
ITU's Role in Global Cybersecurity

Cyber Incident Simulation and Conference on National Critical Infrastructure Protection

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**ITU is the specialized agency of the UN for
telecommunications and ICTs ...**



... and turned 150 years in 2015!

ITU: A Brief Overview

3

Founded in 1865

193 Member States

750 Sector Members

90 Academia

*A specialized agency of the UN with
focus on **Telecommunication / ICTs***



ITU-R: ITU's Radio-communication Sector globally manages radio-frequency spectrum and satellite orbits that ensure safety of life on land, at sea and in the skies.



ITU-T: ITU's Telecommunication Standardization Sector enables global communications by ensuring that countries' ICT networks and devices are speaking the same language.

ITU-D: ITU's Development Sector fosters international cooperation and solidarity in the delivery of technical assistance and in the creation, development and improvement of telecommunication/ICT equipment and networks in developing countries.

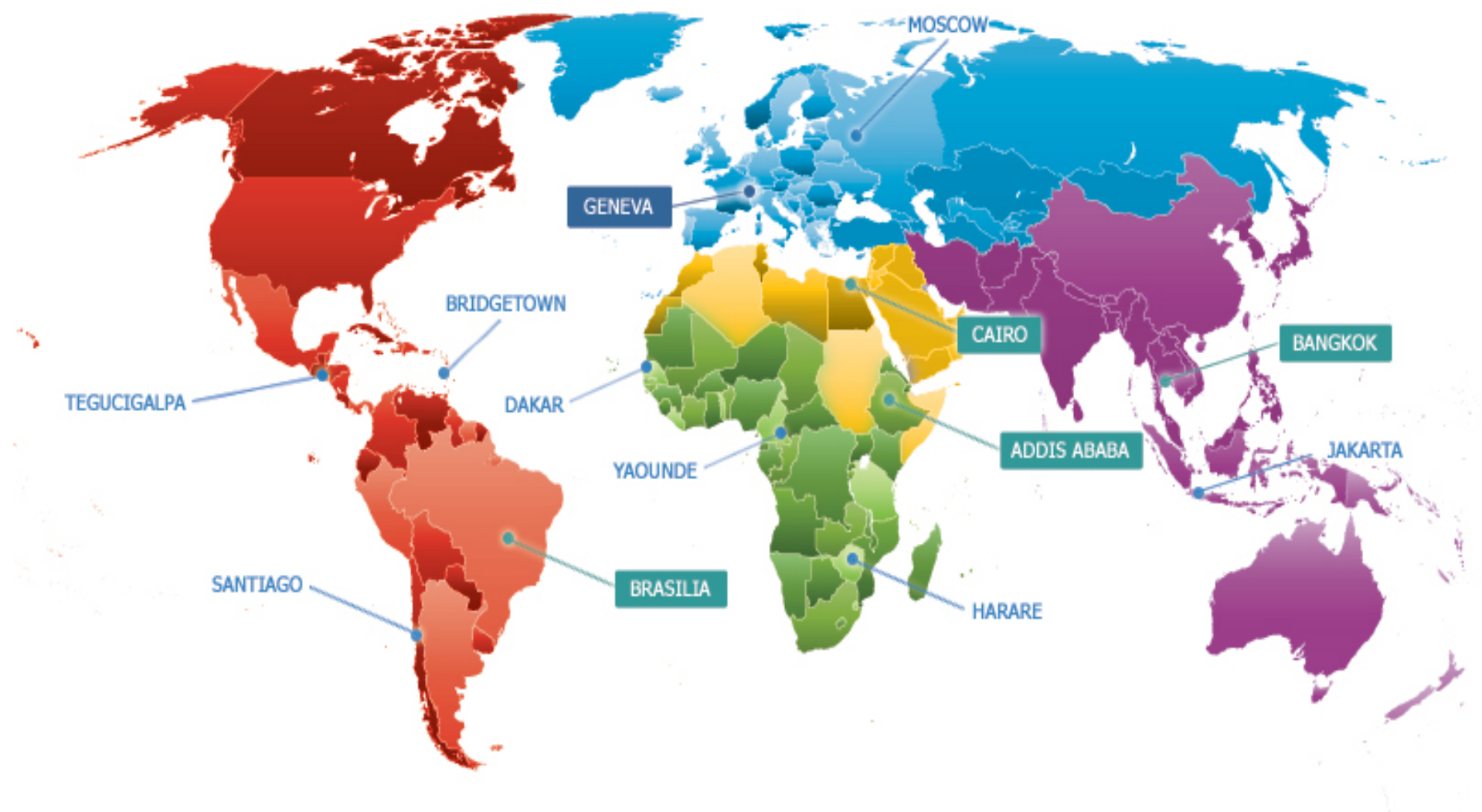
Headquartered in
Geneva,
4 Regional Offices
7 Area Offices.



