



MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN
GOVT. OF RAJASTHAN AND INDIAN SPACE RESEARCH ORGANISATION

This Memorandum of Understanding entered into on the 18th day of February, 2010 between:

- (i) Government of Rajasthan, represented by its Secretary, Department of Science and Technology (hereinafter called "GOR") of the first part
and
- (ii) Department of Space, Government of India, through Indian Space Research Organisation, represented by Director, NRSC / ISRO, Hyderabad (hereinafter called ISRO) of the second part.

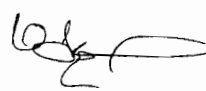
WHEREAS the ISRO is committed to development and use of modern space technology for promotion of Education and Training etc. It has launched a satellite dedicated for education called EDUSAT. The EDUSAT has entered into operational phase and a large number of interactive and receive only terminals are installed at many states & UTs. ISRO has also completed the process of setting up the state level networks in all the States and Union Territories of the country to promote educational activities and meet their educational requirements.

AND WHEREAS the GOR is primarily responsible for operationalisation of satellite communications technologies for training and extension activities of multiple departments of GOR. Prominent departments are: Medical and Health, Agriculture, Rural Development, WCD, S&T, Revenue where quality, access and equity are challenging issues to meet the developmental requirements for all-round growth of its human resources. The existing infrastructure and efforts need to be augmented / upgraded with optimal utilization of the latest technology.

AND WHEREAS GOR and ISRO believe that modern technology is an important tool, which must be leveraged for increasing and strengthening educational opportunities and activities. It is further believed that the EDUSAT can provide connectivity between the far flung rural areas and the urban centers for information, and can not only greatly enhance the availability of effective responses to the rural and educationally deprived areas but also improve the access and quality of science education. For this purpose the established satellite networks of ISRO need to be effectively utilized, regionally relevant contents need to be created to enrich education sector and make it more attractive, and the overall systems' elements need to be continuously monitored and upgraded to create an effective system of imparting education. The two parties have agreed to work jointly towards effective utilization of satellite based network to this effect and to identify their respective roles and responsibilities.

NOW IT IS HEREBY AGREED as follows:

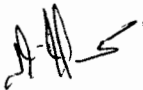
1. That ISRO shall be responsible for:
 - (a) The technical assistance and one time financing to support the maintenance and operations of the Hubs/Teaching-end, SITs (Satellite Interactive Terminals) and ROTs (Receive-Only Terminals) at identified locations of GOR as in Annex-I and financial estimates as in Annex-II. It is understood that ISRO shall honor the contractual obligations entered into by GOR for annual maintenance and the operations for THREE years subject to quarterly technical reviews and recommendations of which shall be binding on GOR.
 - (b) Providing the required bandwidth on ISRO's satellite transponders for Receive Only Transmission (ROT) channel with 2.3 MHz and one Satellite Interactive channel (SIT) with 2.3 MHz for THREE years.
 - (c) Assisting GOR towards installation, commissioning of any additional numbers of SITs and ROTs as may be required by the GOR, the cost of which will be borne by the GOR.
 - (d) Providing technical guidance and assistance, after the completion of three years, as may be required from time to time at the SITs, ROTs and Hub levels under mutually agreed terms and conditions.

