplink E/s Size |  |  | |  |
|  | Uplink E/s Antenna Transmit Gain |  |  | |  |
|  | E/s radiation pattern |  |  | |  |
|  | Location of U/L E/s (Longitude, Latitude) |  |  | |  |
|  | Coverage area contour |  |  | |  |
|  | Service area contour |  |  | |  |
|  | EIRP & Contours |  |  |  | |
|  | Specify tentative location and end use of Earth station (name, address, latitude, longitude), as applicable  1. TT&C  2. EO/Science mission Payload Data downlink/uplink  3. Communication satellites gateway | | |  | |
|  | **COMMUNICATION SATELLITE FREQUENCY PLAN DETAILS (if applicable)** | | | | |
|  | **GATEWAY LINK FREQUENCY DETAILS**  (All the parameters as per Sl.no. 11&12 mentioned above needs to be filled for Gateway link as well.) | | | | |
|  | Uplink Frequency Range | | | *Attach relevant document.* | |
|  | Downlink Frequency Range | | |
|  | **USER LINK FREQUENCY DETAILS**  (All the parameters as per Sl.no. 11&12 mentioned above needs to be filled for Gateway link as well.) | | | | |
|  | Uplink Frequency Range | | | *Attach relevant document.* | |
|  | Downlink Frequency Range | | |
|  | **ESTABLISHMENT AND OPERATION ASPECTS OF THE INTENDED SPACE SYSTEM** | | | | |
|  | 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. | | |  | |
|  | Provide reference of corresponding application for Authorization for establishment and/or operations of Space Based systems for communication from IN-SPACe. | | |  | |
|  | Timeline for establishment of satellite(s) and realization plan with major milestones (Satellite & payload architecture finalization plan, CDR, Dis-assembled mode IST, AIT, environmental tests and launch) | | |  | |
|  | Tentative configuration and architecture of the intended satellite and payload along with major parameters such as type of payload (optical/microwave/hyperspectral/communication/scientific research/technology demonstration payloads, etc.) with major details such as lift off mass, throughput, number of transponders/beams, resolution, as applicable. | | |  | |
|  | **UNDERTAKING/DECLARATION** | | |  | |
|  | 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. | | | Yes | |
|  | 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. | | | Yes | |
|  | **Signature of the Authorized Signatory with Seal and Date** | | |  | |

