Agenda

- ICT Educational Organization Structure
- Current ICT Infrastructure
- Current state of University Teaching
- Research & Development
- Developments in progress for enhancing campus
- Establishing National Research and Education Network
ICT Educational Organization Structure

Top Level Management

MOE
- universities (art & science)
- university of economic

MOST
- university of technology

MCIT
- IT training centers

We are here

MOE – Ministry of Education
MOST – Ministry of Science & Technology
MCIT - Ministry of Communication & Information Technology

UCSY
Border Link Communication Network Diagram

[Diagram showing network connections and regions such as India, China, Lao, Thailand, Cambodia, Vietnam, and Singapore, with satellite and cable connections indicated.]
Current ICT Infrastructure

- **Internet Service Provider (ISP)**
  1. Myanmar Posts and Telecoms (MPT)
  2. Yatanarpon ISP

- **National backbone**: Fiber link between major cities

- **Narrowband Access**
  - Dial-up, Access kit

- **Broadband Access**
  - ADSL, Wi-Max, Optical Fibre, Satellite (ipStar, Thaicom5, VENASAT)
Cyber Security

**mmCert**: under Ministry of Communications and Information Technology

- **Myanmar Computer Emergency Response Team**
- a single point of contact for dealing with cyber security incident in Myanmar
- works to increase public awareness in security
- supports technical advisories in our community

[http://www.mmcert.org.mm/](http://www.mmcert.org.mm/)
Teaching Methodology

→ Change Theoretical Oriented approach to Practical Oriented approach

→ Apply Public, Private and Partnership approach

→ Join with industrial sector (both national companies and international companies)
Languages used in Study

• All Textbooks and References are written in English
• Native Language is only spoken in detail explanation during lecture time
• Reports, Seminars, Assignments are conducted in English
Distance Learning

• Online Teaching and Learning System among Computer Universities

  • Use 4Mbps Fibre Line from MPT
  • All universities use 256Kbps ipStar Link from MPT
  • Use Streaming server to transmit the lecture and streaming media player to receive the lecture

• Web-based Teaching System in Yangon University
ICT Training Centers under the Ministry of Science and Technology

• Information and Communication Technology Training Institute
  - established in 2006
  - joint with JICA, Japan

• India-Myanmar Center for Enhancement of IT Skills
  - established in 2008
  - joint with India Government
Network Status at Computer Universities

- **UCSY** has 2 dedicated line from MPT
  - Fiber Optic, E1 connection, Wi-Max connection
- **UCSM**
  - ipSTAR Satellite Connection, Fiber Optic
- **All universities** have internet access through
  - *ipStar Satellite Communication*
- **No intranet connection** between all computer universities
Research and Development in UCSY

1. Natural Language Processing
   - Myanmar-English Myanmar Bilingual Dictionary
   - English-Myanmar Machine Translation System
     [Link: http://www.nlpresearch-ucsy.edu.mm]

2. Image Processing
   - Myanmar Intelligent Character Recognition (MICR) and Myanmar Voice Mixer (MVM) System
   - Automatic Identification System of Myanmar National Registration Card (NRC) Holder based on Biometric Information
Research and Development in UCSY

3. Mobile Computing
   - iTxtmm (Myanmar Text Input for Mobile Phone)
   - Context-Related Access Control Mechanism
   - Context aware Location-based Service
     http://www.ucsy.edu.mm

4. Virtualization and Cloud Computing
   - UCSY Private Cloud System (Open Source)

5. Open source Web portal
Developments in progress for enhancing campuses

• International Co-operations

• Future International Co-operations

• Expectations
International Cooperation Activities and Events

International Conferences on Computer Applications (ICCA)
International Cooperation Projects

- **School on Internet Asia (SOI Asia) Project**
  - develops distant learning applications for the advanced usage of the Internet as a tool of higher education.

- **Asian Internet Interconnection Initiatives (AI3) Project**
  - joined together with KEIO University, other Asian partner universities and UCSY
  - aims to research and develop the Internet technologies
  - 2011 AI3/SOI Asia Autumn joint Meeting is held at UCSY in the last November.
International Cooperation Project

- **SEACOOP Project**
  - Supporting policy dialogues and strengthening cooperation between Europe and Southeast Asia in ICT

- **Recent Activities**
  - The 6th SEACOOP Cooperation Forum on ICT Research and ICT for Development is successfully celebrated at Myanmar on October 25, 2011.
  - A TEIN3 workshop organized by UCSY and DANTE under the aegis of MOST and EU to connect the REN community to the World on May 2012.
One Day in Asia Event

CONNECT-Asia Presents:

ODIA

ODIA Features:
- Pakistan
- Patan Durbar Square (Nepal)
- Shwedagon Pagoda (Myanmar)
- Angklung (Indonesia)
- Melaka & George Town (Malaysia)
- Kamakura (Japan)
- Uam Historical Park (South Korea)
- Sydney Opera House (Australia)

Thursday, 01 November 2012
14:00 - 16:00 Jakarta Time (GMT+7)

http://connect-asia.org/
International Cooperation

- UCSY join to **Network-based ASEAN Language Translation for Public Service Project** proponent by **NECTEC, Thailand**.

- National Advance IPv6 Centre, **University Sains Malaysia** offers UCSY to carry out research collaborations concerning IPV6, next generation internet technology.

- Scholarship Program and Training of Trainers (TOT) Program by Nippon Telegraph and Telephone (NTT) Data Corporation, Japan.
Future International Cooperation

- Translation post-editing system for multilingual information access and language learning, Linton University College, Legenda Education Group, Malaysia.

- UCSY is trying to join to the TEIN3 / TEIN4 network to support researches and development in Myanmar and to enhance international cooperation.
First Step to Enhance Campus Networks

Cooperation with National Startup Resource Center (NSRC), University of Oregon, USA

- Upcoming event on 2013 March
  - Technical assistance & Group Workshop Program for participants from all Universities in Myanmar

Objectives

- To develop the human network
- To provide direct engineering assistance in the physical development of campus networks
- To improve network access and infrastructure
Expectation

• To build advanced research center with the initial guidance of knowledgeable and skilled experts from developed countries

• To setup campus networks in Universities and improve internet access connection.

• To implement Cyber Security and Forensic Computer Crime Investigation Laboratory as security is an important issue in ICT environment.
Establishing Myanmar NREN

• Motivate Universities to participate in Myanmar NREN by sharing knowledge and technology such as providing training and awareness workshop

• Need a good coordination and collaboration among Universities and research organizations

• Support IT & develop campus network for research and education activities
Thank you