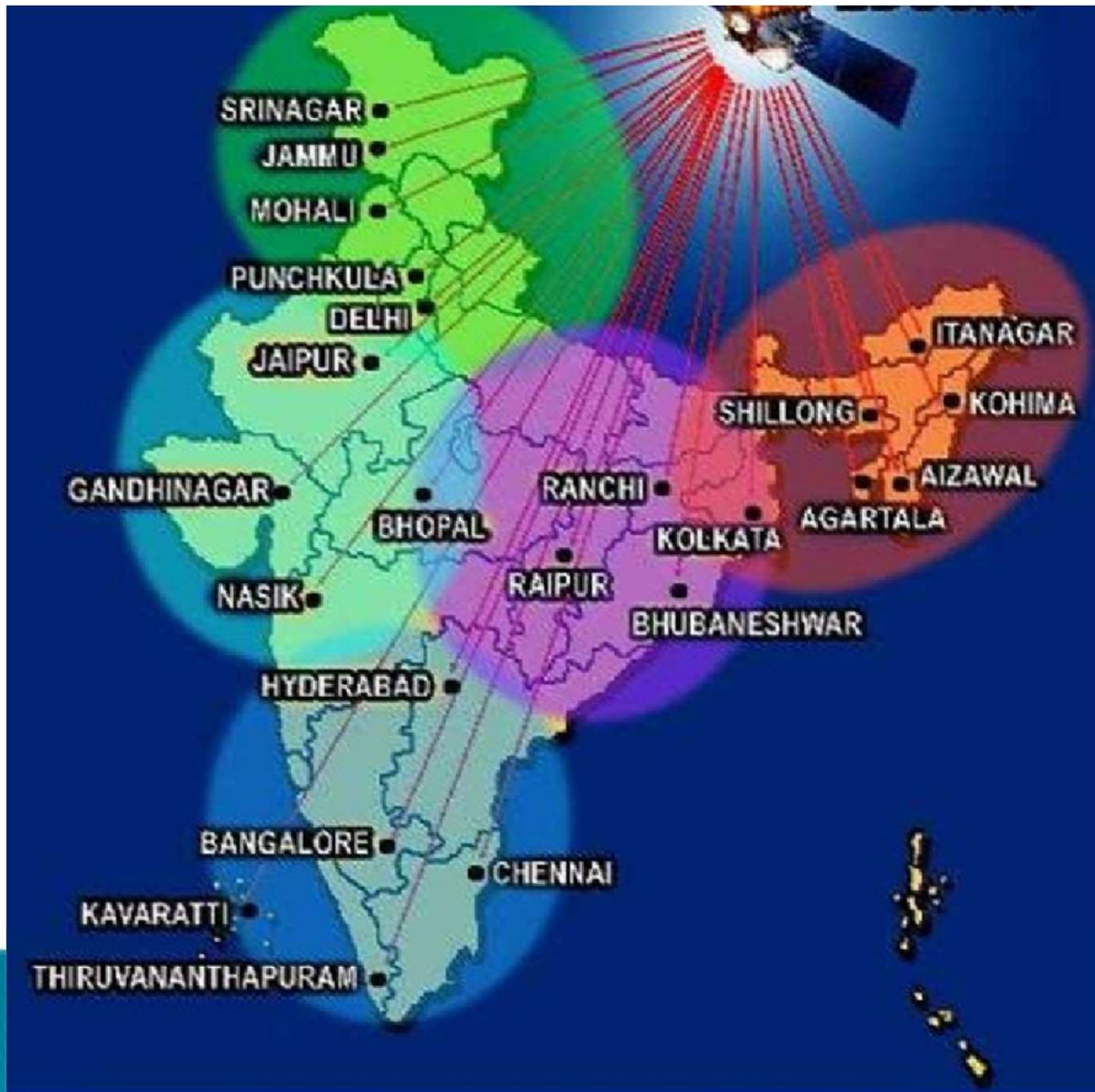
