Slide 1

Ministry of Posts and Telecommunications of Cambodia (MPTC)

INTERNET GOVERNANCE

Presented by Chakrya MOA
5 October 2006

Slide 2

National Organization(s)

Ministry of Posts and Telecommunications of Cambodia (MPTC) has been reformed just to manage all telecom policies, regulations and related IT and has representatively cooperated with ITU on many issues of ICT sector.

In 1997 MPTC begun the business operation of Internet with strict policy and regulation of opening Camnet.

Later on since 2001, Cambodian government established the National Information Communication Development Authority "NiDA".

... National Organization(s)

NiDA and MPTC are cooperating together in establishing the ICT strategy including the Internet governance to promote and secure IT for all institutions, private and public sectors, especially in organizing and administrating e-government initiatives.

◆ However MPTC continues to manage the ICT activities such as Internet licensing, IP applications and domain name system (DNS), country code top level domain (ccTLD) registrations.

◆ In so doing Cambodian government requires new structures for network information center (KHNIC) to manage IP addresses and DNS registration authority (RA).

Domain Name System (DNS)

MPTC is currently managing the Domain Name System (DNS) for Cambodia.

A domain is simply a sub-tree of the domain name space. A domain's domain name is the same as the domain name of the root node of the sub-tree. That just means that the name of a domain is the name of the node at the very top of the domain.

some form of the organization's name and a suffix that describes the type of organization. For example, MPTC has registered the domain name "MPTC.GOV.KH".

This allows local public sectors to apply for the registration of the Cambodian .KH domain.

... Domain Name System (DNS)

Rules and Structure under ccTLD ".kh"

Policies for registration of Second and Third Level Domain Names under the TLD "kh" are as follows:

- The name must conform to the relevant technical Internet requirements. A domain Name ideally needs to be between 3 and 12 characters long (longer names are possible), and contain only letters, numbers and hyphens (-), but not at the beginning or at the end of the name. No spaces are allowed. A name may be rejected if that name is considered to be offensive or inappropriate.

- Second Level Domain Names

The current Second Level Domain Names, in accordance with wide practice in the Internet world, are listed as follows:

- .per.kh   personal
- .com.kh   Commercial entities
- .edu.kh   Educational institutions below the university level.
- .gov.kh   Government institutions.
- .mil.kh   Military institutions.
- .net.kh   only for the computer of network providers.
- .org.kh   Organizations of a variety of structure/composition.

The DNS administrator may further delegate the management of portions of the naming tree.

... Domain Name System (DNS)

Conflict in Third Level Domain Names

- Third Level Domain Names must conform to the general structure as stated in Paragraph 1.

- A domain name should resemble the company name or be identical to the company name.

- Each applicant may find out form the DNS Administrator if the name they intend to register already exists. The DNS administrator is not responsible for the name chosen by each applicant if later found unsuitable by other entities. However, if a conflict occurs during the registration procedure, DNS administrator will withhold the process until the case has been settled in a written legal agreement signed by both parties.

... Domain Name System (DNS)

- For Domain Names that are identical to trade names
  the DNS Administrator will assign the Domain
  Name to the company that has registration at the
  Ministry of Commerce even though that Domain
  Name has already been assigned to the other
  Company.
- The same rule applies to Company name.
- If there is conflict between trade name and
  company name, trade name has priority.
- For DNS names that are not identical to trade name
  or company name, DNS administrator will assign
  on a first come served basis.
- A copy of License or Certificate of trade name,
  issued by the Ministry of Commerce of Cambodia,
  authenticated by the municipality of Phnom Penh
  must be provide. Otherwise the applicant must
  show the original license to the DNS administrator.
- Certain name are not allowed, e.g. Cambodia

... Domain Name System (DNS)

The total DNS is around 559.

- ◆ .gov.kh : 63
- ◆ .edu.kh : 38
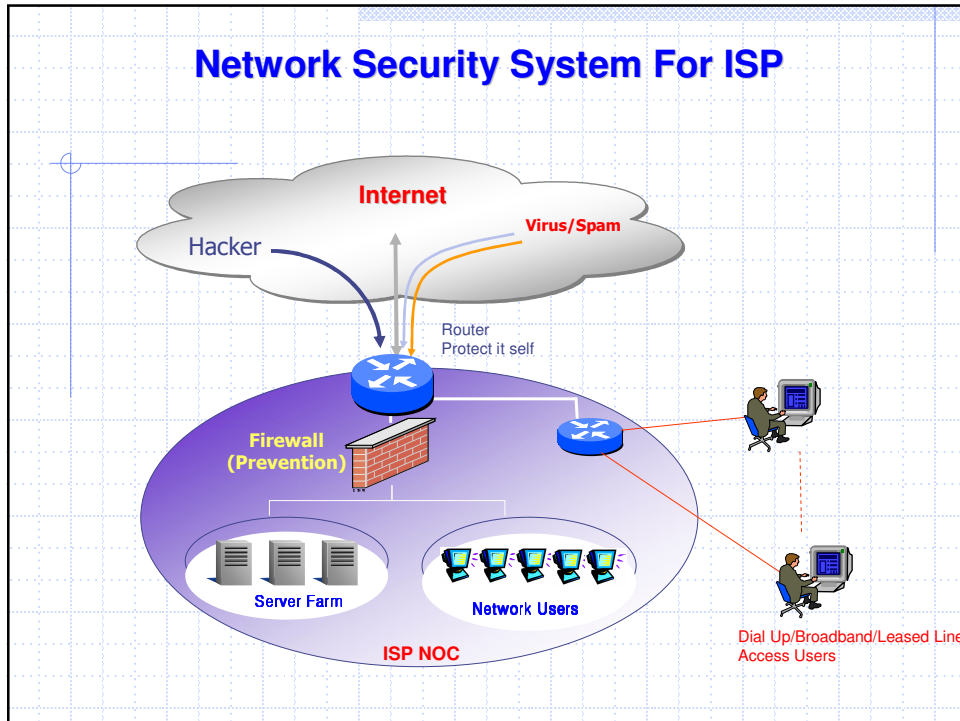- ◆ .org.kh : 97
- ◆ .net.kh : 8
- ◆ .com.kh : 353