15  **1865**
2015

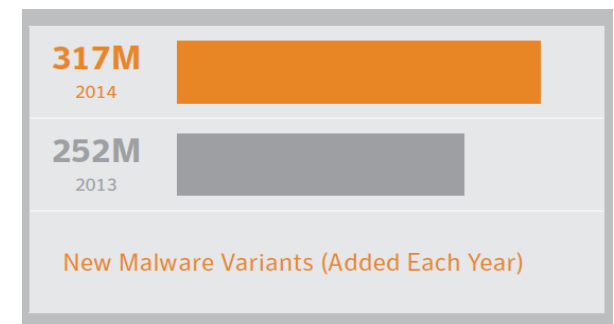


ITU's Global Presence



The importance of Cybersecurity

- From industrial age to information societies
 - Increasing dependence on the availability of ICTs
 - Number of Internet users growing constantly (now 40% of world's population)
- Statistics and reports show that cyber-threats are on the rise
 - The likely annual cost to the global economy from Cybercrime is estimated at more than \$455 billion (Source: McAfee Report on Economic Impact of Cybercrime, 2013).
- Developing countries most at risk as they adopt broader use of ICTs
 - E.g. Africa leading in Mobile-broadband penetration: almost 20% in 2014 - up from less than 2% in 2010 (Source: ITU ICT Statistics)
- Need for building cybersecurity capacity
 - Protection is crucial for the socio-economic wellbeing of a country in the adoption of new technologies



Source: Symantec 2015 Internet Security Threat Report

Coordinated Response

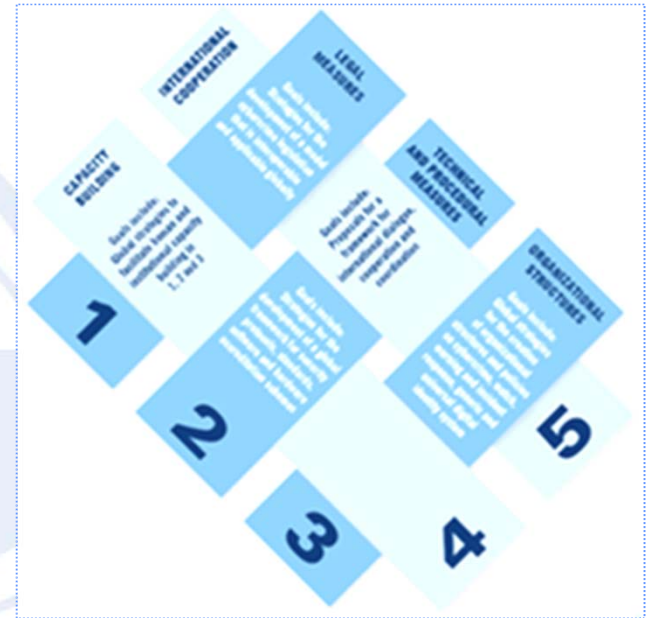
Need for a multi-level response to the cybersecurity challenges



ITU'S ROLE IN GLOBAL CYBERSECURITY

Global Cybersecurity Agenda (GCA)

- GCA is designed for cooperation and efficiency, encouraging collaboration with and between all relevant partners, and building on existing initiatives to avoid duplicating efforts.
- GCA builds upon five pillars:
 1. Legal Measures
 2. Technical and Procedural Measures
 3. Organizational Structure
 4. Capacity Building
 5. International Cooperation
- Since its launch, GCA has attracted the support and recognition of leaders and cybersecurity experts around the world.