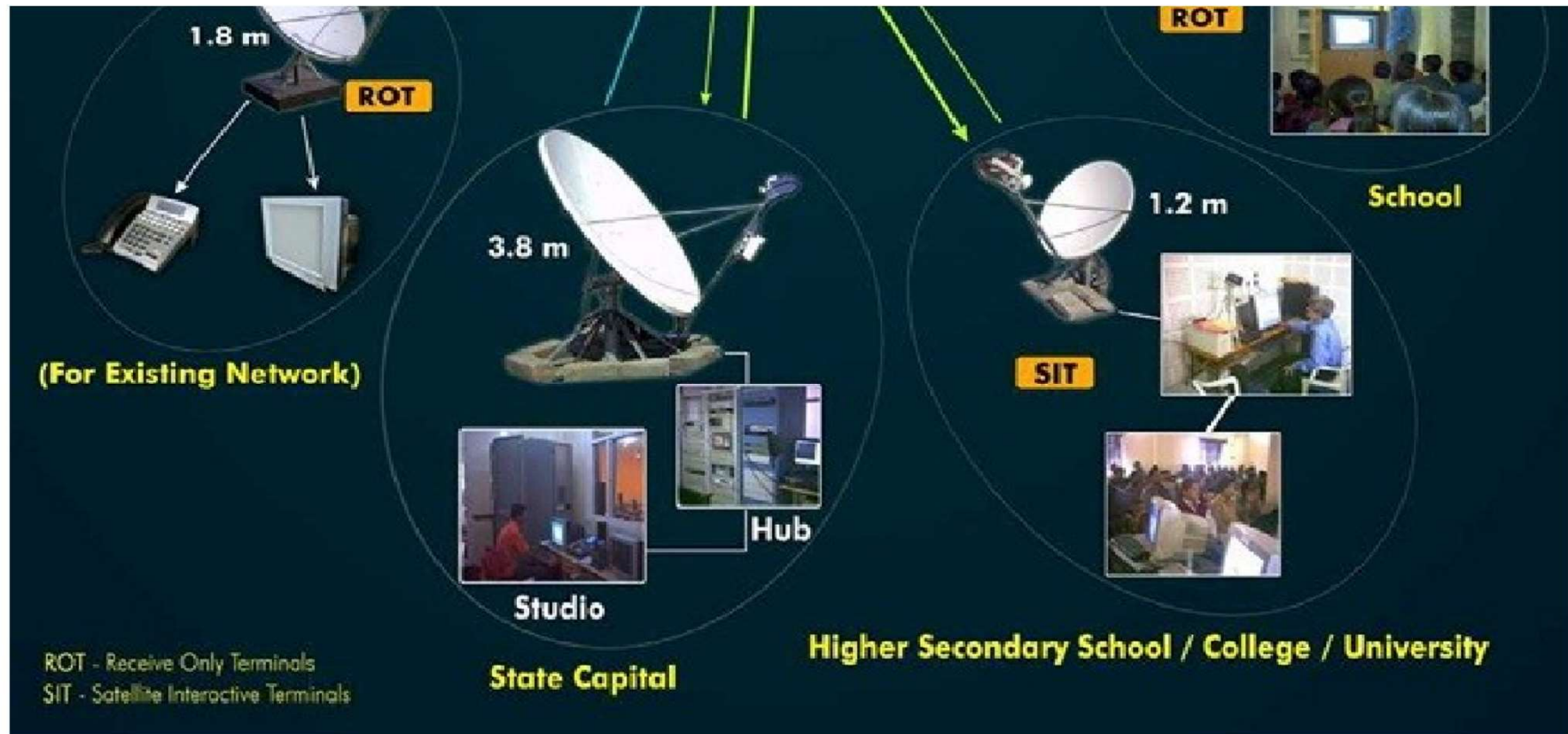