 2. GOR shall be responsible for;
 - a) devising appropriate schemes for budgetary support and for directing its agencies / organizations for providing adequate funding for their EDUSAT activities including for setting up the SITs / ROTs, as per their requirements, peripherals as at hub and at all receiving ends, content generation and research and evaluation, operations and maintenance of the network and all other related activities;
 - b) monitoring, regulating the scheduling and programming of the Network; and coordinating all EDUSAT activities among the State's various user agencies and other parties by sharing the resources of the hub;
 - c) maintaining civil, electrical and other supporting infrastructures at the location for Hub and all classroom receiving ends;
 - d) maintaining the sites / locations ready for usage of installed SITs / ROTs (including building, air conditioning, electrical fittings, power etc.) as may be required;
 - e) safe custody of items supplied and installed and identification of the custodian for the same at all locations in the state;
 - f) follow-up / coordination with the ISRO and or its authorized agency during fault reporting and attending the problems at Hub, SITs and ROTs.
 - g) necessary content generation for utilization of the network for educational purpose;
 - h) send monthly utilization plan of the network in terms of time / schedule, topics etc., and inform all concerned in advance and to ISRO;
 - i) follow-up / coordination with all users in State for utilization of the network (including other users for sharing of the Hub, if required). For the purpose of discharging its responsibilities the Government of Rajasthan may designate through Notification one or more agencies / authority.
 - j) shall not change any transmission parameters, RF power of Hub, SITs, ROTs without written approval of ISRO.
 - k) shall intimate all SIT locations to ISRO and shall not shift the SITs and Hubs without prior written permission of ISRO.
 - l) shall not add any new elements to the Hub and shall not modify the configuration of the Hub without prior permission of ISRO.
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12. Duration of MOU -

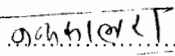
This MOU will remain in force from the date of its execution for a period of 36 months after which the parties may renew it annually for so long a period as may be mutually agreed upon. In the absence of such renewal, this MOU will lapse without any liability on any party.

In WITNESS WHEREOF The GOR and ISRO have caused this MOU to be executed as of the day, month and year first above written.

Signature : 

Name : Shri V. SRINIVAS
Designation : Secretary S&T
Date : February 18, 2010
For & on behalf of GOR
(Authorised Signatory)

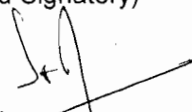
In presence of WITNESSES -

Signature : 

Name : Dr. N.K. Kalaria
Designation : Project Director
SRSAC, Jodhpur

Signature : 

Name : Dr. V JAYARAMAN
Designation : Director, NRSC/ISRO
Date : February 18, 2010
For & on behalf of DOS /ISRO
(Authorised Signatory)

Signature : 

Name : Dr. JR Sharma
Designation : General Manager
RRSC (W), Jodhpur

Details of Annexure I & II

Annexure – IA, IB, IC

IA. GRAMSAT

- ◆ Uplink station at IGPRS, Jaipur
- ◆ Studio at IGPRS, Jaipur
- ◆ 32 SITs Zila Parishads
- ◆ 237 ROT Panchayat Samities

IB. EDUSAT

- ◆ Teaching end studio, Shiksha Sankul, Jaipur
- ◆ 44 SITs at DIET (District Institute Of Education & Training) locations
- ◆ 13 ROTs at Schools

IC. Telemedicine Centres

- ◆ DOC Server – 1 SMS Hospital, Jaipur
- ◆ Remote 38

Annexure – II

Cost estimate

(Details Enclosed)

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GRAMSAT

List of sites of ROT's & SIT's


S. No.	District	SIT at Zila Parishad	ROT at Panchayat Samiti
1.	Ajmer	Ajmer	Masuda
			Bhinay
			Kekri
			Jawaja
			SriNagar
			Arain
			Silora
			Pisangan
2.	Baran	Baran	Baran
			Chhipa Barod
			Kishanganj
			Chhabara
			Shahbad
			Atru.
			Anta
3.	Barmer	Barmer	Siwana
			Balotra
			Sindhari
			Dhorimana
			Chauhatan
			Sheo
			Barmer
			Baytu
4.	Banswara	Banswara	Garhi
			Talwara
			Anandpuri
			Bagidora
			Peepal Khoot
			Sujjanganh
			Ghatol
			Kushalgarh
5.	Bharatpur	Bharatpur	Bayana
			Wair
			Sewar
			Roopwas
			Deeg
			Nagar
			Kaman
			Kumher
			Nadbai
6.	Bhilwara	Bhilwara	Kotari
			Mandalgarh
			Jahajpur
			Sahara
			Suwana
			Shahpura
			Raipur
			Asind
			Mandal
			Banera
			Hurda
7.	Bikaner	Bikaner	Lunkaranser
			Bikaner
			Nokha
			Kolayat
			Dungergarh

