

Ongoing Projects of E-Infrastructure Division

1.

Project Title	Optical Wireless Access Network for Rural and Urban Communication
Executive Agency:	IIIT Delhi and ERNET India
Principal Investigator:	Prof. Anand Srivastava
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Project Objectives:	<ul style="list-style-type: none"> • The objectives of this project are to provide optical wireless (OW) connectivity for rural, urban communication scenarios. • Under 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. • Under 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.
Projected Achievements/ Outcome:	<ul style="list-style-type: none"> • 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):	23.10.2019 3 years (Project extended till 31 st March 2023)
Status of Project:	Ongoing

2.

Project Title	Proposal for setting up Wi-Fi enabled campus network at Patna University, Patna
Executive Agency:	ERNET India
Principal Investigator:	Shri Avanindra Singh
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Project Objectives:	<ul style="list-style-type: none"> • The objective of the project is to setup a model Wi-Fi network at PU, Patna, Bihar. • To setup and create model Wi-Fi enabled campus network at Patna University with tier-3 architecture upgrade 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, learning material and data. Enable faster and more efficient decision-making at all levels.
Projected Achievements/ Outcome:	<ul style="list-style-type: none"> • Setting up secure resilient and high-speed model Wi-Fi enabled campus network at PU, Patna with redundant architecture. • Wi-Fi enabled campus network will cover around 35 Department/Building of PU in the campus. • Enabling high speed wireless access to internet/intranet resources to campus employees, staff, faculty, teachers, student, official visitors, guests on any-time anywhere basis in the campus with capability of all users connecting. • Improved education and learning environment and may support dynamic interactive access to student and professors to digital learning content, sharing of online and stored practical information like laboratory experiments, reports and procedures, enabling students to interact with each other and to collaborate on projects etc.
Start Date	31.03.2021
Duration (in months):	36 months
Status of Project:	Ongoing

3.

Project Title	Strengthening of ICT Infrastructure (Wi-Fi system & Examination Evaluation System)” Himachal Pradesh University, Shimla
Executive Agency:	Himachal Pradesh University
Principal Investigator:	Dr. Mukesh Kumar
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Project Objectives:	<ul style="list-style-type: none"> • To provide Wi-Fi connectivity to New Academic Buildings such as Multi Faculty Building Phase-II & Phase-III, HRDC Academic staff College, Boys Hostel, Girls Hostel, Faculty House VC Office, PRC Building and Health Centre in the University campus which needs to be made Wi-Fi enabled. • To develop efficient scheme for university evaluation system for speedy result declaration using Scanners, Cutters and Cloud Hosting. • To prepare a database of evaluators ready to evaluate the answer sheets in an online mode. • To develop an online system for evaluators and examiners to evaluate the answer sheets and automatic preparation of Awards Sheets.
Projected Achievements/ Outcome:	<ul style="list-style-type: none"> • Installation of Wi-Fi equipments and related accessories including LAN connectivity in Multi Faculty-II, HRDC Academic Staff College, Boys Hostel, Girls Hostel, PRC, Health Centre, VC Office & Faculty House. • An efficient scheme development for University Evaluation System for speedy result declaration using Scanners, Cutters and Cloud Hosting of answer sheets. • Implementation of On screen Evaluation and Advanced Examination Management System (OSES), an online system along with creation of database for evaluators and examiners to evaluate the answer sheets and automatically prepare Awards Sheets and then translate it into Result Preparation automatically.
Start Date	05.07.2021
Duration (in months):	12 months (Project extended till 3 rd Jan 2023)
Status of Project:	Ongoing