Information Security Issues & Challenges

Conference on e-Government in Asia and the Pacific

Datuk Mohd Noor Amin
Seoul, Korea
11 May 2011

Growing Cybersecurity Threats

"No geographical borders, no boundaries and tremendous destructive power"

- ICTs have become an integral part of information society.
- ICT networks are regarded as basic national infrastructure.
- ICTs are also exposing our societies to the threat of cyberwar/cyberattacks.
- Vulnerability of national infrastructures increases as the use of ICTs take root.
- Cyber attacks on ICTs are borderless and can be launched from virtually anywhere.
- As global reliance on ICTs grows, so does vulnerability to attacks on critical infrastructures through cyberspace.

Key Cybersecurity Challenges

- Lack of adequate and interoperable national or regional legal frameworks

- Lack of secure software and ICT-based applications

- Lack of appropriate national and global organizational structures to deal with cyber incidents

- Lack of information security professionals and skills within governments; lack of basic awareness among users

- Lack of international cooperation between industry experts, law enforcements, regulators, academia & international organizations to address a global challenge

ITU-IMPACT

Global Coalition

The International Multilateral Partnership Against Cyber Threats (IMPACT) is the cybersecurity executing arm of the United Nation's (UN) specialised agency - the International Telecommunication Union (ITU) - bringing together governments, academia and industry experts to enhance the global community's capabilities in dealing with cyber threats.

Global Coalition

Industry Experts	Academia	International Bodies	Think Tank

IMPACT's Global Alliances

Expertise   Technology   Skills   Resources   Experience

ITU   **IMPACT**
INTERNATIONAL MULTILATERAL PARTNERSHIP AGAINST CYBER THREATS

Cybersecurity services

192 Partner Countries	UN System

Cybersecurity Services Deployed
116 countries have joined the ITU-IMPACT coalition

NORTH AMERICA

Costa Rica
Grenada
Honduras
Panama
Saint Lucia

SOUTH AMERICA

Brazil
Ecuador
Paraguay
Suriname
Venezuela

EUROPE

Albania	Moldova
Andorra	Montenegro
Armenia	Poland
Austria	Romania
Azerbaijan	San Marino
Bosnia and Herzegovina	Serbia
Bulgaria	Spain
Croatia	Switzerland
Italy	Vatican City

AFRICA

Benin	Ghana	Sao Tome and Principe
Botswana	Guinea	Senegal
Burkina Faso	Guinea-Bissau	Seychelles
Burundi	Kenya	Sierra Leone
Cameroon	Lesotho	Somali
Cape Verde	Liberia	South Africa
Chad	Madagascar	Sudan
Comoros	Malawi	Swaziland
Congo	Mali	Tanzania
Côte d' Ivoire	Mauritius	Togolese
Djibouti	Morocco	Tunisia
Egypt	Mozambique	Uganda
Eritrea	Namibia	Zambia
Ethiopia	Niger	Zimbabwe
Gabonese	Nigeria	
Gambia	Rwanda	

ASIA

Afghanistan	Mongolia
Bangladesh	Nepal
Bhutan	Oman
Brunei Darulssalam	Philippines
Myanmar	Saudi Arabia
India	Sri Lanka
Indonesia	Syria
Iraq	Thailand
Israel	Turkey
Jordan	United Arab Emirates
Lao	Viet Nam
Lebanon	Yemen
Malaysia	
Maldives	

IMPACT

OCEANIA

Fiji
Micronesia
Solomon Islands
Tonga
Tuvalu

IMPACT
INTERNATIONAL MULTILATERAL PARTNERSHIP AGAINST CYBER THREATS

IMPACT's Partners

Industry

International Organisations

Academia (200+)