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8.	Bundi	Bundi	Nenwa
			Keshorai Patan
			Talera
			Bundi
9.	Chhitturgarh	Chhitturgarh	Badi Sadri
			Doongla
			Gangrar
			Kapasan
			Bhoopalsagar
			Chitturgarh
			Arnod
			Nimbahera
			Rasmi
			Bhadesar
			Chhoti Sadari
			Begu
			Bhesrodgarh
10.	Dausa	Dausa	Mahuwa
			Bandikui
			Sakrai
			Dausa
			Lalsot
11.	Dhaulpur	Dhaulpur	Dhaulpur
			Rajakhera
			Baseri
			Badi
12.	Dungarpur	Dungarpur	Aspur
			Bichhiwara
			Dungarpur
			Sagwada
			Simalwada
13.	Hanuman garh	Hanuman garh	Bhadra
			Nohar
			Hanumangarh
14.	Jhalawar	Jhalawar	Jhalra Patan
			Dug
			Khanpur
			Bakani
			Manohar Thana
			Sunel
15.	Jodhpur	Jodhpur	Osian
			Mandore
			Shergarh
			Balesar
			Luni
			Phalodi
			Bap
			Bilara
			Bhopalgarh
16.	Jaisalmer	Jaisalmer	Jaisalmer
			Sam
			Sankara
17.	Karauli	Karauli	Hindaun
			Toda Bhim
			Nadauti
			Karauli
			Sapotra
18.	Kota	Kota	Kherabad
			Sangod
			Ladpura
			Itawa
			Sultanpur

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19.	Pali	Pali	Sumerpur
			Bali
			Rani Station
			Desuri
			Rohat
			Marwar Junction
			Sojat
			Raipur
			Jetaran
			Pali
20.	Pratapgarh		Dhariyabad
			Pratapgarh
21.	Sawi Madhopur	Sawi Madhopur	Bamanwas
			Khandar
			Gangapur City
			Bonli
			Sawai Madhopur
22.	Sri Ganganager	Sri Ganganager	Raisingh nager
			Karanpur
			Padampur
			Sadul Sher
			Suratgarh
			Anopgarh
			Sri Ganganager
23.	Sirohi	Sirohi	Sirohi
			Sheoganj
			Abu Road
			Reodar
			Pindwara
24.	Nagaur	Nagaur	Makrana
			Kuchaman city
			Mertacity
			Riyan
			Parbatsar
			Didwana
			Ladnu
			Jayal
			Degana
			Mundwa
			Nagaur
25.	Tonk	Tonk	Tonk
			Uniara
			Niwai
			Deoli
			Malpura
			Toda Rai Singh
26.	Udaipur	Udaipur	Mavli
			Kherwara
			Salumber
			Bhinder
			Bad gaon
			Girwa
			Jhadol
			Kotra
			Gogunda
			Sarada