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| **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** | | | | |
|  | Proposed ITU Filing Name | | |  | |
|  | Type of orbit: GSO or NGSO | | |  | |
|  | Proposed Launch Date | | |  | |
|  | Life time of Satellite | | |  | |
|  | Planned number of satellites/constellation size, as applicable | | |  | |
|  | Orbital parameters such as orbital slot, orbital plane, altitude, period, inclination etc. - in case of GSO/NGSO | | |  | |
|  | Intended objective of the space system | | |  | |
|  | Intended radiocommunication services for this filing:  Space Research/  Earth Exploration/  Space Operation (TTC) /  Amateur Satellite/  FSS/MSS/Any other  *(Mention all which are applicable)* | | |  | |
|  | Intended usage of this filing:  Telemetry/Tracking/Beacon/  Telecommand/Data Downlink/Data uplink  *(Mention all which are applicable)* | | |  | |
|  | No. of Beams in each direction  a) space-to-earth  b) earth-to-space | | |  | |
|  | **OPERATION FREQUENCY DETAILS**  **[Fill for each beam(space-to-Earth) separately as applicable]** | | | | |
|  |  | Beam 1 | Beam 2 | Beam n… | |
|  | Purpose:  such as Telemetry, Tracking,  Beacon, Data Downlink |  |  |  | |
|  | Frequency band |  |  |  | |
|  | Bandwidth |  |  |  | |
|  | Minimum Frequency |  |  |  | |
|  | Maximum Frequency |  |  |  | |
|  | Spot Frequency |  |  |  | |
|  | Polarization |  |  |  | |
|  | Satellite Transmit Antenna Gain |  |  |  | |
| 1. Sa | Satellite Antenna Radiation Pattern |  |  |  | |
|  | Maximum EIRP |  |  |  | |
|  | Minimum EIRP |  |  |  | |
|  | Data rate |  |  |  | |
|  | Modulation technique |  |  |  | |
|  | Required C/No |  |  |  | |
|  | Receive Earth station size(s) |  |  |  | |
|  | Receive Earth Station Antenna Gain |  |  |  | |
|  | Receive Earth Station Antenna Pattern |  |  |  | |
|  | Receive earth station G/T |  |  |  | |
|  | Location of D/L E/s (Longitude, Latitude) |  |  |  | |
|  | Coverage area polygon |  |  |  | |
|  | Service area polygon |  |  |  | |
|  | EIRP & G/T Contours |  |  |  | |
|  | **OPERATION FREQUENCY DETAILS**  **[Fill for each beam (Earth-to-space) separately as applicable]** | | | | |
|  |  | Beam 1 | Beam 2 | | Beam n…. |
|  | Purpose:  such as Telecommand, Tracking, Data Uplink other than Telecommand |  |  | |  |
|  | Frequency band of operation |  |  | |  |
|  | Bandwidth |  |  | |  |
|  | Minimum Frequency |  |  | |  |
|  | Maximum Frequency |  |  | |  |
|  | Spot Frequency |  |  | |  |
|  | Polarization |  |  | |  |
|  | Satellite Receive Antenna Gain |  |  | |  |
|  | Satellite Antenna Radiation Pattern |  |  | |  |
|  | Satellite Receive Noise Temperature |  |  | |  |
|  | Maximum EIRP |  |  | |  |
|  | Minimum EIRP |  |  | |  |
|  | Data rate |  |  | |  |
|  | Modulation technique |  |  | |  |
|  | Required C/No |  |  | |  |
|  | Uplink E/s Size |  |  | |  |
|  | Uplink E/s Antenna Transmit Gain |  |  | |  |
|  | E/s radiation pattern |  |  | |  |
|  | Location of U/L E/s (Longitude, Latitude) |  |  | |  |
|  | Coverage area contour |  |  | |  |
|  | Service area contour |  |  | |  |
|  | EIRP & Contours |  |  |  | |
|  | Specify tentative location and end use of Earth station (name, address, latitude, longitude), as applicable  1. TT&C  2. EO/Science mission Payload Data downlink/uplink  3. Communication satellites gateway | | |  | |
|  | **COMMUNICATION SATELLITE FREQUENCY PLAN DETAILS (if applicable)** | | | | |
|  | **GATEWAY LINK FREQUENCY DETAILS**  (All the parameters as per Sl.no. 11&12 mentioned above needs to be filled for Gateway link as well.) | | | | |
|  | Uplink Frequency Range | | | *Attach relevant document.* | |
|  | Downlink Frequency Range | | |
|  | **USER LINK FREQUENCY DETAILS**  (All the parameters as per Sl.no. 11&12 mentioned above needs to be filled for Gateway link as well.) | | | | |
|  | Uplink Frequency Range | | | *Attach relevant document.* | |
|  | Downlink Frequency Range | | |
|  | **ESTABLISHMENT AND OPERATION ASPECTS OF THE INTENDED SPACE SYSTEM** | | | | |
|  | 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. | | |  | |
|  | Provide reference of corresponding application for Authorization for establishment and/or operations of Space Based systems for communication from IN-SPACe. | | |  | |
|  | Timeline for establishment of satellite(s) and realization plan with major milestones (Satellite & payload architecture finalization plan, CDR, Dis-assembled mode IST, AIT, environmental tests and launch) | | |  | |
|  | Tentative configuration and architecture of the intended satellite and payload along with major parameters such as type of payload (optical/microwave/hyperspectral/communication/scientific research/technology demonstration payloads, etc.) with major details such as lift off mass, throughput, number of transponders/beams, resolution, as applicable. | | |  | |
|  | **UNDERTAKING/DECLARATION** | | |  | |
|  | 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. | | | Yes | |
|  | 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. | | | Yes | |
|  | **Signature of the Authorized Signatory with Seal and Date** | | |  | |