COP

Legal Framework
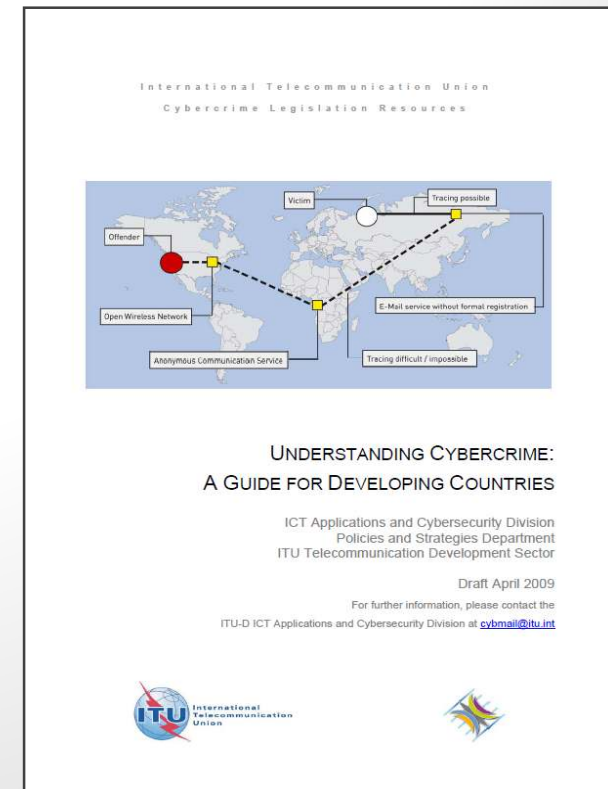
Global Cybersecurity Agenda
Legal Measures

- Assisting countries to understand legal aspects of cybersecurity

- Towards hamornisation of legal frameworks

- Adoption by all countries of appropriate legislation against the misuse of ICTs for criminal or other purposes

- ITU cybercrime legislation resources:

  - Publication: "Understanding Cybercrime: A Guide for Developing Countries

    - http://www.int.itu/ITU-D/cyb/cybersecurity/legislation.html

  - ITU Toolkit for Cybercrime Legislation

Cybercrime: A Guide for Developing Countries

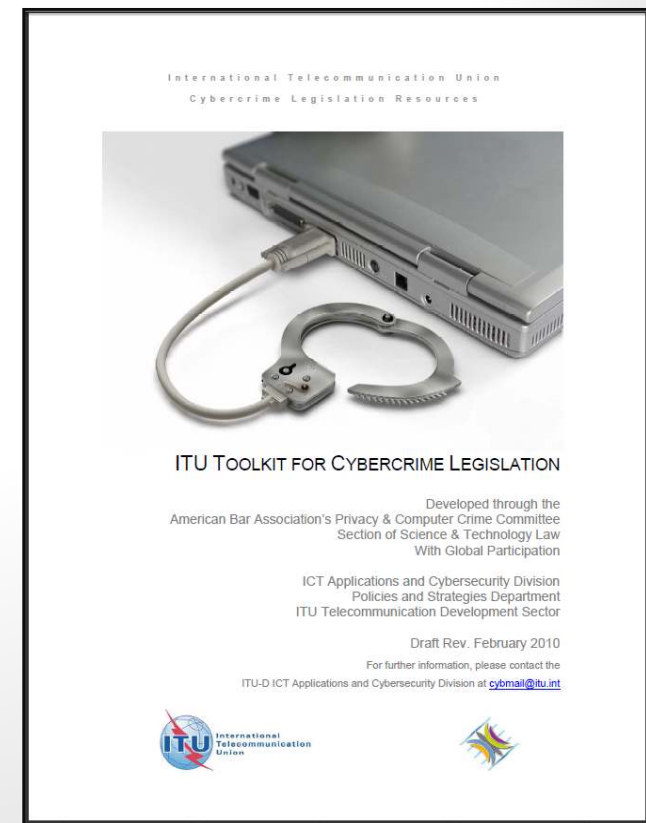## http://www.int.itu/ITU-D/cyb/cybersecurity/legislation.html

- Assist developing countries to better understand the national and international implications of growing cyber threats