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27.	Alwar	Alwar	Umren
			Thanagazi
			Kishangarhbas
			Tijara
			Kotsasim
			Behror
			Nimrana
			Mundawar
			Reni
			Ramgarh
			Rajgarh
			Kathumar
			Laxmangarh
			Bansur
28.	Rajsamand	Rajsamand	Rajsamand
			Kumbhalgarh
			Amet
			Devgarh
			Bhim
			Railmagara
			Khamnor
29.	Jhunjhunu	Jhunjhunu	1. Aلسار
			2. Bhuana
			3. Chidawa
			4. Surajgarh
			5. Khetri
			6. Udaipurwati
			7. Jhunjhunu
			8. Nawalgarh
30.	CHURU	CHURU	1. Sujjanganr
			2. Ratanganr
			3. Sardarshahar
			4. Churu
			5. Rajgarh
			6. Taranagar
31.	SIKAR	SIKAR	1. Dhodh
			2. Fatehpur
			3. Laxmanganr
			4. Danta Ramgarh
			5. Piprali
			6. Neem ka Thana
			7. Khandala
			8. Srimadhopor
32.	JALORE	JALORE	1. Jalore
			2. Ahore
			3. Jaswantpura
			4. Raniwara
			5. Bhinmal
			6. Sayla
			7. San chore
33.	Jaipur	Jaipur	1. Virat Nagar
			2. Kot putali
			3. Shahpura
			4. Jumma Ramgarh
			5. Amber
			6. Jhotwara
			7. Sanganer
			8. Chaksu
			9. Dudu
			10. Bassi
			11. Sambhar Lake
			12. Govindgarh
			13. Fagi

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EDUSAT

List of SIT Locations under EDUSAT

S.N.	SIT NAME	CONTACT PERSON	BASIC NO.	Distance from district HQs
1	Shiksha Sankul, JLN Marg, Jaipur	Ranjeet Singh	0141-2712376	0 K.M.
2	DIET, Baran	Om Prakash Modi	95-7453-234595	0 K.M.
3	DIET Goner, Jaipur	Dharmendra	95-141-2588168	10 K.M
4	DIET Tonk	Laxman	95-1432-254560	4 K.M.
5	DIET, Jhalawar Road, Kota	Ramesh Chandra Gupta	95-744-2470452	4 K.M.
6	DIET, Nathdwara, Rajsamand	Renu Tanwar	95-2953-233630	35 K.M
7	DIET, Goverdhan Vilas, Udaipur	Vijay Rajpoot	95-294-2486764	0 K.M
8	DIET, Churu	Satyanrayan Swami	95-1562-250009	0 K.M
9	DIET, Bundi	Suresh Verma	95-747-2443843	0 K.M
10	DIET, Sikar	Gopal Lal Mathur	95-1572-248008 95-1572-251221	0 K.M
11	DIET, Karoli	Satendra	95-7464-250151	0 K.M
12	DIET, Alwar	Krishan Lal Dhawaria	95-144-2736538	0 K.M
13	DIET, Masauda, Ajmer	Ramvilas Jangid	95-1462-266986	30 K.M
14	DIET, Shahpura, Bhilwara	Gurumen Singh	95-1484-222248	25 K.M
15	DIET, Jhunjunu	Pram Lata Maan	95-1592-234699	0 K.M
16	DIET, Nagaur	Dhanesh Kumar	95-1586-220256	0 K.M
17	DIET, Vidhyashala Jodhpur	Suresh Chandra Jangid	95-291-2794361 95-291-2618972	0 K.M
18	DIET, Bharatpur	Vinod Kumar	95-5644-222415	2 K.M
19	DIET, Dungarpur	Deepak Shah	95-2964-233193	0 K.M
20	DIET, Garhi, Banswara	Shantilal Seth	95-2963-221052	35 K.M
21	DIET, Barmaer	A.R.Choudhary	95-2982-220903	0 K.M
22	DIET, Chittargarh	Abha Madam	95-1472-241013	0 K.M
23	DIET, Pugal Raod, Bikaner	Suresh Chabra	95-151-2226569 95-151-2241686	2 K.M
24	DIET, Jhalawar	Kalyanmal Verma	95-7432-240129	0 K.M
25	DIET, Jaisalmer	Rajendra Vyas	95-2992-252641	0 K.M
26	DIET, Mountabu, Sirohi	Jyotiswarup Meena	95-2974-235191	35 K.M
27	DIET, Chunawara, Ganganager	Pushpeeta Lahidi	95-154-2763608	20 K.M
28	DIET, Jalore	Sardar Singh	95-2973-226024	0 K.M
29	DIET, Bagari Nagar, Pali	Rajendra Singh	95-2960-281028	35 K.M
30	DIET, Baswa, Dausa	Kuldeep	95-1420-231502	30 K.M