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| **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** |  |
|  | Launch Facility details such as location, type, ownership, etc. and identification of facilities that will be utilised for the launch | NGE to upload copy of the “agreement for sharing of facilities” too in case ISRO facility is being utilised for launch.  The clauses covering damage to ISRO property/ personnel present during the launch activity to be highlighted. |
|  | 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.  Whether Third-Party Liability arising due to launch has been appropriately transferred/shared to the concerned non-Indian Launching State | Attach if applicable |
|  | **Mission Details** |  |
|  | Mission objectives |  |
|  | Mission details a) Mission Trajectory (Launch trajectory, orbital inclination, orbit altitude etc.) b) Staging event with time  c) Impact location | Attach adequate details to verify the authenticity of trajectory and impact points |
|  | 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** |  |
|  | 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 |
|  | Data and analysis w.r.t reliability of each stage and integrated launch vehicle. |
|  | FMECA analysis for the launch vehicle |
|  | 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 |
|  | 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 it 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** |  |
|  | 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 |
|  | In case of launch vehicle **carrying the satellite from Indian Entities**: 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 |
|  | In case of launch vehicle carrying the **foreign satellite:** 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 |
|  | Upload/attach third party and other insurance policy document, if any, containing suitable clauses as prescribed in the guidelines on liability related aspects |  |
|  | Details of the Indigenous element, if any (Manufacturing/fabrication/ Testing of hardware & software etc. in India may be highlighted) |  |
|  | Proposed / desired timeframe along with milestones, for the completion of the proposal. |  |
|  | Details, if any, of International / National Collaborations, Joint Development, Joint Venture for this proposal. |  |
|  | Intellectual Property Rights, if any available with the Applicant related to the proposal |  |
|  | Estimated cost of the project |  |
|  | Source of funding |  |
|  | 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) |  |
|  | Clearance / Approval / License of any other Government Department/ Agencies obtained/under process, if any, for this proposal (Details may be provided). |  |
|  | 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** | |

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| **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** |
|  | Whether the application is for seeking renewal/extension/amendment of the previous Authorization? If so, provide details. |
|  | **Station Details:** |
|  | Make the relevant selection:   1. Satellite Control Centre (SCC) [consists of two elements – MCC and TT&C]; 2. Only Mission Control Centre (MCC) 3. Only TT&C Earth Station 4. Only Remote Sensing Data reception station 5. Any other category (such as radars, telescope for SSA etc.), please specify   *(Multiple selections is allowed, details are to be furnished for each of the selection)* |
|  | Fixed, Mobile or transportable Station? |
|  | Intended purpose/type of the proposed station, such as GSO, NGSO, Communication, Remote sensing services; Deep space missions (Interplanetary), SSA, for launch support, etc. |
|  | Establishment and Operation of Ground station for self-use or GSaaS (Ground Station as a Service) or both |
|  | Location (complete Address, landmark, latitude, longitude, area) |
|  | Details of land leased / owned / procured / rented for establishment and operation of Ground Station.  Furnish the documentary evidence, if any. |
|  | 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. |
|  | Ownership - self owned, partnership or any other arrangement |
|  | **Technical Information** |
|  | Specification and Configuration of the Ground Station (RF and Baseband details) |
|  | Ground System Architecture including:   * Ground station terminal, * Mission Operation Centre (MOC), * Ground station data storage and network |
|  | Frequency band and Frequency Range and polarization being supported for Uplink purpose  (Both the capability of the station and the actual band of operations and carrier frequencies & BW) |
|  | Frequency band and Frequency Range and polarization being supported for Downlink purpose  (Both the capability of the station and the actual band of operations and carrier frequencies & BW) |
|  | 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 Date rate, modulation capability, etc. |
|  | Whether Remote Access to the Ground Station(s) from within or outside Indian Territory is planned? If so, provide details and the locations of such planned remote access points. |
|  | 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. |
|  | Redundancy details of MCC (such as redundancy for the workstations, network elements, etc.) |
|  | 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. |
|  | Details of deployed software, hardware, encryption, data security mechanism, network, 24x7 support system, respond time, escalation matrix etc. |
|  | Details of provisions to cease the support to 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** |
|  | 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/In-process/Yet to apply |
|  | **Miscellaneous** |
|  | Details of Indigenous Elements, if any (Manufacturing/fabrication/testing etc. may be highlighted) |
|  | Proposed / desired timeframe along with milestones, for the completion and operationalization of the Ground Station. |
|  | Details, if any, of International / National Collaborations, Joint Development, Joint Venture for this proposal. |
|  | Intellectual Property Rights, if any available with the NGE related to the proposal |
|  | Expected date of commencement of operations |
|  | Estimated cost of the project |
|  | Source of funding for this project |
|  | Any other information or specific details which IN-SPACe should know for processing the application |
|  | **Declarations/Undertakings** |
| F | We agree to cease the support to 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.  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 |
| G | 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. |
| H | 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. |
| 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** |

