Transformation towards Smart Universities & eduroam

Pakistan Education Research Network
The Concept: Smart Education through Smart Universities

- **Smart Bags**
  - PM's Laptops Scheme
  - EVO on the move

- **Smart Campus**
  - Blanket WiFi Coverage
  - Safe Campus

- **Smart Assessment**
  - PLOs/ CLOs assessment
  - Learning Management

- **Smart Classrooms**
  - eClassroom
  - eLearning

Smart Bags

Smart Campus

Smart Assessment

Smart Classrooms
Smart Campus Objectives

- Complementing the laptops being provided under Prime Minister’s Laptops Scheme
- Easy and wide access of internet/ intranet services to the students
- Support through enabling environment to all at higher education institutes to enhance their research and learning skills
- Transforming universities from conventional to contemporary
- Promoting the emerging concept of BYOD (bring-your-own-device)
- Introducing eduroam facility at the higher education institutes of Pakistan
eduroam (education roaming) is an international roaming service for users in research, higher education and further education.
eduroam

PERN has successfully deployed eduroam which is an international wireless Internet access service developed for the research and education community at selected HEIs. This service has been tested and made operational at foreign universities as well. PERN users can access the wireless Internet at all eduroam enabled sites nationally and Internationally.

XEAP Project:

- PERN did a collaboration project with AARNet Australia for the deployment of eduroam in Pakistan under TEIN funded project “Extending eduroam in the Asia Pacific”.
- The XeAP project provided the guidance and assistance (including provision of hardware and software) to deploy eduroam in five ‘XeAP Target Countries’ in the APAC region. The deployment will be comprised of the country’s NREN becoming the NRO and an institutional participant, and 3 institutions within the country becoming institutional participants.
Status:

- PERN is now a member of worldwide eduroam
- 2 National Roaming Servers (NRS) and one monitoring Server deployed
- The Servers are successfully integrated with The PERN Active directory
- Successfully paired with ETRL (Europe Top Level Radius Servers).
- More universities will be added in coming phases.

Avg Users= 1500
Avg Users= 1500
Avg Users= 400 - 500
2000 - 2500
Avg Users= 600
Avg Users= 800

Total eduroam users (year 2015-2016) : 4,750
Agha Khan University
Bahria University Islamabad
Higher Education Commission Islamabad
Higher Education Commission Lahore
Islamia University Bahawalpur
Jinnah Sindh Medical University Karachi
Karakoram International University Gilgit-Baltistan
Khyber Medical University Peshawar
Kohat University of Science and Technology Kohat
National Defence University, Islamabad
Sardar Bahadur Khan Woman University Quetta
Sindh Madressatul Islam University, Karachi
Sukkur Institute of Business Administration, Sukkur
University of Agriculture Faisalabad
University of Gujrat
University of Haripur
University of Kotli Azad Jammu and Kashmir
University of Sargodha
Women University Multan
Pakistan in the list of 89 countries with the facility of Educational Roaming.