31	DIET, Dholpur	Indu Shekher Sharma		5 K.M
32	Cte, Keshav Veedhapeeth, Jamdoli, Jaipur	Umesh Soni	95-141-2680466	15 K.M
33	Cte, HB Upadhaya, TT College, Hatundi, Ajmer	R.K. Yadav	95-145-2796226	40 K.M
34	Cte, Vidhayapeeth, TT College, Dabok, Udaipur	Amit Baheti	95-294-2655327	20 K.M
35	Cte, GV Mandir, TT College Sardar Shahar Churu	Prevesh ji	95-1564-220057 95-1564-220056	30 K.M
36	Cte, Vidhya Bhavan, Davali, Udaipur	1) Rajeev Giri 2) Seema	95-294-2451814	3 K.M
37	Cte, Arya Vidhayapeeth, Bhusawar, Bharatpur	1) Shyam Sundar Sharma 2) Dr. Premlata Pahuja		35 K.M
38	Cte, GP College of Education, Baggar, Jhunjhunu	1) Prof. B.K. Tyagi 2) R.K. Swami	95-1592-221421	40 K.M
39	Cte, GL Kabra, TT College, Jodhpur	1) Jitendra Sharma 2) Kamlesh Malpani	95-291-2632851	0 K.M
40	Cte, TT College, Sangariya, Hanumangarh	Kuldeep Saharan		30 K.M
41	Siert, Saheli Marg, Udaipur	Narendra Shrimal	95-294-2415171	0 K.M
42	Govt. Institute of Advance Studies in Education, Bikaner	1) Mohanlal Jangid 2) M.K. Pandey	95-151-2543953	0 K.M
43	Govt. Institute of Advance Studies in Education, Jajipur Road Ajmer	R.C. Jat	95-145-2429840 95-145-2441735	0 K.M
44	Administrative Block, Shikasha, Sankul, JLN, Marg, Jaipur	Suresh Sharma		0 K.M

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Telemedicine

Tele medicine Centres

SL. NO.	SITE Detail	LOCATION	TYPE
1	SMS HOSPITAL	JAIPUR	DOC / SERVER
2	GOVT. HOSPITAL	JODHPUR	REMOTE
3	GOVT. HOSPITAL	NAGAUAR	REMOTE
4	AG.(PBM) HOSPITAL	BIKANER	REMOTE
5	MEDICAL COLLEGE	UDAIPUR	REMOTE
6	GOVT. HOSPITAL	BHARATPUR	REMOTE
7	GOVT. HOSPITAL	ALWAR	REMOTE
8	GOVT. MEDICAL COLLEGE	AJMER	REMOTE
9	JLN HOSPITAL	AJMER	REMOTE
10	GOVT. HOSPITAL	BANSWARA	REMOTE
11	SRG HOSPITAL	JHALAWAR	REMOTE
12	GOVT. HOSPITAL	SIROHI	REMOTE
13	GOVT. MEDICAL COLLEGE	KOTA	REMOTE
14	GOVT. HOSPITAL	BARAN	REMOTE
15	GOVT. HOSPITAL	CHURU	REMOTE
16	GOVT. HOSPITAL	SIKAR	REMOTE
17	GOVT. HOSPITAL	BUNDI	REMOTE
18	GOVT. HOSPITAL	DAUSA	REMOTE
19	GOVT. HOSPITAL	DHOLPUR	REMOTE
20	GOVT. HOSPITAL	JHUNJHUNU	REMOTE

SI. No.	List of equipments supplied at Doctor / Server end (SI No 1)
1	Server (HP ML 350 G5) + Telemedicine Server Software
2	PC (HCL Infiniti) + Doctor End Software
3	Camera-Sony PCS-1600P
4	21" Samsung TV
5	Accessories- PC Table, Equipment Table, Chair, Main Power Board, LAN Switch (8 ports)
6	VSAT- Satellite communication Systems
7	UPS