**Annexure-1 to Application form No. IN:APP:04.01**

**One-time prior approval for Payload data reception operation from every additional Earth Observation/Remote Sensing/ science mission satellite to be supported by the Authorized Ground Station being used for providing GSaaS**

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| **~~I~~**nformation to be submitted to IN‑SPACe on IN‑SPACe Digital Platform (IDP- www.inspace.gov.in), before the commencement of the service support to the customer. | |
|  | **Details of the Satellite/Payload(s) of which the data reception support is being provided** |
|  | Satellite Name: |
|  | Satellite Operator & Owner Name: |
|  | Address & Contact details: |
|  | Name and type of the Payload (Optical/Microwave/Hyperspectral/Thermal/ Meteorology etc.): |
|  | Specifications of each payload (e.g., type of sensor, resolution, GSD, swath, revisit time, etc.) |
|  | Name of ITU filing / Satellite network filing and details of satellite network assignment approval from the concerned Administration/Regulatory Authority: |
|  | Satellite Orbital Location / Orbital Parameters: |
|  | No. of Satellite Passes per day being supported (if applicable): |
|  | Latitude, Longitude details in case of transportable Ground Station |
|  | Expected date of commencement of services: |
|  | Tentative Service Period: |
|  | Mode & mechanism of data transfer between Authorized Ground Station and customer (optical fiber/cloud/SFTP etc.) along with address of destination/customer site: |

**Annexure-2 to Application form No. IN:APP:04.01**

**Information to be provided to IN-SPACe on commencement of support to each additional satellite/constellation through Authorized Ground station(s):**

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| **For each Ground Station support (whether commercial or free of cost),** below information needs to be submitted to IN‑SPACe on IN‑SPACe Digital Platform (IDP- www.inspace.gov.in), within 7 (seven) working days after the commencement of the support to the satellite/constellation. | |
|  | **Details of the Customer to whom the ground station support is being provided** |
|  | Name, Address & Contact details of the Customer: |
|  | **Details of the Satellite(s) to which the ground station support is being provided** |
|  | Satellite Name: |
|  | Satellite Operator & Owner Name: |
|  | Address & Contact details: |
|  | Name of ITU filing / Satellite network filing and details of satellite network assignment approval from the concerned Administration/Regulatory Authority: |
|  | Satellite Orbital Location / Orbital Parameters: |
|  | No. of Satellite Passes per day being supported (if applicable): |
|  | Date of commencement of services: |
|  | Contracted / Committed Service Period: |
|  | Type of services being provided (Telecommand/Telemetry/Tracking/Ranging/Payload Data Reception): |
|  | Latitude, Longitude details in case of transportable Ground Station |
|  | **Details of Mission Control Centre (MCC) being used for service support** |
|  | Whether Telecommands are being received from the customer’s MCC or Applicant’s MCC is being used? |
|  | Location of the MCC: |
|  | Mode of data transfer between MCC and the Authorized Ground Station (optical fiber/cloud/SFTP etc.): |
|  | **Information on Telemetry, Tracking, Telecommand (TT&C) and Ranging Services** |
|  | Exact Frequencies of operation for Telecommand: |
| i. | RF parameters like modulation, bandwidth, data rate etc.: |
| ii. | Transmit EIRP: |
|  | Exact Frequencies of operation for Telemetry & Tracking: |
| i. | RF parameters like modulation, bandwidth, data rate etc.: |
|  | Exact Frequencies of operation for Ranging: |
| i. | RF parameters like modulation, bandwidth, data rate etc.: |
| ii. | Transmit EIRP: |
|  | **Information on Payload Data Reception Services** |
|  | Name and type of the Payload (Optical/Microwave/Hyperspectral/Thermal/ Meteorology etc.): |
|  | Specifications of each payload (e.g., type of sensor, resolution, GSD, swath, revisit time, etc.), if not authorized by IN-SPACe |
|  | Exact Frequencies of operation for Payload Data reception: |
|  | RF parameters like modulation, bandwidth, data rate etc.: |
|  | Mode & mechanism of transferring the data received by the Authorized Ground Station and recipient site (optical fiber/cloud/SFTP etc.) along with address of destination/ recipient site: |

