

# ***BDREN, TEIN3 and Bangladesh***

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# *Outline*

- Follow up and Development after TEIN3 Kick-off meeting at Singapore
- Survey Summary of Universities
- Key Observations
- Motivations for BDREN
- TEIN3 a New 'Silk Route' for Bangladesh
- Conclusion

## *Follow up and Development after TEIN3 kick-off meeting at Singapore*

- In order to have connectivity with TEIN3 a REN is needed in Bangladesh.
- Representatives of all public-private universities met recently at University Grants Commission (UGC) and they showed keen interest to have REN and set up connectivity with TEIN3.
- The REN of Bangladesh has been conceptualized and a design is under preparation and it is named as BDREN.

# *Follow up and Development after TEIN3 kick-off meeting at Singapore Contd..*

- Honorable Education Advisor have been briefed on SAFS and TEIN3 connectivity.
- Consultation with the donars (World Bank) is in process.
- Initiatives have been taken to form a consortium of Higher Educational Institutes (HEI).
- A preliminary survey of Network Infrastructure of all universities have been done.
- Primary negotiation with BTTB (BTCL), PGCB and a number of ISPs.

# *Follow up and Development after TEIN3 kick-off meeting at Singapore Contd..*

- Meetings with different ISPs including PGCB was held
  - ➔ Discussion took place on the lease of a pair of dark fiber to establish connectivity to all educational and research institutes.
  - ➔ it was pointed out that ICT is a thrust sector of the government and BDREN can go a long way to enhance education and research sector through ICT. Thus the government may bear the necessary cost of fiber link for BDREN through PGCB of which 75% share is owned by the government.

# *Survey Summary of Universities*

- Most of the universities have bandwidth of around 2 Mbps.
- A few have less than 2 Mbps.
- Only two have 10 Mbps.
- Most of the universities are willing to increase the bandwidth upto 4 to 6 Mbps in the next one year and may require 10 to 20 Mbps in the next 3 years.
- One university is expecting to have 30 Mbps within a few months.

# *Key Observations*

- Very low Inter-university traffic within Bangladesh.
- Most universities have no or limited access to electronic journals.
- Most universities are connected with the ISPs through fiber optic links.
- 1 Internet PC for every 8 to 20 students.
- Total number of students in Higher Educational Institutes is around 1.4 millions.
- High Student to Teacher Ratio.

# ***Motivations for BDREN***

- Enhancing Inter-university information sharing significantly.
- Deploying new applications to take advantage of high speed network.
- Opening up avenues for new research and regional cooperation through other NRENs.
- Playing the role of catalyst for the development of intra-university ICT infrastructure.
- Availability of Internet Facility to all the students.

## *Motivations for BDREN Contd..*

- Enabling sharing of electronic Journals, research reports, lecture notes through Digital Libraries.
- eLearning contents available through BDREN will greatly complement the shortage of teachers.
- A national repository of downloaded (free, shareware) software, updates, mirrors and documents will reduce the Internet cost significantly.

# *TEIN3 a new 'Silk Route' for Bangladesh*

- TEIN3 will enable us to connect with International research organizations/universities through high speed links.
- TEIN3 will reduce the Internet cost for data traffic between research peers within its global wide area network.
- Telehealth / Telemedicine applications will greatly help train our doctors, and help millions of patients across the country.

# *TEIN3 a new 'Silk Route' for Bangladesh Contd..*

- Will help us conduct cutting edge research in physics, grid computing, networking, genetics, microbiology and many more.
- Will attract scientists and researchers from around the world to collaborate with Bangladeshi researchers (and vice versa) on various vital issues like
  - Global warming,
  - Climate change,
  - Environment, and
  - Earthquake modeling

# *TEIN3 and commodity Internet*

- It is expected that TEIN3 will also help us connect to global Internet at competitive price.
- We will be able to deploy various applications which have been successful in other networks supported by DANTE and APAN.
- TEIN3 will also help us develop our human resource through training and knowledge sharing

# *Conclusion*

- BDREN will provide access to our educational and research institutions at a competitive price.
- BDREN will strengthen the quality of higher education and research in Bangladesh.
- Once implemented BDREN will enable connectivity to TEIN3 which will provide access to global REN and 'commodity Internet'.

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