SATCOM NETWORK RAJASTHAN





EDUSAT Network Showing ROT's & SIT's



Network configuration for Video Broadcast From Teaching End

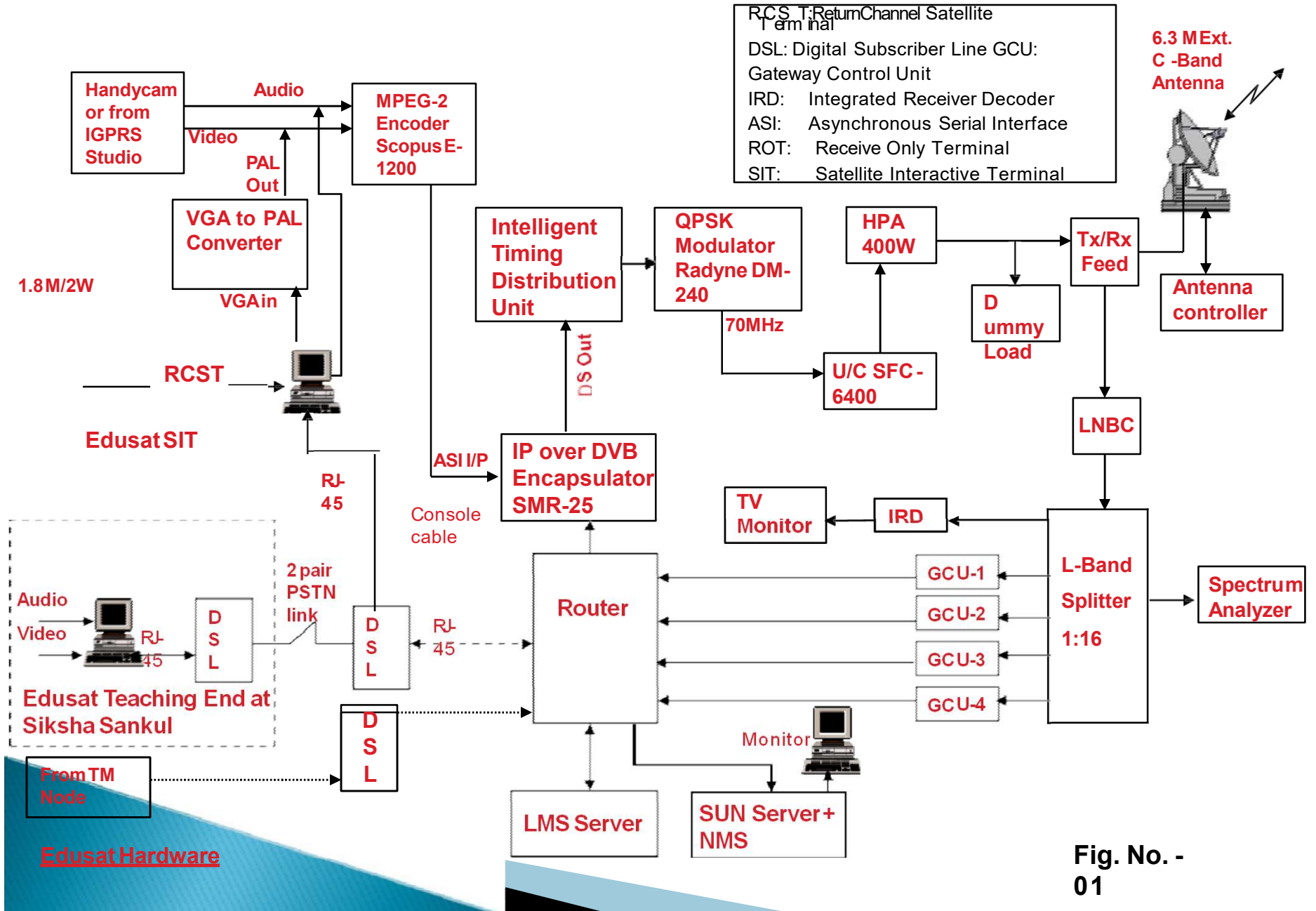
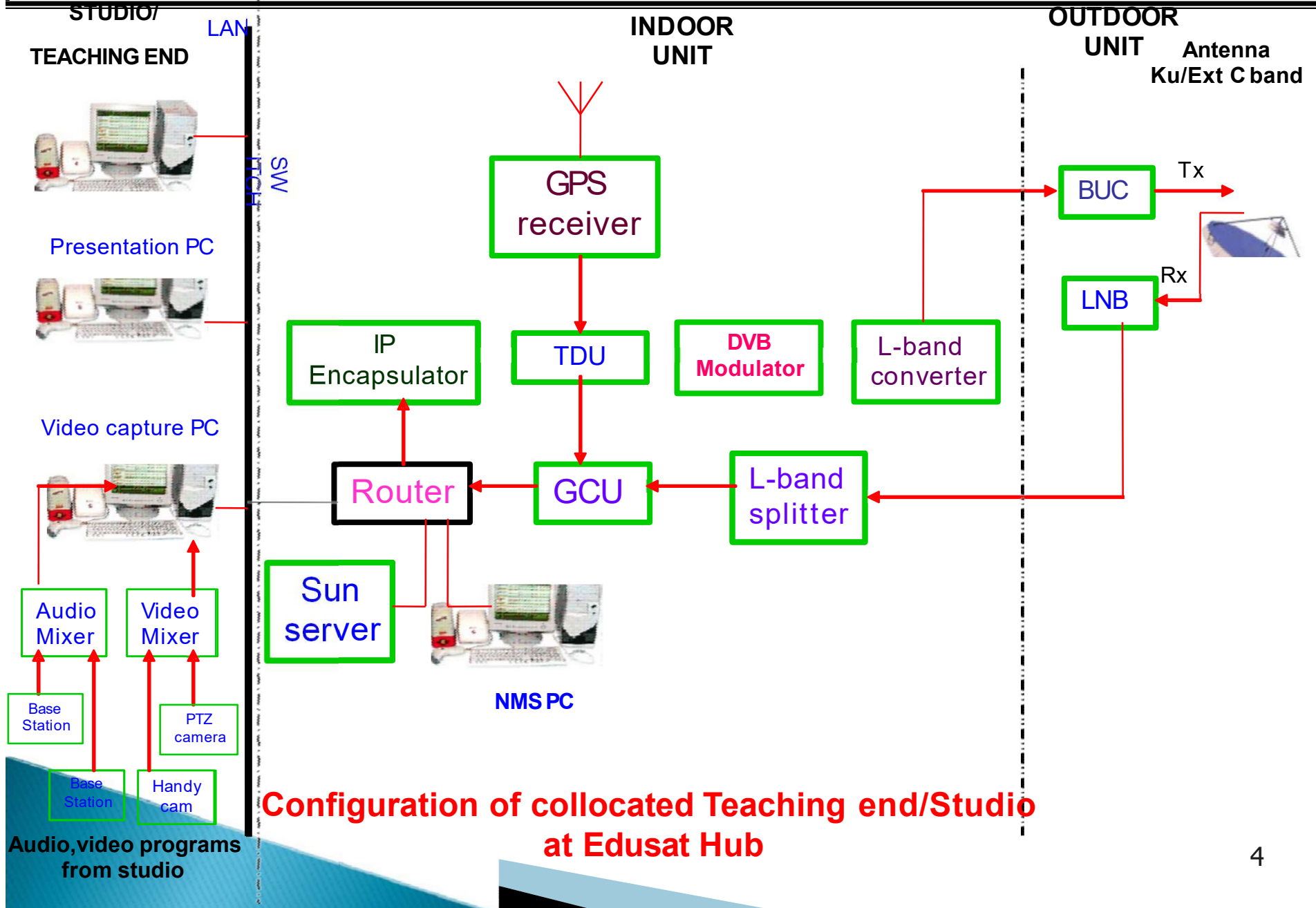
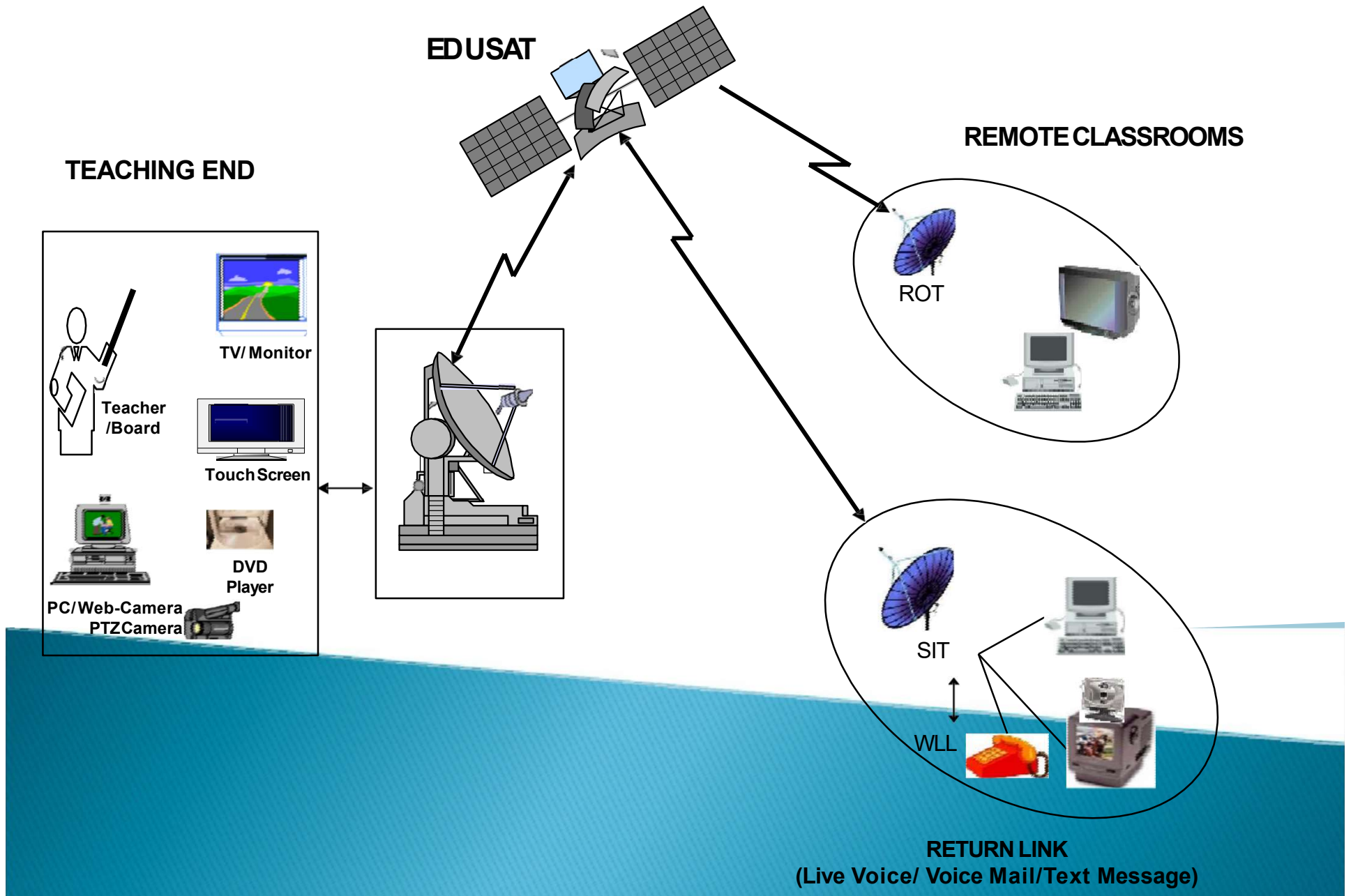


