



# **ITU-ACMA Asia Pacific Regulators' Roundtable 2014 21-22 July 2014**

## **Session 2: Evolution of the Regulator – Addressing International Concerns**

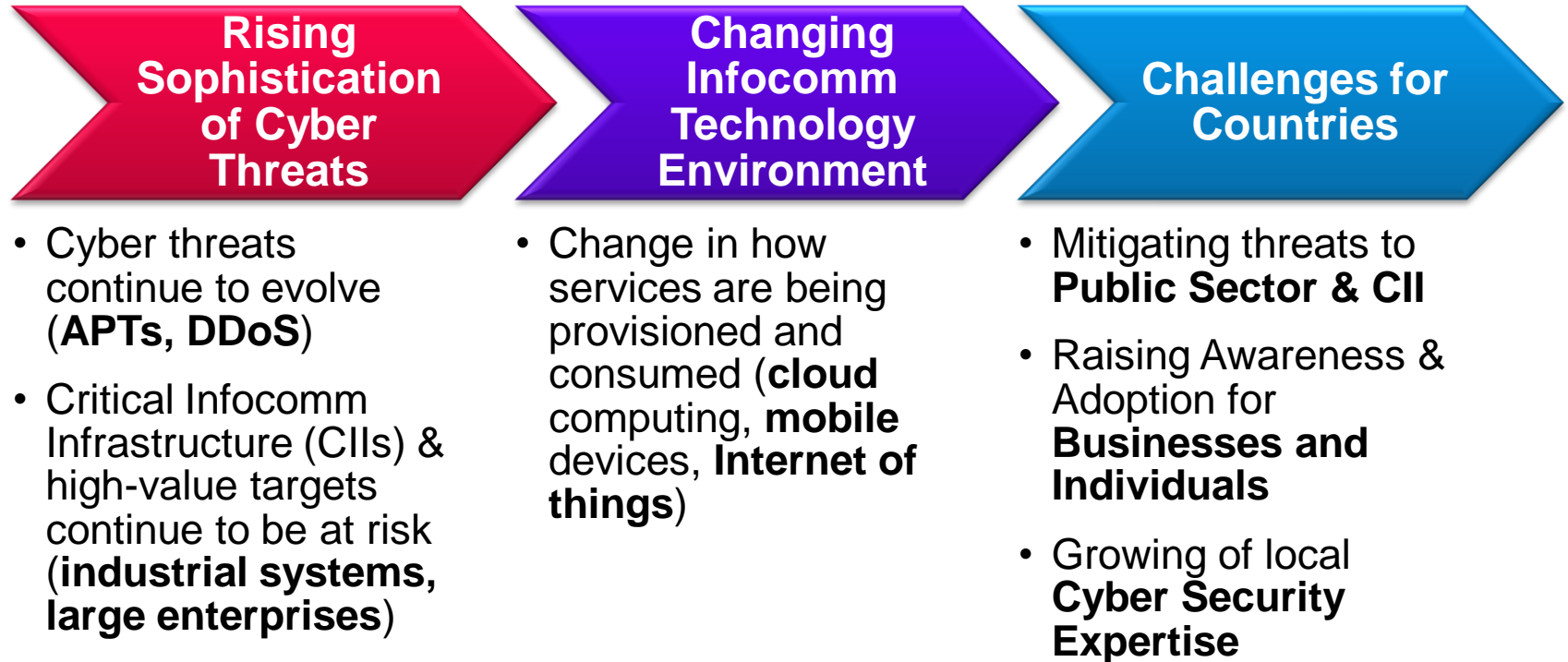
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# Cyber Security

# Strategic Drivers of Cyber Security



# Three Focus Areas

## Enhance the security and resilience of Critical Infocomm Infrastructure or CII

- Public Sector's detection and analytical capabilities
- CII Protection Assessment Programme
- National Cyber Security Exercises

## Increase efforts to promote the adoption of appropriate infocomm security - individuals and businesses

- New avenues that offers wider coverage - broadcast media
- Collaborations with industry and trade associations to promote cyber security and share cyber threat information

## Grow the pool of Infocomm security experts

- Work with Institutes of Higher Learning to incorporate infocomm security courses and degree programmes into the curriculum.
- Work with industry partners to attract and retain such skilled professionals locally

# International Co-operations

- Active participation in:
  - ASEAN-related initiatives
    - ASEAN-Japan IT Security Policy Meeting
    - ASEAN-Japan Government Network Security Workshop
  - Asia Pacific CERT (APCERT)
    - Annual cyber incident drill
- MOUs inked with:
  - Japan
  - South Korea
    - Participates in cyber threat monitoring and information sharing initiatives by Japan (TSUBAME and PRACTICE)
    - Japan and Korea were invited to speak at annual Infocomm Security Seminar hosted by IDA

