

Bangladesh Research and Education Network

BdREN Update for TEIN4 Annual NOC Workshop 2014, AIT

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Presentation At a Glance

- Introduction to BdREN
- Phasing of BdREN inplementation
- BdREN Initial Phase
- Countrywide Network of BdREN
- BdREN Plan to connect Universities
- Achievement of BdREN
- BdREN Services



Introduction to BdREN

- Currently UGC is implementing the HEQEP
 Project with the help of World Bank
- BdREN Project is the One of the HEQEP Components
- BdREN will be a Non-Profit Trust Organization
- Initially Universities (Public & Private) and Research Institutions will be its members



Phasing of BdREN Implementation

Initial Phase

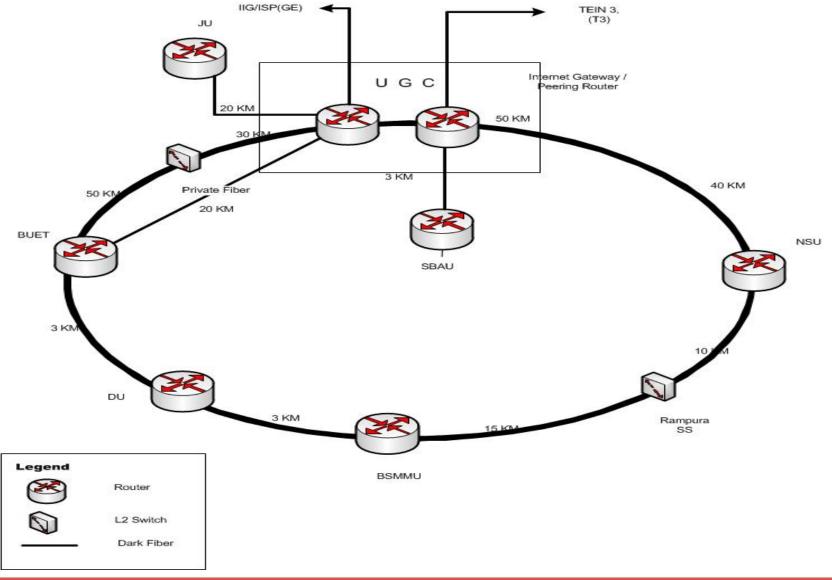
- Acquisition of long distance fiber from PGCB
- •Six universities are connected, another one will join soon
- •TEIN connectivity since Jan 2012
- Virtual Class Room in two universities
- Virtual Meeting Room at UGC

Final Phase

- Establishment of local loop to all public universities
- Establishment connectivity to all universities to BdREN
- •Establishment of Basic Campus Network in universities
- Establishment of BdREN Trust



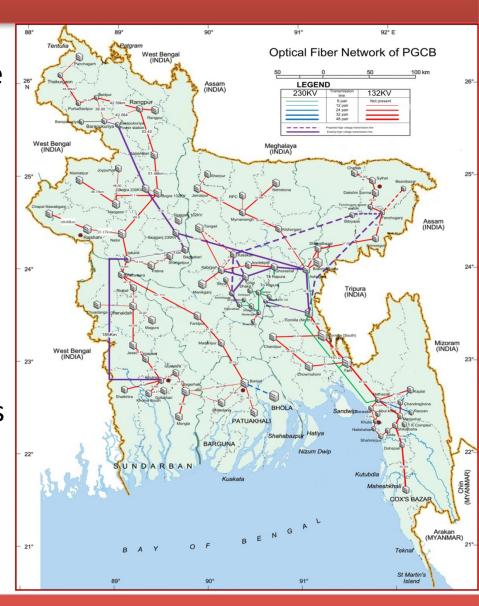
BdREN Initial Phase Network





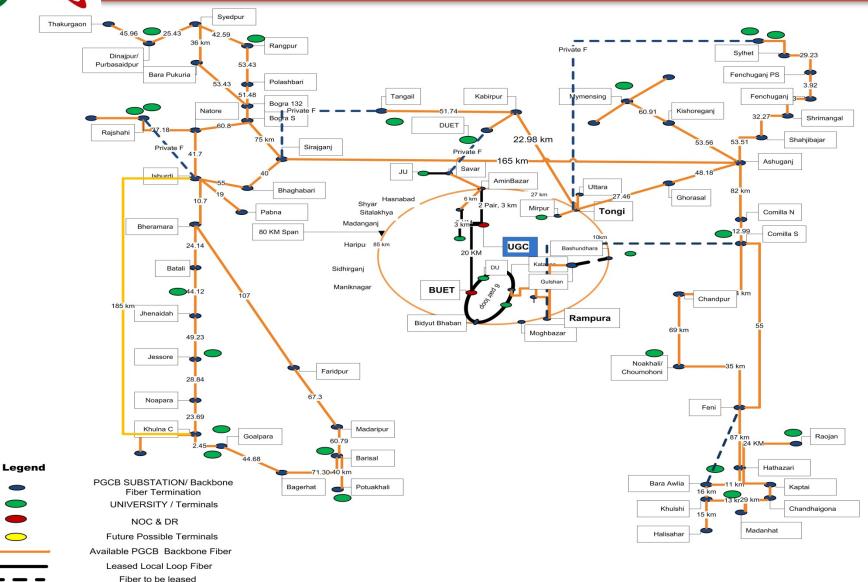
Countrywide Network of BdREN

- Universities located countrywide
- No transmission infrastructure up to university premises so far
- PGCB has countrywide Fiber Optic Network
- 20 years contact with PGCB for 3000+ Km of 1 pair dark fiber
- Possible to cover all the remote universities and research centers
- No maintenance overhead
- Scope for future expansion





BdREN Plan to Connect Universities





BdREN Achievements

- ISP license from BTRC
- > IPLC permission from BTRC (TEIN3)
- Connected to TEIN3 with 45 Mbps
- Connected to Commodity Internet with 60 Mbps
- Associate Membership from APNIC(Asia Pacific Network Information Centre)
- Obtained /22 IPv4, /32 IPv6 addresses and AS Number from APNIC
- ➤ IRU (Indefeasible Right of Use) contract agreement with PGCB (Power Greed Company of Bangladesh) for BdREN



BdREN Achievements

- Six universities connected, more to join soon
- Established virtual class room in two universities
- Established one Virtual Meeting Room in UGC
- Signed the IP (International Partnership) contract with OARnet, HEAnet and Kent State University
- Supply and installation of BdREN network system in progress
- Establishment of Local Loop in all public universities in progress
- Establishment of basic campus network in progress



BdREN-Services

Network services and applications:

- Web hosting services
- Domain Name services
- Email services
- Network security services
- Bandwidth on Demand
- Bandwidth management (e.g. web caching and traffic shaping) services
- Network Operating Center (NOC)
- Storage services
- Collocation services
- IP telephony services (VoIP)
- Authentication, Authorization and Accounting (AAA) services
- Video services: Video Conferencing, Video on Demand



Thank You