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| **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** |
|  | 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) |
|  | Satellite name |
|  | Whether satellite is a part of a Constellation (if so, provide details) |
|  | Payload(s) details/specifications (such as resolution/GSD, swath, revisit time) for which Authorization is being sought |
|  | Satellite owner/Operator Name  Name of the contact person  Email  Address for correspondence |
|  | Shareholding pattern of the satellite owner |
|  | 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 |
|  | Space Object registration details as per UNOOSA including country of registration |
|  | Whether the satellite is operational in-orbit? If so, estimated operational life of the satellite |
|  | 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** |
|  | 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. |
|  | Mode of sourcing the Primary Data from the satellite operator and the associated security mechanism to prevent unauthorised access. |
|  | Details of data archival & retrieval mechanism |
|  | Details of data storage location (physical storage, cloud etc.) along with security measures proposed to be adopted to prevent unauthorised access to the Primary Data |
|  | 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. |
|  | 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)** |
| **For each Data Dissemination transaction (whether commercial or free of cost) of the Primary Data of GSD at nadir <=30cm,** 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). | |
| **1** | **Details of the User to whom the Primary Data is being provided or Primary Data being used for the self consumption** |
|  | Whether self-consumption or dissemination to other users |
|  | Type (Govt./PSU/Pvt. Etc.) |
|  | Legal Name of the Entity |
|  | Brand & Trade name, if any: |
|  | Address |
|  | 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)  Copy of identification provided by the appropriate Govt. Authority for Non-Indian Entity |
|  | For Indian NGE, Foreign Direct Investment, if any, if so provide details including whether the Management and Control is with Indian Citizen or not  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. |
|  | Name and contact details of the Authorized person under whose custody the data is being kept. |
|  | Project Name & End use of the data |
|  | Data Dissemination date and time |
|  | **Information on data disseminated** |
|  | Name of the Satellite |
|  | Ground footprint of the data disseminated in kml format |
|  | Area of the footprint in sq km |
|  | Whether data was provided from archive or through fresh tasking |
| e. | Scene wise details of data   * 1. Date of acquisition   2. Time of acquisition   3. Satellite Orbit Path/Row number   4. Name of the Payload/sensor and type of data/data product\* (such as standalone data, pan-sharpened, mosaic, data cubes, etc.)   5. Cloud Percentage   6. Off Nadir Angle in degrees   Note: \* In case the data / data product is generated using multi-sensor/multi-temporal data, then all relevant details as described above should be provided for each of the sensors / time of acquisition through separate entries. |
| f. |  |
|  |  |
|  |  |
|  |  |
|  | **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** |
|  | Copy of PAN / TAN Number (for Indian Entity) |
|  | Copy of GSTIN Number (for Indian Entity) |
|  | 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 |
|  | Copy of Memorandum of Association and Articles of Association of the company (in case of NGE/Non-Indian Entity) |
|  | 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** |
|  | 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) |
|  | Payload(s) details/specifications (such as resolution/GSD, swath, revisit time) for which the Applicant intends to register as a Data Disseminator |
|  | Satellite owner/Operator Name  Name of the contact person  Email  Address for correspondence |
|  | Space Object registration details as per UNOOSA including country of registration |
|  | Estimated operational life of the satellite |
|  | Whether Applicant is the satellite operator/owner for which it intends to register as a Data Disseminator. |
|  | 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. |
|  | Consent of the Satellite operator permitting the Applicant Data Disseminator to sell/disseminate its satellite data (share copy), along with validity of such permission |
|  | 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 |
| Ground footprint of the data disseminated in kml format |
| Area of the footprint in sq km |
| Whether data was provided from archive or through fresh tasking |
| c)       Fresh tasking/Archive data (provide details such as satellite pass, date etc.): |
| Scene wise details of data   1. Date of acquisition 2. Time of acquisition 3. Satellite Orbit Path/Row number 4. Name of the Payload/sensor and type of data/data product\* (such as standalone data, pan-sharpened, mosaic, data cubes, etc.)   Note: \* In case the data / data product is generated using multi-sensor/multi-temporal data, then all relevant details as described above should be provided for each of the sensors / time of acquisition through separate entries. |
|  |
|  |
| f)       Data Dissemination date and time (may have multiple entries) |