SI. No.	List of equipments supplied at Remote end (SI No 2 to 12)
1	PC (HCL Infiniti)
2	Telemedicine Client Software
3	Printer -Inkjet/Deskjet 600 dpi (HP 3940 or Eqvt)
4	Camera- Polycom Viavedio
5	21" Samsung TV
6	ECG (Schiller Samvid)
7	X-Ray Scanner Make: Microtech 9800XL+TMA 1600
8	Accessories- PC Table, Equipment Table, Chair, Main Power Board, LAN Switch (8 ports)
9	VSAT- Satellite communication Systems
10	UPS

21	GOVT. HOSPITAL	KARALI	REMOTE
22	MBS HOSPITAL	KOTA	REMOTE
23	COMMUNITY HEALTH CENTER	KETHUN	REMOTE
24	GOVT. HOSPITAL	DUNGARPUR	REMOTE
25	MB HOSPITAL	UDAIPUR	REMOTE
26	GOVT. HOSPITAL	BHILWARA	REMOTE
27	GOVT. HOSPITAL	JALORE	REMOTE
28	GOVT. HOSPITAL	PALI	REMOTE
29	GOVT. HOSPITAL	RAJSAMAND	REMOTE
30	GOVT. HOSPITAL	S.MADHOPUR	REMOTE
31	GOVT. HOSPITAL	TONK	REMOTE
32	DR.S.N.MEDICAL COLLEGE	JODHPUR	REMOTE
33	GOVT. HOSPITAL	BARMER	REMOTE
34	GOVT.MEDICAL COLLEGE	BIKANER	REMOTE
35	GOVT. HOSPITAL	CHITTORGARH	REMOTE
36	GOVT. HOSPITAL	GANGANAGAR	REMOTE
37	GOVT. HOSPITAL	JAISALMER	REMOTE
38	GOVT. HOSPITAL	HANUMANGARH	REMOTE
39	GOVT.MEDICAL COLLEGE	JAIPUR	REMOTE

Sl. No.	List of equipments supplied at Remote end (Sl No 13 to 39)
1	PC (HCL Infiniti) + Add on Audio/Vedio card (Osprey 210)
2	Telemedicine Client Software
3	Printer -Inkjet/Desktop 600 dpi (HP 3940 or Eqt)
4	Camera - PTZ Sony EVI D70P
5	ECG (Schiller Samvid)
6	X-Ray Scanner Make: Microtech 9800XL+TMA 1600
7	Accessories- PC Table, Equipment Table, Chair, Main Power Board, LAN Switch (8 ports)
8	VSAT - Satellite communication Systems
9	UPS

ANNEXURE II

COST ESTIMATES

(Rs. In lakhs)

S. No.	Activity	2010	2011	2012
A	Annual Maintenance Contract (AMC)			
1	HUB AMC	20	20	20
2	SIT AMC	10	10	10
3	Studio	4	4	4
4	ROT	11	11	11
	Sub Total	45	45	45
B	Operations			
1	Hub Operations	6	6	6
2	Studio Operations	8	8	8
3	SIT Operations	66	66	66
4	ROT Operations	53	53	53
5	Studio Furnishing	30	5	0
	Sub Total	163	138	133
C	Others			
1	Content Generation , training Cost	25	25	25
2	Regular Hub/SIT /Studio training by ISRO	40	40	40
3	TA/DA For ISRO engineers	35	35	35
4	Misc.	30	30	30
5	Logistics	25	25	25
	Sub Total	155	155	155
D	Extra			
1	Telemedicine	20	20	20
2	44 SIT	66	66	66
3	44 SIT AMC	10	10	10
	Sub Total	96	96	96
	Grand Total	459	434	429
Total For 3 Years		Rs. 1322 lakhs		

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