



13th Subregional Telecommunication Meeting  
for  
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## Country Report on Internet Governance

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### Myanmar: Basic ICT Indicator




**ISPs**  
 ISP: MPT (35%)  
 Myanmar Teleport: 65%

|                        |              |
|------------------------|--------------|
| Land:                  | 676,577sq.km |
| Townships:             | 324          |
| Pop.:                  | 5431million  |
| Tele lines:            | 667,831      |
| Teledensity:           | 1.23         |
| Auto exchange:         | 137          |
| International Gateway: | 2            |
| Packet exchange:       | 1            |
| Internet gateway:      | 2            |
| Internet hosts:        | 25,690       |
| Internet users:        | 78,010       |
| E-readiness ranking:   | 129/180      |
| E-readiness index:     | 0.296        |
| Web measurement index: | 0.154        |
| Infrastructure index:  | 0.004        |
| Human capital index:   | 0.730        |
| E-participation index: | 0.048        |

### Current Status of IT Sector in Myanmar

#### Available connectivity types



1. Dial – Up
2. Myanmar Teleport Broadband ( ADSL , BWLL )
3. iPSTAR Satellite Broadband
4. VSAT
5. Fibre links
6. WAP (GPRS)

### Email, Internet User

|                    |             |
|--------------------|-------------|
| ADSL (Mandalay)    | 37          |
| ADSL (Yangon)      | 840         |
| BWLL (Mandalay)    | 327         |
| BWLL (Yangon)      | 945         |
| Dial Up (Mandalay) | 404         |
| Dial Up (Yangon)   | 6134        |
| iPSTAR             | 851         |
| VSAT               | 250         |
| <b>Total</b>       | <b>9788</b> |

### Myanmar e-Government projects

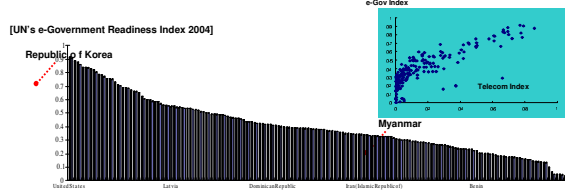
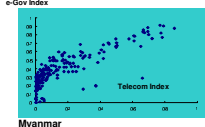
- ✿ **Smart Card** : Rolled-out 2000 cards for MoD - June 2002 .
- ✿ **Smart Schools** : 3 High Schools already installed – August 2002 .
- ✿ **e-Passport** : Start with 5000 passports – October 2002 .
- ✿ **e-Visa** : Roll out before end of 2002 .
- ✿ **TEDI** (Trade Electronic Data Interchange) : On-going
- ✿ **e-Procurement** : On-going
- ✿ **Certification Authority** : On-going
- ✿ e-Government project will be launched soon by the Korean loan of USD 12.5m .

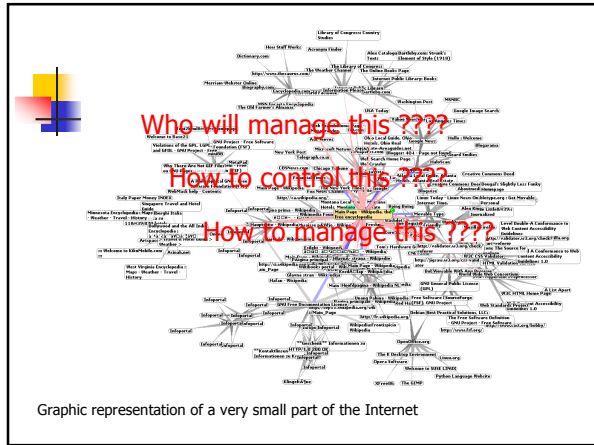
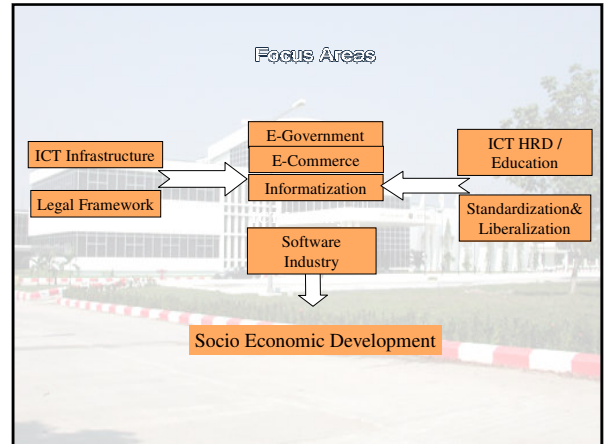
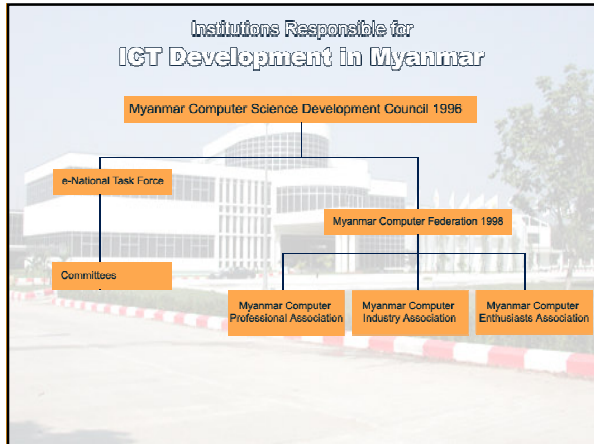