Fig. No. -
01

BLOCK DIAGRAM OF HUB



VIRTUAL CLASSROOM CONFIGURATION



Earth Station



Control Room



Studio



BACKGROUND – SATCOM RAJASTHAN

- Established with collaboration of DECU-ISRO to strengthen training and extension activities in Rajasthan State in the year 2005.
- Integrated HUB For GRAMSAT, EDUSAT and Telemedicine at Indira Gandhi Panchayati Raj Sansthan, Jaipur. and a studio (30' x 45' size) for live relay, biggest facility in State Government Sector having the facility of multimedia and editing.
- Satellite Interactive Terminals (SITs) for two way communication based training rooms are 76 & Received Only Terminals (ROTs) are 512.
- Satellite based Communication Network of Extended-C band for Tele-Education, Telemedicine and GRAMSAT for various departments such as Medical & Health, Agriculture, Education, Cooperative, Forest, Women & Child, Revenue, Rural Development, Disaster Management.
- The objective of the project is to impart training on various departmental programs to the particular targeted user by the these Departments.



BACKGROUND – SATCOM COACHING

SATCOM coaching started from 2011 -12 :

Initiative to train the students of Rajasthan and to mould them for national level engineering and medical entrance examinations.

Live interactive sessions from subject experts :

Highly qualified and trained faculty impart lectures using student-centric teaching approaches.

Objectives:

- Free coaching to economically backward students studying in Govt. Sr. Sec. Schools.
- Providing Good quality content for better preparation of various entrance examination in medical and engineering.



**Satellite Interactive terminals (SIT'S)
having two way Audio and video facilities
installed in Rajasthan Edusat Network**

| S.NO- | NAME | NUMBER |
|-------|----------------|-----------|
| 1 | Zila Parisad | 32 |
| 2 | DIET | 30 |
| 3 | CTE | 9 |
| 4 | IASE | 2 |
| 5 | SIERT | 1 |
| 6 | Shiksha Sankul | 1 |
| 7 | IGPRS | 1 |
| | TOTAL | 76 |

**Receive Only Terminals (ROT'S) having One
way Audio and video facilities installed in
Rajasthan Edusat Network**

| S.NO- | NAME | NUMBER |
|-------|------------------------------|------------|
| 1 | Sr.Sec.School | 233 |
| 2 | Panchayat Samities | 247 |
| 3 | Colleges | 19 |
| 4 | Deputy Director Education | 13 |
| | TOTAL | 512 |

