

Space-National Academic Partner (S-NAP): Announcement of Opportunity

1.0 DESCRIPTION OF THE OPPORTUNITY

1.1 Overview of the Opportunity

The Indian Space programme has the primary objective of developing space technology and application programmes to meet the developmental needs of the country. This involves development of various technologies, realization of new products, signal processing, and development of innovative applications to resolve the problems being faced by society. Apart from developing high technology areas using in-house resources, ISRO also utilizes the intellectual base available in the Indian industries, academia and autonomous research establishments.

There are many academic institutes in the country who have developed considerable expertise in certain fields. ISRO is announcing this opportunity for such teams to work with ISRO scientists and engineers to further the space technology and application potential. This collaborative working will enable the institute to access ISRO facilities and ISRO scientists/ engineers use institute facilities. The partner Institute will be involved along with ISRO, in decision making regarding the adoption of new technologies/applications. This Announcement of Opportunity (AO) is open to Indian Academic Institutes having considerable expertise in any of the themes which are of interest to ISRO.

It should be noted that this AO does not fund the Institutes but only identifies certain academic institutes as partners to Indian Space Research Organization in particular fields. In case of joint working on specific cases, appropriate arrangements will have to be worked out separately.

1.2 Who can submit a Proposal?

Proposals could be submitted by Indian Academic Institutes, Universities and Government agencies who has developed considerable expertise as well as research facilities in a particular field. An institute may submit proposals for more than one field if they consider significant expertise and have facilities in multiple fields. However, an Institute will be selected as S-NAP only in one field. The

Institute need to identify a focal point who is a full time staff member of the concerned institution. The proposals must be forwarded through the Head of the Institution, with appropriate assurance for providing necessary facilities for carrying out the AO responsibilities.

2.0 OBJECTIVES OF THE AO

This Announcement of Opportunity (AO) is for identifying Academic Institutions who have proven credibility in certain field as “Space-National Academic Partner (S-NAP)”. Through this, the Academic Partner will involve in/ facilitate research in space research related technology and applications.

2.1 Responsibility of Academic Partner

- The chosen Space-National Academic Partner (S-NAP) in a field will be a think tank along with ISRO scientists and engineers in furthering space research and solving outstanding issues in that field.
- S-NAP may carry out the work within the Institute or engage other collaborators as the Steering Committee feels appropriate.
- S-NAP may be the front end for international collaborations for specific activities wherever found appropriate.
- S-NAP can submit project proposals suggesting advancements in the existing technology and applications and the projects found appropriate may be funded by ISRO.
- S-NAP should submit periodical reports on the advancements in the happening across the globe so that similar improvements can be planned in ISRO systems and applications.
- S-NAP need to enter into a non-disclosure agreement with ISRO as they will be exposed to many of the facilities/plan of ISRO.
- S-NAP may organize specific seminars and workshops in the area specific to space activities.

2.2 Responsibility of ISRO

- ISRO will involve S-NAP of the particular field for resolving outstanding issues in technology and application.
- ISRO should involve S-NAP in brain storming sessions and future planning sessions wherever possible and if the session is non-strategic.
- ISRO should provide S-NAP access to ISRO facilities for carrying out the

assignments as a follow up to this MoU.

3.0 CRITERIA FOR SELECTION OF S-NAP

It is planned to establish number of S-NAP in selected fields relevant to space technology and applications. Few of the fields are as follows:

<ul style="list-style-type: none"> • Satellite Communication • Satellite Navigation Applications development and ground segment • Signal Conditioning & processing • VLSI & Micro electronics • Metallurgy & Material Science • Image processing • Space Sciences • Composites & Ceramics 	<ul style="list-style-type: none"> • Additive Manufacturing Techniques • Thermal science • Tribology • Chemical Engineering/ Sciences • Structural Engineering & Analysis • Computer Science – High speed computing & Big Data Analytics • Robotics & AI • RF Technology
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The above fields are preliminary and may extend as required by ISRO.

The institutes interested in becoming S-NAP should have excellent record in academic programmes and research activities including infrastructure to carry out advanced research. The faculty involved should be well established and have publications in the relevant field. The institute should be capable to conduct research and educational activities in the relevant fields seeking partnership.

4.0 GUIDELINES FOR PROPOSAL PREPARATION

The potential Institute should submit the proposal in a format described in the following sections. Two copies of the proposal in the specified format (Annexure 1) are to be submitted by the Head of Institution to

The Director,
Capacity Building Programme Office,
ISRO HQ, Antariksh Bhavan,
New BEL Road,
Bangalore-560 094

(send the advance signed pdf copy by Email to: dir.cbpo@isro.gov.in)

If an Institute is submitting proposals for partnership in multiple fields, each proposal should be self-contained with all the information as in the annexure-1.

The last date for receiving the proposal by post through proper channel with the following details (see the format) is April 30, 2019.