- Asses the requirements of existing national, regional and international instruments and assist in establishing a sound legal foundation

- To help harmonise legal frameworks

International Telecommunication Union
Cybercrime Legislation Resources

UNDERSTANDING CYBERCRIME:
A GUIDE FOR DEVELOPING COUNTRIES

ICT Applications and Cybersecurity Division
Policies and Strategies Department
ITU Telecommunication Development Sector

Draft April 2009
For further information, please contact the
ITU-D ICT Applications and Cybersecurity Division at cybmail@itu.int

ITU Toolkit for Cybercrime Legislation

http://www.int.itu/ITU-D/cyb/cybersecurity/legislation.html

- Aims to provide countries with <u>sample legislative language</u> and reference material that can assist in the establishment of harmonised cybercrime laws and procedural rules

- Toolkit was developed after a <u>comprehensive</u> analysis of the most relevant <u>regional</u> and <u>international</u> frameworks currently present

- Serve as a <u>guide</u> for countries desiring to develop, draft, or modify their own cybercrime laws

- Toolkit is intended to advance the global <u>harmonisation</u> of cybercrime laws, facilitate <u>international cooperation</u>, resolve jurisdictional and evidentiary issues and deter cyber criminal behaviour
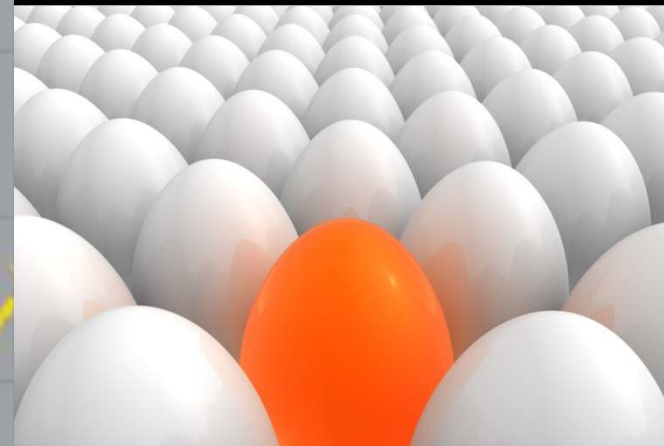

International Telecommunication Union
Cybercrime Legislation Resources

ITU TOOLKIT FOR CYBERCRIME LEGISLATION

Developed through the
American Bar Association's Privacy & Computer Crime Committee
Section of Science & Technology Law
With Global Participation

ICT Applications and Cybersecurity Division
Policies and Strategies Department
ITU Telecommunication Development Sector

Draft Rev. February 2010
For further information, please contact the
ITU-D ICT Applications and Cybersecurity Division at cybmail@itu.int

ITU-IMPACT Milestones
2009 - 2011

1. **Global Response Centre**
   a) Deployed cybersecurity services across over 100 countries globally
   b) Incident remediation coordination by the Global Response Centre for various governments globally
   c) Conducted cybersecurity workshops for 24 countries globally

2. **Centre for Training & Skills Development**
   a) Trained over 200 cybersecurity professionals and practitioners in 2010
   b) Deployed 151 scholarships to 27 partner countries globally (SANS & EC-Council)
   c) Trained 50 law enforcement officers globally on Network Investigation

3. **Centre for Policy & International Cooperation**
   a) Conducted 6 high level briefings with industry partners for partner countries
   b) 2 of IMPACT staff received Honours for (ISC)[2]'s 2010 Security Leadership Achievement Program
   c) ITU-IMPACT Partner Forum
   d) IMPACT collaborated with the US Department of Defense to sponsor the international category winners for the DC3 Forensics challenge in 2009 and 2010

4. **Centre for Research and Security Assurance**
   a) Successfully implemented IMPACT Government Security Scorecard (IGSS) for Malaysian Administration and Modernisation Planning Unit (MAMPU), Prime Minister's Department, Malaysia

Thank you

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