### E-Gov Readiness (World)

- **123th out of 191**
- **web index = 100th/191**
- **telecom index = 191th/191**
- **human index = 122th/191**

[UN's e-Government Readiness Index 2004]



### Different types security threats of Internet

*"The only truly secure system is one that is powered off, cast in a block of concrete and sealed in a lead-lined room with armed guards - and even then I have my doubts."*  
*Eugene H. Spafford, Dir of the Purdue Center for Education and Research in Information Assurance and Security.*

Computer viruses  
Spam mails  
Phishing  
Hacking  
Hijacking  
Spyware  
Malware  
Online theft/fraud

How to prevent them

### Internet governance

*Internet governance is the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet.*  
 (WGIG, 2005).

In order to come up with a solution on the issue of internet governance, UN Secretary-General established a Working Group on **Internet Governance** (WGIG), a multi-stakeholder working group including representatives from governments, civil society and the private sector. WGIG presented the result of its work at Tunis.

### WGIG's Four Internet Governance Models

- Global Internet Council (GIC)
- No Specific oversight organization
- International Internet Council (IIC)
- Public policy and oversight separated

## At national level

- Internet governance needs to address more practical issues concerning “security”

### Issues

Threat prevention  
Security response  
Access  
Diversity  
Openness

## Myanmar's Internet Governance Activities

### 3-layers model

#### Policy

- Myanmar Computer Science Development Council
- Ministry of Communications, Posts and Telegraphs
- E-national Task Force

#### Regulation

- Posts and Telecommunications Department

#### Implementation

- Myanma Posts and Telecommunications
- Myanmar Teleport
- Myanmar Computer Federation

## Roles of policy maker

- Laying down national ICT policy
- Supervising national ICT implementation activities
- Defining long term and short term ICT plans

## Roles of regulator

- Defining standards
- Cooperation with international organizations
- Providing guidelines

## Roles of implementation bodies

- Providing ICT services
- Implementing different stages of e-government, e-commerce, and ICT projects

## Relationships among the three layers

- Myanmar Computer Science Development Council headed by secretary 1 of the State Peace and Development Council is the supreme body in ICT development in Myanmar
- The Ministry of Communications, Posts and Telegraph is the ministry responsible for overseeing the ICT development plans laid down by MCSDC
- The telecommunications regulatory body, Posts and Telecommunications Department provides regulatory and legal advice in implementing ICT projects
- Myanma Posts and Telecommunications, Myanmar Teleport as well as the Myanmar Computer Federation implement the ICT projects for Myanmar

## country code top level domain name (ccTLD) registration

- In Union of Myanmar government, private and other organizations and individuals are allowed to use Myanmar ccTLD (.mm). To do that they must first register to one of the two ISPs.
- ❖ domain names are assigned in first-come first-served basic
- to date, 433 domain names and 524 public IP address are registered with ISPs in Myanmar

## Domain name registration

Domain names registered in Myanmar will use .mm as ccTLD structure

DOMAIN NAMES ASSIGNMENTS FOLLOW INTERNATIONAL STANDARD

- use character and numbers
- no spacing
- in English only

.com .gov .edu .net .org .....

