भारत सरकार अन्तरिक्ष विभाग राष्ट्रीय वायुमंडलीय अनुसंधान प्रयोगशाला पो.बॉ.सं. 122 सम्बन्ध

पो.बॉ.मं. 123, एसवीयू कंपस डाक घर तिरुपति – 517 502 प्रयोगशाला : पो : गादंकी–517 112 पाकाला मंडल, चित्तूर ज़िला, आंध्र प्रदेश दूरभाव : + 91 8585 272024, 222140 फैक्स : + 91 877 2248146 / + 91 8585 272018/21



GOVERNMENT OF INDIA DEPARTMENT OF SPACE NATIONAL ATMOSPHERIC RESEARCH LABORATORY P.B. No.123, P.O SVU Campus Tirupati-517 502

Laboratory: P.O. Gadanki - 517 112

Pakala Mandal, Chittoor Dist., Andhra Pradesh
Phone: + 91 8585 272024, 222140

Fax: + 91 877 2248146 / + 91 8585 272018/21

Dr. Dattatreya Gujjar Sr. Prof., Department of ECE Alva's Institute of Engineering and Technology Mijar, Moodabidri -574225

June 29, 2017

Sub: Letter of Joint collaboration under project of GNSS network by NARL

Sir,

This is to initiate collaboration and joint research work for application of GNSS and ionospheric/atmospheric studies using navigation satellites under an on-going activity of ground based GNSS receiver network at NARL.

A GNSS receiver make "Septentrio PolaRxS PRO" with a "Septentrio GNSS MF-Antenna" and cables was installed at your institute on 17 April 2017 for the aforementioned objective. The plan is to study the delay over the satellite signals due to Earth's Atmosphere and Ionosphere and its effect in precise applications areas. The continuous data from the GNSS receiver installed at your lab would be utilized on collaboration basis.

We wish that your institute also takes active part in using the data processing and research using the data recorded from this receiver at your site. Please note that the research publications using data from this receiver would be shared with you. Also, shall you wish to publications using continuous using the data recorded from this receiver would be shared with you. Also, shall you wish to publications using data from this receiver would be shared with you assure you the best of our lead in specific scientific objectives under this plan and we assure you the best of our support.

This letter is intended to initiate the joint work and extend the operation of our GNSS receiver at your institute for 3 years. Please do the needful to support the installation of the receiver at your institute and send a response letter with similar intent. Thank you very much for your support to scientific research and development.

Sincerely yours

(Dr. Nirvikar Dashora) Scientist/Engineer-SE NARL, Gadanki

Director

NARL, Gadanki

Forwarded By

म्रो. ए. जवरामन / Prof. A. Jayaraman निवेशक, एन.ए.आर.एस / Director, NARL अन्तरिक्ष विभाग / Dept. of Space भारत सरकार / Govt. of India पार्वकी / GADANKI-517 112

Date: 11/03/2017

## Letter of Intent for Asset Mapping

#### Between

National Remote Sensing Centre, Hyderabad - 500037 ISRO, DOS

Alva's Institute of Engineering and Technology, Mijar, Moodbidri

ISRO has developed an online Portal - Ehuvan Panchayat (www.bhuvan-panchayat.nrsc.gov.in) with the space-based inputs towards resource-based and integrated spatial developmental planning of rural areas in a user-friendly enabling environment under the project 'Space based Information Support for Decentralized Planning (SIS-DP). In order to utilize the Portal for decentralized planning by Panchayat Raj Institutions (PRIs), ISRO has initiated a new project called Empowering Panchayati Raj Institutions Spatially (EPRIS) with the goal to empower PRIs by utilizing the Portal for developmental planning at Panchayat level. Towards achieving the goal, it is essential to have the information of existing assets so that one can assess the gap area and plan for new assets.

NRSC has initiated implementation of EPRIS project covering 10% of Panchayats with the help of Partner Institutions namely, SRSACs, NIRD and NGOs. Further to fasten the activity, the asset mapping workshop was conducted through distance learning from IIRS on 27th June 2016 to several academic institutions. During the workshop many academic institutions showed interest to participate in the asset mapping exercise. To carry out the asset mapping activity with Academic Institutions in a stipulated time of 3 months, ISRO has identified a nominal amount of Rs. 2000 per gram Panchayat for the logistics support. To avoid duplication of work, this Letter of Intent for asset mapping has been prepared for joint signature by NRSC & academic institutions.