5.0 EVALUATION OF PROPOSALS

With the overall objectives briefly summarised in Section 2.0, this Announcement of Opportunity (AO) for Space-National Academic Partner (S-NAP) is aimed towards stimulating newer research in space technology and applications and widen the involvement of experienced research personnel in space research. Towards this, the proposals received in response to this AO will be evaluated by an ISRO selection committee constituted for the purpose, considering primarily the expertise available in the institute, past research records of the faculty and the facilities available in the Institute. The recommended institutes will be contacted for further consideration by Capacity Building Programme Office, ISRO HQ.

If an Institute has submitted proposals for partnership under multiple fields, the proposals in each field will be evaluated separately and one Institute will be selected as a partner in only one field. The decision on the field will solely depend on ISRO. ISRO reserve the right not to award the partnership position to any Institute in case the proposals are not found suitable in certain fields.

Once the S-NAP is selected, an offer letter will be sent to the Institute and the Institute need to confirm the acceptance of the offer. An MOU will be entered into between the Institute and the lead centre of ISRO having the expertise in that field.

6.0 FUNDING MODEL

This AO does not fund the Academic Institutes, but only select the Institutes as partner to ISRO in certain field. Further to this, if a project is approved to be carried out in the partner Institute, the appropriate budget as agreed mutually will be provided to Institute to carry out the work. If the experts from the Institute are invited for discussions or brain storming related to space research, TA/DA and honorarium will be provided. Towards this another agreement will be worked out under this umbrella MoU.

7.0 TERMS AND CONDITIONS

- ISRO reserves the right to terminate MoU entered between the Institute and ISRO as a follow up to this AO, if the Institute is found not contributing to the space research.

- The MoU thus entered will be for a duration of three years and the continuation or closure will be decided by ISRO based on the satisfactory performance under the partnership.
- The information gathered/ provided from ISRO is confidential in nature and the Institute should maintain secrecy on its part. The Institute or faculty may dissuade from giving any public or media statements regarding the programs/plans of ISRO or project being carried out in association with ISRO, without prior permission.
- Proprietary techniques and technology of ISRO shall remain the property of ISRO for the design and development of any of the components/ software. The intellectual property rights such as Patents, Copyrights, packaging and the processes etc., relating to the project work under this AO and subsequent MOU shall remain the property of ISRO. However, if any special techniques are evolved on mutual interaction, the same may be owned by both ISRO and S-NAP.
- ISRO has the right to utilize the results of the joint projects carried out at S-NAP in space technology and applications.
- Acknowledgement of ISRO support must be made in all publications arising out of the projects under the S-NAP MoU. The institution will have to take prior permissions from ISRO before publishing any work based on S-NAP projects. Such permission will not be unreasonably withheld. Two copies of all publications resulting from these research projects must be submitted to ISRO to the address mentioned under paragraph 4.0

The declaration contained in the proposal format must be signed by the Focal Point and Head of the Institution (Annexure - 2). Otherwise the proposal will not be considered valid and is liable to be rejected.

8.0 FOLLOW-ON ACTIONS AND ACTIVITIES

Following the notification of acceptance of the proposal, the Institute will have to:

- Confirm his/her intention to accept the offer to become an S-NAP.
- Confirm the acceptance of the terms and conditions
- Agree to the Non-Disclosure Agreement (NDA).

Annexure -**1****Format for Submitting the Proposal for S-NAP**

1	Field in which the Institute is seeking Partnership	
2	Three Specific areas under the above field partnership is proposed	
3	Name of the Institute	
4	Institutional Address for Correspondence Postal Address District State/ Union territory Email ID Phone Number Website	
5	Whether the Institution/University is a Government Institution or a Non-Government Institution?	
6	Board of Governors	
7	Strength of the Institute No. of Faculty Members in the field proposed for partnership Teaching Non Teaching No. of Students	
8	Details of Departments/Details of the Educational Programs in the field proposed for partnership: Graduate Post Graduate Doctoral Post Doctoral Inter-disciplinary courses	
9	Details of the Infrastructure / Facilities /Labs at the Institute (in the field proposed for partnership)	

10	Focal Point in charge of interfacing with ISRO	
11	Bio-data of faculty members showing the educational qualification, project carried out and expertise in the field	
12	List of the sponsored projects carried out/ being carried out by the Institute (in the field proposed for partnership) Under: 1) ISRO 2) and other funding agency (Attach separate list if necessary)	
13	Brief write up about the Institute (500 words) why they should be considered	
14	I/We have carefully read the terms and conditions for becoming a Space-National Academic Partner and agree to abide by it. It is certified that if the Institute is selected as Academic partner to ISRO, all the basic facilities including administrative support, required infrastructure and other amenities available at our Institution will be extended for the Space research.	

Name	Designation	Signature
Name of the Applicant Institute		
Head of the Institution		

Annexure - 2

Format for Declaration

Declaration

We have carefully read the terms and conditions of Space-National Academic Partner (S-NAP) programme and agree to abide by them.

It is certified that if the S-NAP proposal is accepted and supported by the Indian Space Research Organisation (ISRO), the facilities as identified in the proposal and administrative support available at our institution and needed to execute the project will be extended to the Principal Investigator and other Co-investigators.

We certify that the information gathered/provided would be used only for the intended S-NAP activities.

Signature of Focal Point with Name and Designation

Signature of Head of Institution with Name and Designation

Date:

Seal of Head of Institution