Completed Projects of E-Infrastructure Division

1.

Project Title	Setting up of Wi-Fi at Allahabad University (AU)
Executive Agency:	ERNET India
Principal Investigator:	Shri Meherban Singh
Address:	5th Floor, Block-I, A Wing, DMRC IT Park, Shastri Park, New Delhi-110053
URL:	http://www.eis.ernet.in/
Project Objectives:	• Wi-Fi LAN creation through powerful combination of wired and wireless network technologies enable flexibility, resiliency, ease of access to information, data and services by any Wi-Fi enabled device. • Highly available, secure, scalable and redundant Centralized Wireless Controller Management and Authentication systems at AU, Central site. • Cost-effective network setup with centralized Wireless controller for better management, ease of configuration, dynamic environments and with increased flexibility. • Coverage of around 70 Departments/faculty/buildings/blocks in the campus including Hostels and would serve over 25000 faculty/teachers/students/staff/etc. • Enabling high speed wireless access to Internet and Intranet resources to campus employees, staff, faculty, teachers, students, official visitors, guest on any-time anywhere basis across AU campus. • Improvement of delivery of student-centric services, employee performance and efficiency and real-time access to information, learning material and data. Enable faster and more efficient decision-making at all levels.
Achievements/ Outcome:	• A secure Wi-Fi enabled campus network has been set up at Allahabad University with highly available, scalable and redundant Centralized Wireless Controller, Management and Authentication system at NKN/ERNET data center with coverage of around 70 Departments/faculty/buildings/blocks in the campus including Hostels and would serve over 25,000 faculty/teachers/students/staff/etc. • Through the established Wi-Fi network, students, faculty and staff are availing high speed wireless access to Internet and Intranet resources on any-time anywhere basis. This has improved education and learning environment for students and teachers.
Start Date Duration (in months):	28th March 2015 36 months
Status of Project:	Completed on 27th March 2018

2.

Project Title	To establish VSAT connectivity for Internet / Intranet access in the North-Eastern States of the Country.
Executive Agency:	ERNET India
Principal Investigator:	Shri Avanindra Singh

Address:	5th Floor, Block-I, A Wing, DMRC IT Park, Shastri Park, New Delhi-110053
Phone: Fax: Email:	9650387171 as@eis.ernet.in
URL:	http://www.eis.ernet.in/
Project Objectives:	• The objective of the proposal was to establish C-band VSAT connectivity at 60 institutes in North Eastern part of the country. • These institutes include Jawahar Navodaya Vidyalaya, Kendriya Vidyalaya, ICAR research institutes/colleges and Government organizations/institutes in remote locations of North-Eastern states of the country (i.e., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim).
Achievements/ Outcome:	• The Project has provided connectivity to the sites/user institutions that were deprived of a reliable connectivity. The connectivity has enhanced the efficiency of the institution/department in their respective areas such as: ➢ Schools: The connectivity has helped in promoting e-educations in the schools. It has helped students and teachers to access online study material, online labs, submitting online forms, getting examinations results etc. ➢ Agriculture research institutes/colleges: The connectivity has helped in promoting e-Agricultural related activities including dissemination of information on agricultural techniques among researchers and farmer community, promoting research in their respective areas, etc.
Start Date Duration (in months):	23rd March 2015 42 months + Extension of 35 months
Status of Project:	Completed on 22nd August 2021

3.

Project Title	Setting up of Wi-Fi at Utkal University, North East Hill University, Pune and Osmania Universities
Executive Agency:	ERNET India
Principal Investigator:	Shri Meherban Singh
Address:	5th Floor, Block-I, A Wing, DMRC IT Park, Shastri Park, New Delhi-110053
URL:	http://www.eis.ernet.in/
Project Objectives:	• To set up and create model Wi-Fi enabled campus network at each University with tier-3 architecture upgraded 10 Gigabit Fiber optic redundant backbone. • Wi-Fi LAN creation through powerful combination of wired and wireless network technologies enable flexibility, resiliency, ease of access to information, data and services by any Wi-Fi enabled device. • Enabling high speed wireless access to Internet and Intranet resources to campus employees, staff, faculty, teachers, students, official visitors, guest on any-time anywhere basis across the campus. • Improvement of delivery of student-centric services, employee performance and efficiency and real-time access to information,
Achievements/ Outcome:	• A secure Wi-Fi enabled campus network has been set up at each University which has enabled high speed wireless access to Internet and Intranet resources to students, faculty and staff on any-time anywhere basis. • It has improved education and learning environment for students and teachers.
Start Date Duration (in months):	23rd July 2015 (36 months + Extension of 32 months)
Status of Project:	Completed on 31st March 2021

4.

Project Title	Optical Wireless Access Network for Rural and Urban Communication
Executive Agency:	IIIT Delhi and ERNET India
Principal Investigator:	Prof.Anand Srivastava
Address:	Indraprastha Institute of Technology, Electronics & Communication Engineering Okhla, Phase III, New Delhi-110020

Phone: Fax: Email:	anand@iiitd.ac.in
URL:	https://www.iiitd.ac.in
Project Objectives:	• The objectives of this project are to provide optical wireless (OW) connectivity for rural, urban communication scenarios. • In OW connectivity for rural communication as a prototype an end to end, bidirectional last mile access link for rural areas shall be demonstrated, which can support a downstream and upstream data rate upto 10 Mbps. • In OW connectivity for urban communication, the existing WiFi deployments will be complemented with LiFi for indoor communication and a hybrid LiFi-WiFi testbed shall be developed for evaluation.
Achievements/ Outcome:	• Last mile bidirectional access upto 10 Mbps for rural areas. • Hybrid Li-Fi WiFi system with throughput more than standalone LiFi or WiFi system and link aggregation experimentation.
Start Date Duration (in months):	23rd October 2019 (36 months + extension of 11 months)
Status of Project:	Completed on 30th September 2023