GCA: From Strategy to Action

1. Legal Measures



Publication : Understanding Cybercrime A Guide for Developing Countries
MoU with UNODC for assistance
ITU-EC project model law for ACP

2. Technical and Procedural Measures



ITU Standardization Work: ITU-T , ITU-D SG1 Q22
ITU-R recommendations on security
ICT Security Standards Roadmap
ITU-T JCA on COP

3. Organizational Structures



National CIRT deployment
ITU work on National CIRTs cooperation
ITU Cybersecurity Information Exchange Network (CYBEX)
ITU-D SG 1 Q22

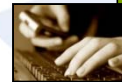
Global Cybersecurity Agenda (GCA)

5. International Cooperation



ITU High-Level Expert Group (HLEG)
ITU's Child Online Protection(COP)
Collaboration with UN, and other IGOs, as well as with Symantec, Trend Micro, ABI research, ISOC, Interpol, FIRST, CCI, CTO, & UNODC

4. Capacity Building



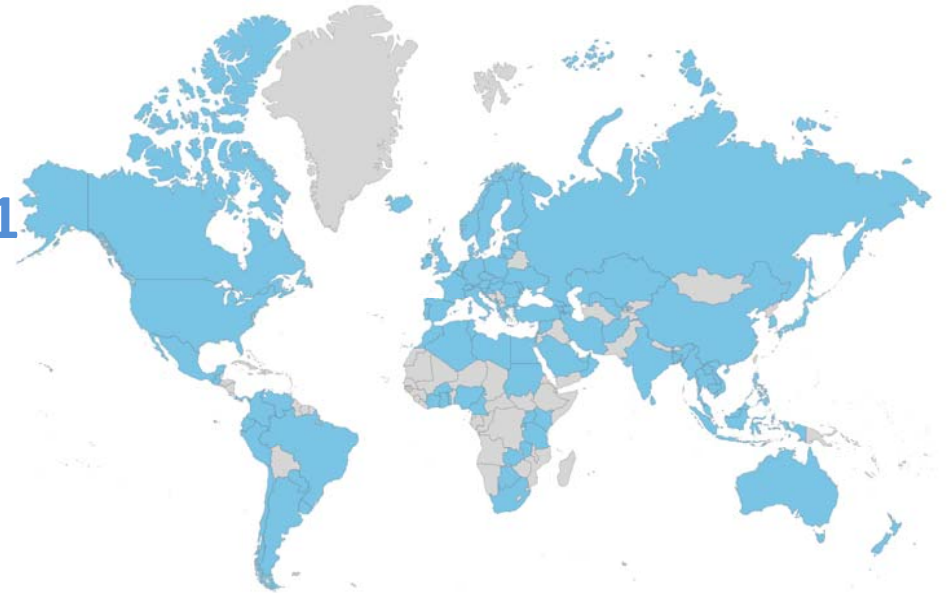
ITU National Cybersecurity Strategy Guide
Report on ITU-D SG1 Q22
Technical assistance and projects: LDCs
Regional Cybersecurity Seminars
National Cyber drills

Telecommunication Development Bureau's Cybersecurity Program Overview

- BDT Cybersecurity Program's action areas:
 - National CIRT Programme
 - Cyber Drills
 - Global Cybersecurity Index (GCI)
 - National Cybersecurity Strategy Guide
 - Technical Assistance
 - Human Capacity Building (seminars, workshops, train the trainer sessions, etc.)
 - Community engagement and awareness

National CIRTs are in the first line of cyber-response

- Assessments conducted for **65** countries
- Implementation completed for **11** countries
- Implementation in progress for 4 countries
- **11** cyber drills conducted with participation of over **100** countries



91 National CIRTs remain to be implemented



Objective

The Global Cybersecurity Index (GCI) is a measure of the commitment of countries to cybersecurity in the five pillars of the Global Cybersecurity Agenda:

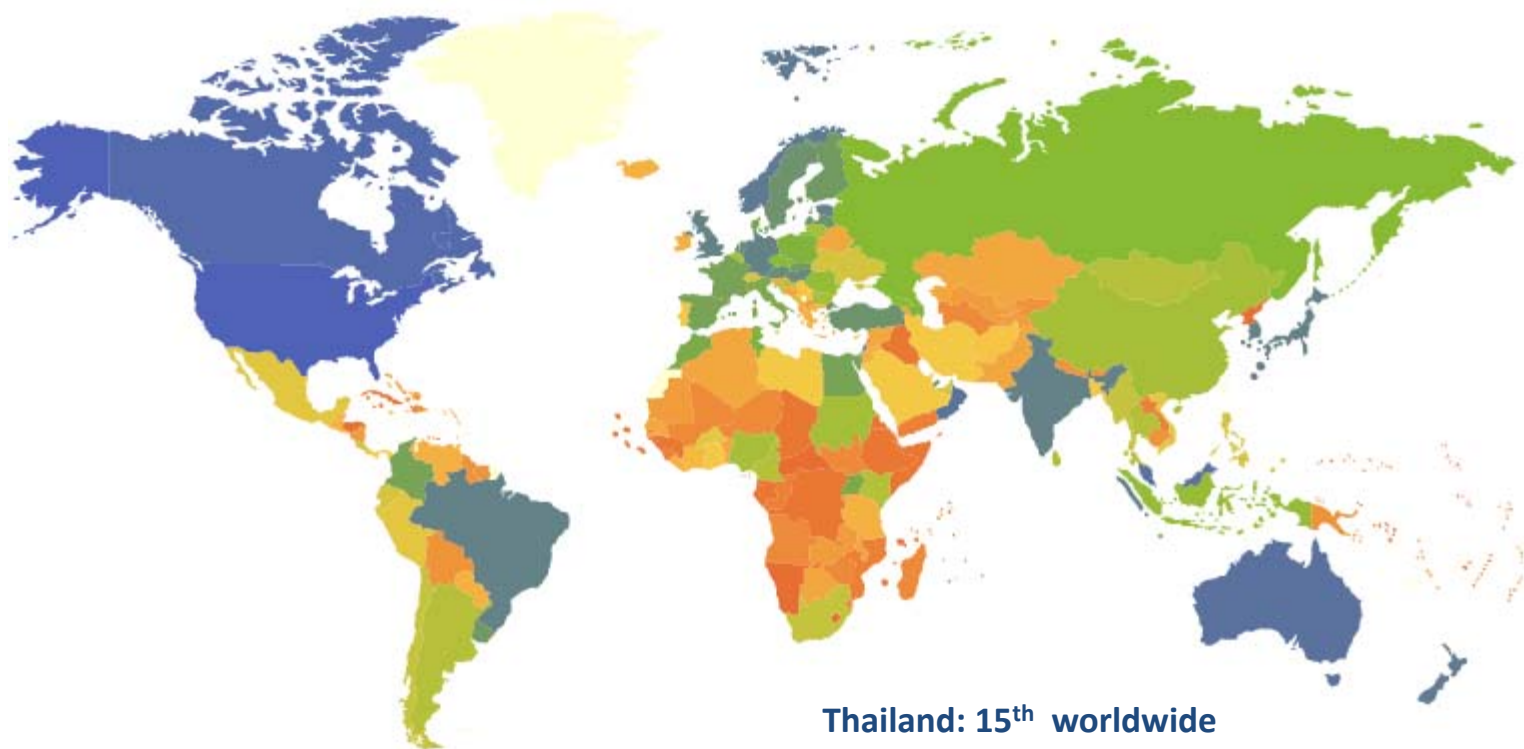
- Legal Measures
- Technical Measures
- Organizational Measures
- Capacity Building
- Cooperation

Goals

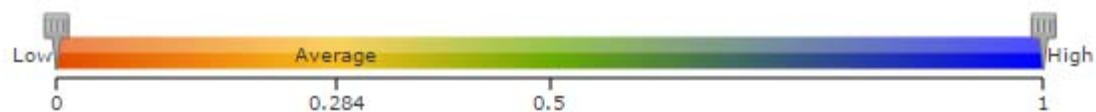
- help countries identify areas for improvement
- motivate them to take action to improve their GCI ranking
- help harmonise practices
- foster a global culture of cybersecurity

104 countries responded for first iteration in 2014
Final Global and Regional Results are [on ITU Website](http://www.itu.int/en/ITU-D/Cybersecurity/Pages/GCI.aspx)
<http://www.itu.int/en/ITU-D/Cybersecurity/Pages/GCI.aspx>