Public Key Infrastructure (PKI), Registration Authority (RA)

- The Certification Authority (CA) currently exists in region countries such as Malaysia Singapore and Thailand. However Cambodia has not had the opportunity to build a CA suitable for its own country. So far MPTC has participated at a number of informative regional workshops with ITU and other companies in the region.
- However MPTC does play a major role for IT and Telecommunication and has the responsibility over time to develop CA or another small public key infrastructure.
- MPTC cooperated with ITU in Geneva and obtained a sponsor for setting up a small network as for Registration Authority (RA). This RA is a remote server of Wisekey public key security company in Europe.

Internet Security

- ◆ Computer Emergency Response Team (CERT) has been set up as CamCERT under NiDA.
- ◆ Until now each ISP is responsible for their own network securities with cooperation to upstream providers and also getting advise directly from hard/software vendors.
- ◆ IP security matter is under national and regional collaborations.

Network Security System For ISP

Internet

Hacker

Virus/Spam

Router
Protect it self

Firewall
(Prevention)

Server Farm

Network Users

ISP NOC

Dial Up/Broadband/Leased Line
Access Users

Internet Connection Security

- MPTC try to create the Internet Exchange (IX) for domestic and international backbone connection in order to secure the internet access within local ISPs.
- Telecom Cambodia (TC) establish the International Internet Exchange (IIX)/ Domestic Internet Exchange (DIX), (see diagram) to provide redundancy Internet backbone connection to customer and other ISPs.
- Now IIX is connecting to CAT-Thailand and to VTI-Vietnam. In the other hand, Internet backbone link through satellite is just for backup.

IP Connection Security for Cambodia
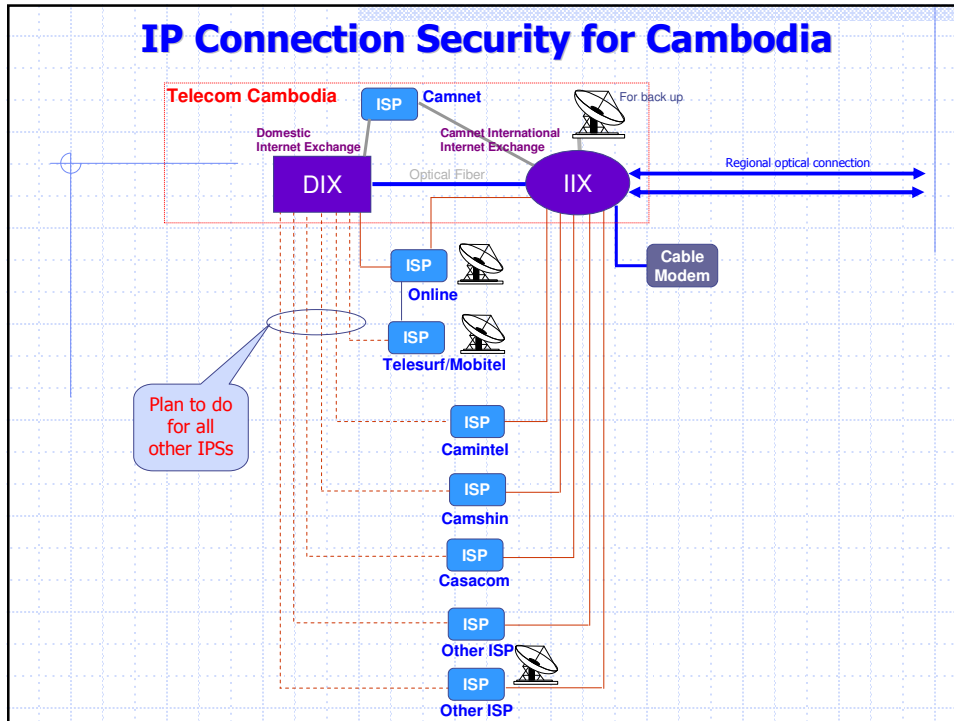
Legislation Development

- Cambodia needs to develop all important laws such as Computer Crime, Electronic Transaction Act.
- Cambodia requires further co-operative actions with LMV and other ASEAN country members.

Suggestion to ITU

◆ MPTC would like to get more assistance from ITU in establishing legislations, regulations on Internet security matter.

◆ MTPC requires more trainings and workshops supported by ITU, especially more hands on training in how to stop spam mail and defend all possibilities from other hackers.

◆ MPTC would like to set up a major team within local ISPs, and try to cooperate with other countries and ITU as well to establish CERT activities.

Thank you !