**Annexure-1**

**Security Clearance Proforma**

**Application proforma for security clearance (other proposals)**

1. 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. |

1. 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 |

1. 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 |

1. 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**

1. Name & address and registration number of the company
2. Name & address of owners (in case of proprietorship firm) / directors of the company

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Is the company owners (in case of proprietorship firm ) directors listed above, the subject of any
2. Preventive detention proceedings under

Public safety Act / National security Act etc. Yes/No

1. Criminal investigation in which charge sheet Has been filed Yes/No
2. If Yes, please provide following details
3. Case/ FIR number
4. Detention / warrant number, if any
5. Police station / district / agency
6. Sections of law under which case (s) has / have been filed
7. Name and place of the court
8. 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** |  |
|  | Name of Satellite/Constellation: |  |
|  | Name of the ITU Filing for payload & TT&C, if already filed |  |
|  | Name of Administration |  |
|  | Owner (Name of the entity) |  |
|  | Name |  |
|  | Address |  |
|  | Contact No/Email |  |
|  | Company Registration Number in India with GSTIN |  |
|  | Name of authorized operator (Name of the satellite operator) |  |
|  | Point of Contact (POC) in Initial Phase and Normal Phase. For each point of contact, provide the following details: | |
|  | Name |  |
|  | Designation |  |
|  | Phone |  |
|  | Email |  |
|  | Launch Vehicle related information | |
|  | Launch vehicle name |  |
|  | Launch Facility |  |
|  | Launch date (window) |  |
|  | **Part-B: Mission Related Information** |  |
|  | Mission Objectives |  |
|  | Spacecraft dimension (preferable to be above 10 cm to enable tracking) | |
|  | Stowed: |  |
|  | Post Deployment of all appendages: |  |
|  | Drag area |  |
|  | SRP area |  |
|  | Mass | |
|  | Dry mass: |  |
|  | Wet mass |  |
|  | Mention propulsion system (electrical/chemical/ others, please specify) and propellant mass details (e.g., monopropellant/bipropellant, specify others): |  |
|  | Total fuel loaded at launch pad |  |
|  | 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): |  |
|  | 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 |  |
|  | Satellite/constellation configuration, architecture and mission profile (provide reference of design documents, if already submitted): |  |
|  | Trackability (on-orbit position and velocity determination)  (Attach supplementary document) | |
|  | Plan for maintenance of acquired observational data: |  |
|  | Plan for Spacecraft ephemeris data maintenance: |  |
|  | Unique identifiability (desirable feature): |  |
|  | 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. |  |
|  | Ground segment | |
|  | 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) |  |
|  | 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** |  |
|  | Expected in-orbit lifetime | |
|  | Mission life: |  |
|  | Post-mission life till atmospheric re-entry: |  |
|  | Total number of objects to be released during normal mission phase |  |
|  | List of objects: |  |
|  | Orbit at which the object(s) will be released for each object:  (Attach supplementary document) |  |
|  | Quantification of collision risks with small and large objects within +/-15 km altitude of proposed operational orbit (show that probability of collision with catalogued objects <= 0.001, or have capability of collision avoidance):  (Attach supplementary document) |  |
|  | Conjunction Assessment/ Spaceflight Safety. | |
| a. | Plans for regular conjunction assessment (CA)  (Attach supplementary document) | |
| b. | Source of orbital elements of other Space Objects: |  |
| c. | Agency/owner/operator which will be responsible for the CA: |  |