In this Letter of Intent, National Remote Sensing Centre (NRSC) is the nodal agency for capacity building, asset mapping and activity planning for empowering PRIs, NRSC and Alva's Institute of Engineering and Technology, Mijar, Moodbidri, agree to exercise their best efforts in fulfilling the following obligations for asset mapping in the selected Gram Panchayats (as per list shown in Annexure-1):

- All the community assets lying in the selected Gram Panchayat area are to be mapped using the latest version of Bhuvan Panchayat Asset Mapping Mobile App, freely 1. downloadable from the Bhuvan Panchayat Portal (www.bhuvan-panchayat.nrsc.gov.in).
- The asset mapping is to be done in co-ordination with the local Elected Panchayat 2. Representatives / Panchayat functionaries and validated by the concerned Elected Panchayat Representative / Panchayat functionary.
- The assets successfully mapped by the Bhuvan Panchayat Mobile App will be available 3. on the Portal after moderation.
- The following documents, available in Bhuvan Panchayat Portal for free download, may 4. be referred for the detailed methodology: (i) Asset Directory and Mapping Guidelines, and (ii) Bhuvan Panchayat Asset Mapping App User Manual.
- Remuneration will be paid to the University at the rate of Rs. 2000 per Gram Panchayat 5. on signing of this Letter of Intent.

- University/Institutes should make their own arrangement for Smart phone(s) for collecting the asset data in the field
- After successful mapping of all the assets utilization of fund with necessary certification by the Panchayat Representative/ Panchayat functionary need to be submitted to NRSC
- 8. After successful asset mapping, developmental activity planning using Bhuvan Panchayat platform will be planned separately by capacity building of the locals with the participated academic institutions at Panchayati Raj Institutions.

This letter of intent is valid until successful completion of the task as per the above obligations, or 3 months from the date of signing this letter, whichever is earlier. The obligations under this letter of intent can be nullified on mutual consent. This letter of Intent is not intended to and shall not constitute in any way a binding or legal agreement, or impose any legal obligation or duty on either party.

Signatures

वी रघ वेंकटरामन

V. Ragnu Venkara Centre

Alva's Institute of Engineering and Technology PRINCIPAL

Alva's Institute of Engg. & Technology, Mijor, MOODBIDRI - 574 225, D.K. Annexure-1

State	Details of the s	elected Gram Panchayat	
- Otale	District Panchayat	Intermediate Panchayat	Gram Panchayat
			Statil Fallellayar
		기계 그 그 스웨딩 네티	ADYAR
			AIKALA
			AMBLAMOGRU'
			ATHIKARI BETTU
			BADAGAYEDAPADAVU
			BAJPE
			BALA
			BALKUNJE
			BELMA
			BELUVAI
			BOLIYARU
			CHELAIRU
			DAREGUDDE
			GANJIMATA
		to her Tell	GURUPURA
			HALEYANGADY
		_ · ·	HAREKALA
	*	4	HOSABETTU IRUVAIL
Karnataka	Datable	Mangaluru	JOKATTE
Namataka	Dakshina Kannada	Mangaiuru	KALLAMUNDKUR
			KANDAVARA
			KEMRAL
			KILPADY
			KINNIGOLI
			KINYA
			KONAJE
			KONDEMULA
			KUPPEPADAV
			MALAVURU MALLOORU
			MANJANADY
		1	MENNABETTU
			MOODUSHEDDE
			MUCHURU
			MUNNURU
-		1	MUTHURU
		1	NEERMARGA
		1	NELLIKARU
	31		PADUMARNAD PADUPANAMBUR
· }			PADUPERAR
		1	PALLADKA
v-			PAVURU
			PERMUDE
			PUTTHIGE
			SHIRTHADY
			SOMESHWARA
		1	SURINJE TALAPADY
			TENKAMIJAR
			UALIBETTU
			VALPADI
			YEDAPADAV
			YEKKARU

PRINCIPAL
Alva's Institute of Engg. & Technology,
Milar. MOODBIDRI - 5/4 225, D.K.

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### Alva's Institute of Engineering & Technology

Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

Phone: 08258-262725, Fax: 08258-262726

#### Circular

We are happy to inform to all the HOD's, Deans and staff that ISRO headquarter scientists conducting **Two Day Workshop On "Space Technology and Applications"** on 02-03 November 2017 at RRSC-South, NRSC, Bengaluru venue and also they are helping us to carry out research work.

In this regard, informed to all the staff members (mentioned below) are attend the same. Bus Schedule will be informed at the earliest.

Address - ISRO, Headquarter, Antariksh Bhavan, New BEL Road, Bengaluru, Karnataka -31

PRINCIPAL

Alva's Institute of Engg. & Technology, Mijar, MOODBIDRI - 574 225, D.K.