NOTE: Out of 76 SITs only 35 SITs are working as the maintenance contract for the SITs was with M/S INFINIUM which expired on 31st March 2015. In case of ROTs 460 are working out of 512 and rest 42 ROTs are having theft and antenna damage problem. There are also 38 telemedicine nodes (SIT) among which 6 are at medical college and rest 32 at district hospitals but they also non-functional as the technical support from prognosys expired in 2010



BENEFICIAL END



TECHNICAL SUPPORT BY ISRO AT SATCOM



Summary of Network Utilization

| Sr. No. | Name of Users | Year | No. Of hours Utilized for program transmission | | |
|---------|--|-------------------------------------|--|-----------------|-----------------|
| | | | Different Govt. Dept | Satcom Coaching | Total |
| 1 | Panchayati Raj Sansthan, School Education, Relief Department, Education Department, Agriculture Department | 2010 - 2011 | 40 hrs | | 40 hrs |
| 2 | Education,DST, Panchayati Raj Department, Agriculture Department, Gramsat | 2011- 2012 | 294 hrs 30 min. | 221 hrs | 515 hrs 30 min. |
| 3 | Education,DST, Panchayati Raj Department, Agriculture Department, Gramsat, IGPRS,DOIT,ISRO. | 2012 -2013 | 334 hrs 45 min. | 266 hrs | 600 hrs 45 min. |
| 4 | DST, Education, Interaction by Sh. C.K Mathew (Chief Secretary of Rajasthan), College Education, Sarva Shiksha Abhiyan, , Agriculture Department, DOIT etc. | 2013-2014 | 425 hrs 35 min | 409 hrs | 834 hrs 35 min |
| 5 | DST, Education, College Education, Sarva Shiksha Abhiyan, , Agriculture Department etc. | 2014-15 | 67 hrs 20 min | 419 hrs 10min | 486 hrs 30min |
| 6 | DST, Education, College Education, Sarva Shiksha Abhiyan, RBI, Agriculture Department etc. | 2015-16 | 45 hrs 10 min | 310hrs 10min | 355 hrs 20min |
| 7. | Panchayati Raj Sansthan, DST, Education, RBI, Agriculture Department etc. | 2016-17 (up to 6 December 2016) | 18 hrs | 160 hrs | 178 hrs |

SATCOM PROJECT

| Session | Duration | Students enrolled | No of days | Lecture | Hours Utilized for program transmission | Selected students (Through received information) | Incentive |
|---------|---|-------------------------|------------|---------|---|--|---------------|
| 2011-12 | From 1-06-2011 to 10-2-2012 | 3102 | 130 | 221 | 221 | Total 89(IIT/JEE-1, AIEEE-9, RPET-79) | 65 Students |
| 2012-13 | From 9-4-2012 To 11-5-2012 (Crash course) From 1-08-2012 To 11-01-2013 (Coaching classes) | 6461 | 112 | 266 | 226 | Total 68, (RPET/AIEEE-68) | 270 Students |
| 2013-14 | From 6-05-2013 to 10.01.2014 (Coaching classes) | 7807 | 145 | 409 | 409 | Total 17 Students (RPET/AIEEE-17) | 1106 Students |
| 2014-15 | 4-6-2014 to 13 Jan 2015 (Coaching classes) | 7578 | 131 | 342 | 342 | No response received yet | 968 Students |
| 2015-16 | 21-7-2015 to 22 Jan 2016 (Coaching classes) | 7415 | 115 | 300 | 310 | No reports received | 1576 Students |
| 2016-17 | 01-9-2016 to 06-12-2016 (Coaching classes) | 5200 (upto 6 Dec. 2016) | 52 | 148 | 160 | | |

Future Plan –

- To connect all Secondary and Senior Secondary level in the state for providing free coaching, skill development and English learning classes.
- To establish a content generation cell to undertake the task of preparing content/module for training activities.
- To upgrade all ROT'S in two way communication.
- To upgrade studio by Smart Board.
- Provision of one dedicated SATCOM room having a seating capacity of more than 25 participants at District as well as Panchayat Samiti levels.
- To upgrade the existing technology
- Introducing arts and commerce subjects in addition to science subjects.
- Development of a dedicated portal for SATCOM application.
- All the colleges of the state are also planned to be covered with this network as per the e-learning programme.
- Establishment of a new separate studio for catering to the needs of other departments as two programme at one time can not be transmitted.
- Recording facility for off line content on rental basis.



THANKS