# Recent Collaborations

- ASEAN Regional Forum (ARF) Incident Response Workshop in Singapore (Sept 2012):
  - Co-hosted by SingCERT and CERT Australia
  - Participants' capacity to cooperate in the event of cyber security incidents
- ASEAN CERT Incident Drill (ACID):
  - Hosted by SingCERT since 2006
  - Opportunity for teams to interact, practice and refine incident handling procedures when dealing with cross-border incidents.
  - Ninth ACID scheduled for Sept 2014

# Upcoming Collaborations

- ASEAN-Japan Government Network Security Workshop:
  - To be hosted by Singapore from 27 to 28 Aug 2014
  - Topics include protection of Critical Infocomm Infrastructure (CII); raising cyber security awareness etc.
- US-Singapore ARF Cyber Confidence Building Measures (CBM) Seminar:
  - Two-day seminar to be held in late 2014, in Singapore
  - Discussions among participating states to centre on the voluntary sharing of information, so as to facilitate better predictability and understanding of state activities in the ICT environment.





# Cross-border Data Flow

# Adoption of cloud services

## Potential Benefits

- **Managing business and operational costs (e.g. with ready cloud infrastructure)**
- **Efficiency in IT services (e.g. possibility to offer more value-added IT services)**
- **Encourages business innovations (e.g. when entering new markets)**

## Potential Challenges

- **Data residency (e.g. data may be broken into pieces and routed to different locations)**
- **Data sovereignty (e.g. pin-pointing the location of cloud infrastructure)**
- **Lack of control (e.g. what happens when data leaves the organisation and is housed in cloud)**

# Facilitating cloud computing – policy challenges

**Cross-border data transfers are key to cloud computing**

## Lack of Harmonised Laws

- Regulatory requirements (e.g. data protection) may differ across jurisdictions
- Harmonisation attempts (e.g. APEC CBPR) are still relatively new

## Data Localisation

- Requirements to keep data local, and not transfer it out of the jurisdiction
- E.g. using local data centres where data can be stored and inspected

- **Is data localisation consistent with cloud computing?**
- **Is harmonisation the best way to facilitate cross-border data flows?**
- **Do existing regulations for data need to be revamped?**

# Singapore's framework for cloud services

- Sharpen the overall economic competitiveness of Singapore through catalysing demand and adoption of cloud services in key industry verticals
- Drive creation of new products to address business needs and develop manpower capabilities
- Instil confidence by having a regime to protect data of consumers

## Promote and facilitate adoption of cloud services

Promote demand: e.g. Software-as-a-Service (SaaS) Enablement Programme (SEP) provides funding support for SaaS enablement projects in specific industry verticals

Facilitate supply: e.g. Certification Grant scheme for Multi-Tier Cloud Security (MTCS) standard provides funding support for Cloud Service Providers (CSPs) in Singapore who are interested to participate in the certification

## Consumer Protection

Singapore's Personal Data Protection Act sets baseline rules to protect consumers' personal data

The PDPA also sets conditions for overseas transfer of data



# Interoperability & Net Neutrality

# Singapore's Net Neutrality Position

**No unreasonable restriction to Internet access**

**No blocking of lawful content & services**

**Comply with minimum QoS**

**Comply with fair competition & Interconnection rules**

**Information Transparency (network mgmt; bb speeds)**

**Flexibility for industry to innovate & for efficiencies**

**Allowed to provide niche or differentiated services**



# Global Connectivity

# Mobile Roaming Rate Regulation

Reduce cost of cross-border communication:



- Requires international collaboration between each country's regulator and mobile operators
- Promotes greater international communication linkages

**Singapore and Malaysia's bilateral efforts in reducing mobile roaming rates will help to pave the way for other similar efforts in the region, strengthening economic ties and benefiting travellers**



# Singapore's Next Generation Nationwide Broadband Network

- Initiative under iN2015 to create a ultra-high speed, pervasive, intelligent infrastructure
- 3 layer industry structure
- Regulatory frameworks:
  - Interconnection offer
  - Universal service obligation
  - Quality of Service requirements



# Internationally

## Making Best Use of Infocomm Technology

1. Finland
2. Singapore
3. Sweden
4. The Netherlands
5. Norway
6. Switzerland
7. The United Kingdom
8. Denmark
9. The United States
10. Taiwan

## ASEAN Projects

- ASEAN Broadband Corridor
- Plan to Increase Capacity to meet Data Demand in ASEAN for the next 5 Years
- ASEAN TELSOM Infrastructure Development Task Force (AIX)
- ASEAN TELSOM Bridging the Digital Divide Task Force
- Facilitating the provision of Broadband to Every School by Strengthening USO Policy in ASEAN
- ASEAN Workshop on Setting up a Framework for Universal Service Obligation Fund (USOF)



# Thank You