|  | Plan for sharing of ephemeris for collision avoidance/conjunction risk mitigation with DOS: |  |
|  | Maneuverability: capability to perform collision avoidance maneuver (Attach supplementary document) | |
|  | Means of propulsion (ion/chemical/electrical) : |  |
|  | Fuel budget for orbit maintenance |  |
|  | Fuel budget for collision avoidance: |  |
|  | Fuel budget for post mission disposal: |  |
|  | Plan for orbit maintenance during mission life & notification on planned maneuver to DOS: |  |
|  | 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) |  |
|  | Overall design reliability to assess chances of on-orbit mission failure: |  |
|  | Plan for Failure Mode Effect Analysis to limit failure modes which can lead to accidental explosion during operational phase: |  |
|  | Detailed post mission disposal plan, including passivation, |  |
|  | Plans for Failure mode analysis and system reliability figures for successful PMD plan implementation: |  |
|  | Collision avoidance capability, maximum delta-V which can be imparted for Collision Avoidance Maneuver (CAM) |  |
|  | 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** |  |
|  | Name of Launch Vehicle: |  |
|  | Name of the Entity |  |
| a | Name |  |
| b | Address |  |
|  | Authorised operator |  |
|  | 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 |  |
|  | **Part-B: Mission Related Information** |  |
|  | Launch Facility |  |
| a | Name of launch pad |  |
| b | Coordinates (Geodetic): Latitude (deg), Longitude (deg), Altitude (km) |  |
|  | Launch date  [Mention possible dates, dd-mm-yyyy format] |  |
|  | Launch window  [Mention start and end timings (in yyyy-MM-dd hh:mm:ss UTC format)] |  |
|  | LV configuration |  |
| a | No. of stages: |  |
| b | For each stage, specify   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Total Mass (kg) | Dry mass | Propellant mass | Type of propellant (mono/bi/semi-cryo/cryo) | Dimension | |  |  |  |  |  | |  |
|  | Presence of radioactive, and /or biological material (if present, provide full details in supplementary attachment): |  |
|  | Nominal ascent trajectory and launch dispersion:  (Attach supplementary document) |  |
|  | 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:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | 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 |  |
| a | (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 |  |
| a | Plan for collision avoidance (COLA) with catalogued objects: |  |
| b | Agency responsible for COLA: |  |
| 15. | Total number of objects (other than payloads and rocket bodies) released |  |
| a | List of objects: |  |
| b | Size of each object: |  |
| c | Altitude of release of each object: |  |
| 16. | List of rocket bodies generated by LV |  |
| a | Sub-orbital stages |  |
| b | Orbital stages |  |
| c | 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 |

**Annexure-4: Details of Hosted Payload(s) to be submitted by the Host Entity**

**Part I: Applicable for Indian Hosted Payload(s)**

|  |  |  |
| --- | --- | --- |
|  | Number of Hosted Payload(s) |  |
|  | Name of Hosted Payload(s) |  |
|  | Objectives of Hosted Payload(s) |  |
|  | Entity owning the Hosted Payload(s) |  |
|  | Share the copy of agreement/contract between the Applicant (Host Entity) and the Hosted Payload owner. |  |
|  | Status of IN-SPACe Authorization for the Hosted Payload(s) |  |
|  | Identify the shared resources/systems of the Host Space Object for operations of the Hosted Payload |  |
|  | Mechanism of operations and control of Hosted Payload and Host Space Object. Provide signal flow and schematic diagram |  |
|  | 1. Whether Hosted Payload is planned to be operated independently by the Hosted Payload owner. Yes/No 2. Whether Hosted Payload operates with its own independent TT&C, MCC and communication channel or will share the Host Space Object resources, kindly specify. |  |

