**TELE-EDUCATION**

ISRO’s Tele-Education project is operational in NER States (except Manipur). Responsibility for ISRO’s Tele-education project in NER was handed over from DECU, ISRO to NESAC in November, 2013. The following tasks were taken up covering 7 Hubs and 321 SIFs of NE Region.

- Comprehensive Annual Maintenance Contract.
- Technical Support and Training Centre.
- Hub Operation.

**TELE-MEDICINE**

ISRO’s Telemedicine project provides access to high quality healthcare to people of remote locations in NER through tele-consultancy with doctors at Specialty and Super-specialty nodes. This project is operational under various networks, namely,

- ISRO-NEC joint Telemedicine project (25 nodes).
- Army Telemedicine project (06 nodes).
- Indian Air Force Telemedicine network (01 node).
- Civilian Telemedicine Network (07 nodes).

**COMMUNICATION SUPPORT FOR DISASTER MANAGEMENT**

NESAC has capacity for disaster support with communication facility as mentioned below:

- Audio/Video and data connectivity through MHA-VPN VSAT network.
- Voice connectivity through INSAT type-D terminal.
- SMS alert service under FLEWS project.
- Smartphone based Mobile Application for Disaster Event Reporting.

**MAJOR HIGHLIGHTS**

- Tele-Education has presence in 7 NER States with 7 HUBs cum Teaching nodes and 321 Satellite Interactive Terminals.
- Tele-Medicine has presence in 8 NER States with 39 nodes under ISRO-NEC joint TM project, Civilian network Indian Army and Air Force network.
- MHA-VPN node for Disaster Management System with VSAT based video-conference and data sending facility.
- ISRONET Connectivity for inter-centre Video Conference and data sending facility.
- State of the art Content Generation Studio.

**MAJOR BENEFITS**

- Distant Classrooms conducted under Tele-Education project for students in remote NER states.
- Medical Consultancy with Super Specialty hospitals.
- Communication support in Disaster Management.
SATELLITE COMMUNICATION APPLICATIONS

IRNSS PROJECT OF ISRO

NESAC campus has an IRNSS CDMA Ranging Station (IRCDR), an IRNSS Range and Integrity Monitoring Station (IRIMS) and an IRNSS Data Communication Network (IRDCN) set up under IRNSS project. These facilities are operational and tracking the three IRNSS satellites as of now.

CONTENT GENERATION STUDIO

NESAC has a spacious Studio for need specific content generation equipped with state-of-the-art hardware and software for high fidelity video and audio recording as well as requisite editing and other post processing. Audio/Video content has been generated for user agencies like NDRF, State Disaster Management Authorities, ABITA etc.

TRANSPORTABLE WLL-VSAT

Voice communication with fixed line nodes via Wireless in Local Loop technology can be efficiently done with a transportable VSAT based system. Such a vehicle with VSAT and other equipment is placed at NESAC campus.

ISRONET SYSTEM

ISRONET enables access of ISRO’s official communication portal as well as to do inter centre video-conferencing and data sending.

MSS TYPE-D TERMINAL

At the time of disasters, satellite dependant communication provides one reliable alternative. INSAT Type-D Terminal (Satellite Phone) provides both voice and data communication facility. NESAC has three such sets.

Ka-BAND PROPAGATION EXPERIMENT

NESAC has a facility for doing propagation characteristics experiment in the Ka-band using the satellite beacon of GSAT-14 Satellite.