## Security

- mmCERT is the body responsible for ensuring cyber security in Myanmar.

### Mission of mmCERT

- Create National IT image by cooperating with international CERT for cyber security and Cyber crime
- Disseminate Security Information and Adversaries
- Provide technical assistance
- Cooperate with law enforcement organizations for cyber crime

## Security (Cont...)

- Now Myanmar is using secure socket layer
- CA will be used in near future

The following laws concerning ICT have already been promulgated:

## Legal Structure

Whoever commits any of the following acts shall, on conviction be punished with imprisonment for a term which may extend to 5 years or with fine or with both:

- sending, hacking, modifying, altering, destroying, stealing, or causing loss
- and damage to the electronic record, electronic data message, or the whole
- or part of the computer programme dishonestly;

## Security: CHALLENGES AHEAD

- Existing legal structures do not comprehensively cover online security,
- More technical trainings are required to enable mmCERT to address cyber security more efficiently.
- More cross-border cooperation as well as regional cooperation is required
- Public education on the seriousness of cyber security shall be carried out
- CLMV countries are not adequately prepared for security issues, and prone to be effected by cyber security threats. Should work together with ITU's guidance.

## OPENESS

- The cyberspace is considered to be a free space to present and share information freely. However, it is important not to undermine national security and individual privacy. The government has already provided for open flow of information on the web at the same time taking care that misuse of the web space does not occur.

## Openness

The following categories of online sites are regulated –

- pornography
- terrorism
- other sites harmful to the general public

## Diversity

- Nowadays several web sites in local contents and multi-languages fronts (including Myanmar) are available
- Launching of Myanmar unicode font will help
- Many local sites have contents in English and Myanmar
- Local contents range from education to culture, and tourism to e-learning

## Diversity: Issues Ahead

Content localization is a serious issue due to low level of digital literacy rate

Access rate is still low causing a hindrance to diversity issue

CLMV countries can join hands in providing local contents in Multilingual basic (a portal for CLMV?)

Important to attract general public to participate in diversify internet

Content providers need to provide rich contents to attract more people



## Access

- At present there are three kinds of access to the internet in Myanmar –
  - Through ISP
  - Through Internet café and PACs
  - Through Private network
  - Wireless Networks

(Some privates, companies, government and non-government organizations have internet access through their private network usually using wireless local loop (WLL), VSAT, satellite broadband (IPSTAR))

## Access

- Currently, internet penetration is not evenly distributed
- Basic telecommunications infrastructures are still lacking to provide Internet connection to some rural areas
- Several projects aimed at promote access are launched

cyber cafes  
Public Access Centres  
Ministry WAN



## Access: Issues

- Telecom density is still low to effectively raise access
- ISP should reduce access rate to attract more users
- Adequate funding is necessary to bring internet to rural populace
- Satellite terminals are used to provide connection to rural areas. But they cost a lot.
- More PAC centres need to be established



## Spam & Cyber security

- Electronic transaction law provides for preventing spamming and other potentially harmful activities online
- mmCERT has been formed to ensure cyber security in Myanmar
- mmCERT is cooperating with regional and international organizations (ASEAN, APT, ITU) in cyber security issues
- Ready to cooperate and take part in any regional or inter-governmental cooperation arrangement for cyber security

### Conclusion

The government of the Union of Myanmar has taken the issue of ICT development as a priority to speed up the socioeconomic development of the country. Myanmar has already started e-Government projects and at this stage the e-Government projects are focusing on G2G functions. Electronic Document Management System and Government Personnel Management System have recently been launched and several ministries are now connected on-line and are test-using the system. MPT has also installed a data back up centre in and the new capital Nay-pyi-taw. In the coming years these government-centred e-government projects will be extended to include the general public. Within a couple of years, the Myanmar public will be able to enjoy complete full fledged e-government and e-commerce services. With increasing use of Internet for business purposes especiall, security has become a major issue. Diversity and access should also be taken care of to avoid imbalance in nation development. Global, regional as well as G2G, cooperation are seen as possible areas for promoting ICT DEVELOPMENT. Internet governance is also regarded as a prime area for promoting ICT development. This subregional meeting of CLMV countries will benefit all concerned nations and so should be carried out in earnest.



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Thank you very much!!  
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