**Part II: Applicable for non-Indian Hosted Payload(s)**

|  |  |  |
| --- | --- | --- |
|  | Number of Hosted Payload(s) |  |
|  | Name of Hosted Payload(s) |  |
|  | Objectives of Hosted Payload(s) |  |
|  | Entity owning the Hosted Payload(s). Provide Name, address and contact details of the Entity. |  |
|  | * 1. Name, address and contact details of the concerned non-Indian administration under whose jurisdiction, the concerned Hosted Payload would operate   2. Status of the Authorization/Approval/License/Permission from this concerned Non-Indian Administration. Provide the copy of the approval/license or the documentary evidence |  |
|  | Hosted Payload(s) details   1. Type of Hosted Payload:   (Earth Observation/ Communication / Scientific/ Special Purpose Payloads such as SIGINT/COMINT/ELINT/Thruster or attitude control system, etc.)   1. Mass 2. Dimensions of the Hosted Payload in Stowed and deployed condition, if applicable, 3. Intended operational life 4. Other specifications of the Hosted Payload: 5. In case of EO payloads, provide Specifications: Type of sensors, Imaging mode, Spectral, spatial, radiometric, temporal resolutions and swath, revisit time, onboard storage/recorder if any, onboard data security/encryption mechanism in case of the payload has ≤30 cm GSD, etc.   Provide details of data communication channel between Host Space Object and Hosted Payload data receive stations (whether communication channel is part of the Host Space Object or Hosted Payload itself): Data rate, carrier frequencies and modulation   1. In case of communication payloads: Each payload configuration & architecture (channelization plan/transponder frequencies & bandwidth, user link & gateway link frequencies, number of beams, spot beams/single beam, coverage area, EIRP, G/T, etc., as applicable). 2. In case of Scientific Payloads/Special Purpose Payload such as SIGINT, COMINT, ELINT, thrusters, Propulsion systems, etc.: Instrument details, detector/sensor specifications, Type of propulsion system (electrical/chemical/other). For motion control systems (Servo/wheels), provide broad technical details, etc, as applicable   Provide details of data communication channel between Host Space Object and Hosted Payload data receive stations (whether communication channel is part of the Host Space Object or Hosted Payload itself): Data rate, carrier frequencies and modulation |  |
|  | Share the copy of agreement/contract between the Applicant (Host Entity) and the Hosted Payload owner. |  |
|  | Identify the shared resources/systems of the Host Space Object for operations of the Hosted Payload |  |
|  | Mechanism of operations and control of Hosted Payload and Host Space Object. Provide signal flow and schematic diagram |  |
|  | Whether Hosted Payload is planned to be operated independently by the Hosted Payload owner. If yes, provide the following details:   1. Details of Hosted Payload TT&C Stations being used (such as locations, ownership- Self owned or through service provider. Provide details of service provider like name, address, if applicable.) 2. Details of the Mission Control Centre [MCC] being proposed to be used (such as locations, Ownership - self owned or service provider. Provide details of service provider like name, address, if applicable.) |  |
|  | In case of communication Hosted Payload intends to provide capacity and services over India, confirm whether such Hosted Payload Owner has applied to IN-SPACe, seeking its Authorization. |  |
|  | Confirm if the Hosted Payload intends to capture data pertaining to Indian Territory.  If yes, then provide confirmation that the contract with the Hosted Payload owner addresses the mechanism of Hosted Payload control and operations in respect of the imagery/data captured pertaining to Indian Territory. The contract also has the consent of the Hosted Payload owner permitting Host Entity to maintain the record of the captured data pertaining to Indian Territory, for six months period and submit to IN-SPACe, as and when sought. |  |
| **ITU Filing Details** | | |
|  | Whether Hosted Payload is operating under the ITU filing done by the Applicant (Host Entity). If no, provide the details of ITU filing:   1. Administration under which the ITU filing is done 2. Name of the ITU filing 3. Hosted Payload frequency band and frequencies 4. ITU filing status 5. In case of independent TT&C, provide ITU filing details |  |