Heat Map



**Thailand: 15th worldwide
7th in the Region**



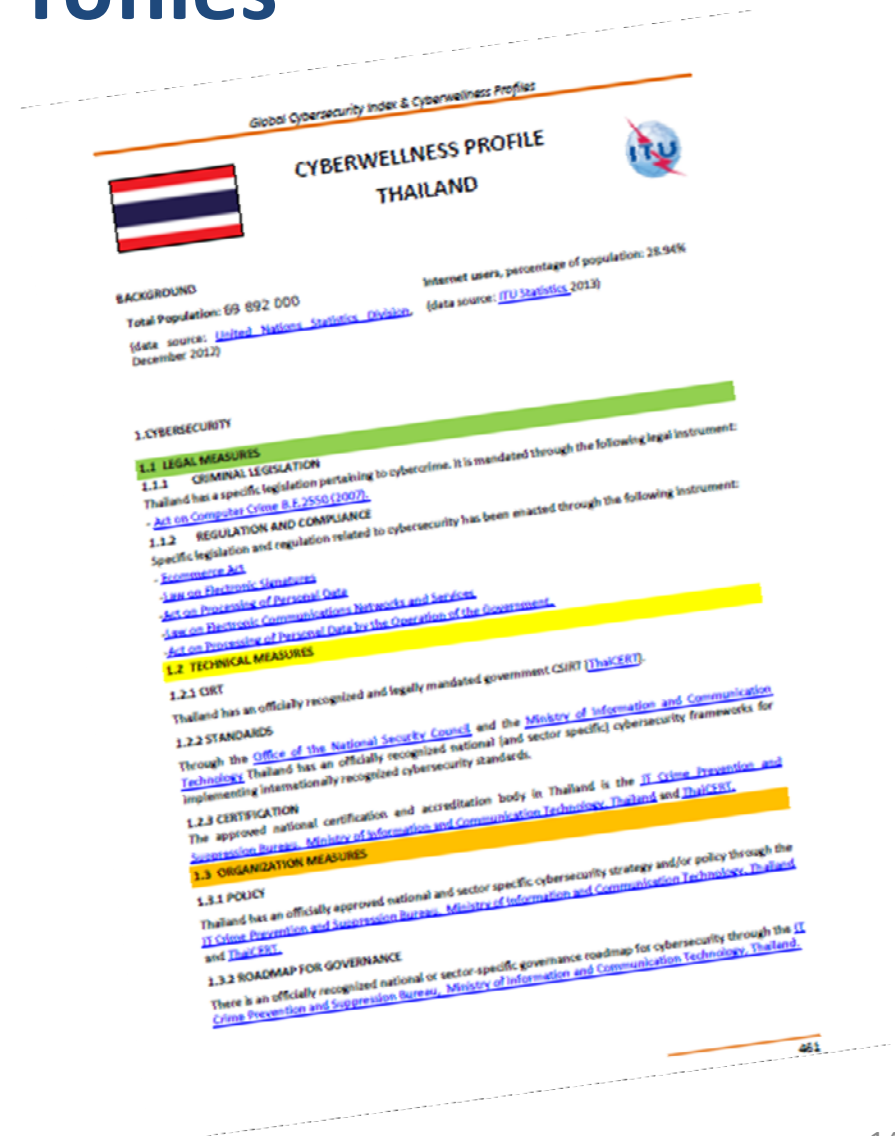
Country Profiles

Factual information on cybersecurity achievements in each country based on the GCA pillars

- Live documents
- Invite countries to assist us in maintaining updated information

http://www.itu.int/en/ITU-D/Cybersecurity/Pages/Country_Profiles.aspx

Example →



National Cybersecurity Strategy Toolkit

Functional toolkit to help national governments improve their cyber strategies - under elaboration

- 66 out of the ITU's 193 Member States have a National Cybersecurity Strategy
- Will replace previous ITU National Cybersecurity Strategy Guide
- Developed under open consultation & multi-stakeholder approach
- Both a reference guide and an evaluation tool

Building a global partnership

GFCE Founding Member and Co-initiator of CSIRT Maturity initiative

Best practices in cybercrime legislations, joint technical assistance to member states, information sharing



Symantec **TREND MICRO** Tap on expertise of globally recognized industry players and accelerate info sharing with ITU member states

Collaboration in Study Group 2 Question 3 and in Cyberdrills **nuix**

ABIresearch technology market intelligence Collaboration with ABI Research – **The Global Cybersecurity Index (GCI)**



COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION



INTERPOL

Capacity building initiatives,
joint consultations and more.

Collaboration with FIRST – To share best practices on computer incident response, engage in joint events, facilitate affiliation of national CIRTs of member states



Collaboration with Member States – **Regional Cybersecurity Centres**

Joint activities to combat the proliferation of SPAM



MoU to jointly enhance Cybersecurity in the ECOWAS region



Thank You



More info @ <http://www.itu.int/cybersecurity>

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