Copy to

Principal Desk

Mr. Vivek Alva, managing Trustee AEF

All Deans and HOD

Principal Alva's Degree College

# TWO DAY WORKSHOP ON "SPACE TECHNOLOGY AND APPLICATIONS"

Date: 02-03 November 2017 Venue: RRSC-South, NRSC, Bengaluru

Participants: Faculty members of Alva Institute of Engineering and Technology (AIET), Moodbidri, Karnataka

DAY 1: 02 NOVEMBER (THURSDAY), 2017					
09.30 AM- 09.35 AM	Welcome by Dr.K.Ganesha Raj, General Manager, RRSC-South				
9.35 AM -10.30 AM	"Overview of Indian Space Programme" by Dr.P.G.Diwakar, Scien				
10.30 AM - 10.45 AM	High Tea				
10.45 AM - 12.00 PM	"Remote Sensing Platforms/Sensors" by Shri.T.Shamsudheen, EOS, ISRO HQ.				
12.00 PM – 13.00 PM	"Digital Image Processing" by Shri.K.Nagajothi, Scientist, RRSC- South				
13.00 PM – 14.00 PM	Lunch				
14.00 PM - 15.00 PM	'Landscape Analysis &Biodiversity Characterization" by Dr.B.K.Ranganath, ANTRIX Corporation Ltd., Bengaluru.				
15.00 PM -15.15 PM	Tea break				
15.15 PM – 16.00 PM	"Soil Resources" by Dr.S.Ramasubramoniam, Scientist, RRSC-South				
16.00 PM -17.00 PM	"Weather and Climate Studies" by Dr.D Jagadeesha, Scientist, EOS, ISRO HQ.				
09.30 AM - 10.30 AM	Wallely III of the same and a barrier and the same and th				
	EOS, ISRO HQ.				
10.30 AM -10.45 AM	Tea break				
10.45 AM – 11.30 AM	"Digital Elevation Model and its Applications" by Smt.A.Vidya, Scientist, RRSC-South				
11.30 AM -13.00 PM	Visit to Lab and facilities at RRSC-South, (Smt.T.R. Nagashree & Shri.B. Chandrasekaran, Scientists, RRSC-South)				
13.00 PM - 14.00 PM	Lunch				
14.00 PM - 15.00 PM					

15.00 PM -15.15 PM	Tea break		
15.15 PM -16.00 PM	"Space based Navigation and Applications" by Dr.V.Poompa		
16.00 PM -17.00 PM	"Geospatial Platform (Bhuvan)" by Shri.T. Shamsudheen, EOS, ISRO HQ.		
17.00 hrs	Valedictory and Vote of Thanks		

#### Faculty Name list

S1.No	Name of the Faculty	Qualification	Department	Mbl. no
1	Mr. Vivek Alva	MBA	Managing Trustee, AEF	9945630301
2	Dr. Dattathreya	Ph.D	Electronics and	9481582906
3	Dr. Praveen. J	Ph.D	Communication	8884767555
4	Prof. Shankar B.B	MTech(Ph.D)	Engineering	7892658494
5	Prof. Parvez	MTech(Ph.D)		7829200515
6	Prof. Manjunath Kotari	MTech(Ph.D)	- i and	9449586008
7	Dr. Badusha	Ph.D	Computer science and Engineering	8122572250
8	Dr. Sumitha	Ph.D		9986672329
9	Dr. Umesh Chandra	Ph.D		9449574120
10	Prof. Sanjay MTech(Ph.D)		Civil Engineering	9964051896
11	Prof. Ajith Hebbar	MTech(Ph.D)		9448582073
12	Dr. Basavaraju.B	Ph.D	Engineering Chemistry	941727797
13	Dr. Ravi kumar.C	Ph.D		8892540530
14	Dr. Pavitra.G.P	Ph.D		9739315602
15	Dr.Shashi Kumar.K	Ph.D	Engineering Physics	8971826021
16	Dr. Roopalakshmi. R	Ph.D	Information Science	9940200752
17	Dr. Rama Bhat	Ph.D	Bio-Technology, Alva's Degree college	9480228391
18	Dr. Sathyanarayana	Ph.D	Mechanical Engg Engineering	9964810960
19	Ashwin Jain	PG	Journalism	990064825

भारत सरकार अन्तरिक्ष विभाग राष्ट्रीय वायुमंडलीय अनुसंधान प्रयोगशाला पो.बॉ.नं. 123, एसवीयू कैंपस डाक घर तिरुपति - 517 502

प्रयोगशाला : पो : गादंकी-517 112 पाकाला मंडल, चित्तूर ज़िला, आंध्र प्रदेश दूरभाव : + 91 8585 272024, 222140

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