ITU Multi-Country Workshop for National Focal Points on ICT Indicators and Measurements

Nay Pyi Taw, Myanmar
15-18 March 2016

Session 1  ASEAN ICT targets

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e-ASEAN Framework Agreement was signed by ASEAN Leaders at ASEAN Informal Summit in Singapore in Nov 2000

Nay Pyi Taw, 15-18 March 2016
Six main thrusts

- Establishment of ASEAN Information Infrastructure
- Growth of electronic commerce
- Liberalisation of trade in ICT products and ICT services, and of investments
- Facilitation of trade in ICT products and services
- Capacity building and e-Society
- e-Government
## Six main thrusts

<table>
<thead>
<tr>
<th>Name</th>
<th>e-ASEAN Measurement Framework</th>
</tr>
</thead>
</table>
| **Lead country/organisation** | • Thailand/Electronic Commerce Resource Center, National Electronic and Computer Technology Center.  
• Thailand/Department of Business Economics, Ministry of Commerce.  
• Singapore/Infccomm Development Authority of Singapore. |
| **Participating countries** | ASEAN countries: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. |
| **Objectives** | The main objective is to develop a set of recommendations for positioning the ten ASEAN countries in the digital economy, to cover indicators for the digital economy and to improve the practice of regularly measuring the progress of the region towards the goals of e-ASEAN. Specific objectives of the second meeting were to consider and establish a core list of ICT indicators and their definitions; to share information and experience among countries on model surveys and data collection methodology as part of capacity building effort; and to take stock of ICT/e-commerce surveys in each ASEAN country. |
| **Short history** | A first meeting was held in September 2002 in Bangkok, Thailand. A second meeting was held in November 2003 in Yangon, Myanmar. Due to a restructuring of the e-ASEAN working group, the activities of the e-ASEAN measurement working group have been transferred to the Telsom working group, which falls under the e-Society and ICT Capacity Building (ESICB) working Group. Leading organisations for this issue remain NECTEC/Thailand and IDA/Singapore |
| **Results, links and contacts** | • First meeting: [http://www.ecommerce.or.th/project/easean-measurement/](http://www.ecommerce.or.th/project/easean-measurement/). |

FROM : OECD GUIDE TO MEASURING THE INFORMATION SOCIETY, 2009
2 types of indicators

- Core – basic indicators to be collected by all member countries
- Supplementary – additional indicators that augment the basic indicators.
### The number of indicators

<table>
<thead>
<tr>
<th>Thrust</th>
<th>Core</th>
<th>Supplementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Establish the ASEAN Information Infrastructure</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>2. Facilitate growth of electronic commerce</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>3. Liberalize trade and investments in infocomm</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>4. Facilitate trade in infocomm products and services</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>5. Build capacity and an e-Society</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>6. Promote the use of ICT applications in the delivery of government services (e-Government)</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>97</strong></td>
<td><strong>63</strong></td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>160</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Number of indicators – a comparison

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Core</th>
<th>Supplementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. e-ASEAN</td>
<td>160</td>
<td>97</td>
<td>63</td>
</tr>
<tr>
<td>2. Administrative data on</td>
<td>57</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Telecommunications / ICT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. WSIS</td>
<td>24</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>4. MDGs Goal #8</td>
<td>2</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>5. Core indicators on access</td>
<td>16</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>to, and use of, ICT by</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>households and individuals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Core Indicators on use of</td>
<td>12</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>ICT by businesses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- The ASEAN ICT sector was of the view that there are many components of the e-ASEAN framework that are beyond the purview of ASEAN ICT Sectoral Body, in particular, those related to liberalisation, tariff, some specific online government services, and other cross-sectoral areas where the ICT ministry is not the lead agency.

- Since 2011, with the launch of the ASEAN ICT Master Plan (AIM) 2010-2015, the work under e-ASEAN FA was discontinued.
ASEAN ICT MASTERPLAN 2015 (AIM 2015)

- AIM 2015 launched on January 2011
- During the development of AIM2015, there was some discussion on what KPIs to use, but, TELSONM did not reach a consensus on what to use and ended up with dropping them from the AIM2015.
- The issue of KPI will be discussed again this year in connection with monitoring the implementation of the new AIM2020
ASEAN ICT MASTERPLAN 2015 (AIM 2015)

- ST1: Economic Transformation
- ST2: People Engagement & Empowerment
- ST3: Innovation
- ST4: Infrastructure Development
- ST5: Human Capital Development
- ST6: Bridging the Digital Divide
AIM 2015 REVIEW BY TRPC

- In 2013 ASEAN undertook a mid-point review of the ICT Masterplan 2015 (AIM 2015) - to review and evaluate.
- Review was done by Dr Peter Lovelock of TRPC
- Dr Lovelock can be reached at peter@trpc.biz
- 4 objectives in this review, the fourth one being recommending benchmarks and KPIs.
- The KPIs in slides 14 – 21 are taken from his review.
Noteworthy

- The review noted ‘For better policymaking and agenda-setting institutionalizing statistical indicators needs to be actively considered and developed’
- This would be for ICT statistics and an ICT indicator database
- KPIs to be sourced from public sources
ST1: Economic Transformation

1. ICT goods exports (percentage of total goods exports)
2. ICT service exports (percentage of service exports, BoP)
3. Nominal GDP with ICT contribution (by percentage)
4. Public private partnerships (by no., percentage participation, timespan, cost)
ST2: People Engagement & Empowerment

1. Cost per megabyte of download as percentage of GDP per capita
2. Cost per 10-second mobile tariff as percentage of GDP per capita
3. Percentage of firms with an online presence
   - Broken out by firms with own website and social media presence
ST2: People Engagement & Empowerment (cont’d)

4. Number of e-Government services available
5. Level of e-Government services usage
   - Percentage of business registrations and filings conducted online
6. Number of cyber intrusions (network attacks) per month (e.g. identity theft, DDoS, website vandalism, etc.)
7. Number of online monetary transactions (by no./by vol)
ST3: Innovation

1. Number of new enterprises/SMEs started
   - Number of companies with virtual offices

2. Number of home-grown products entering foreign markets

3. Number of patent applications by residents
   - Number of patent registries may be inadequate as a measure of innovation if (1) patents are unavailable (too costly, inconvenient, time-consuming) for average inventors and programmes to access; (2) patents are not adequately enforced within a country

4. Number of CIOs

5. Level of intra-ASEAN digital exchange (traffic)
ST4: Infrastructure Development

1. Broadband subscriptions per 100 population
2. Wireless broadband subscriptions per 100 population
3. Mobile subscriptions per 100 population
4. Percentage of individuals using the Internet/Internet penetration (Internet users per 100 population)
ST4: Infrastructure Development (cont’d)

5. Secure Internet servers (per 1 million people)
6. International connectivity (international broadband per economy)
7. Average access speed
8. Data centre efficiency level (average power usage effectiveness, PUE)
9. IPv6 addresses/ IPv4 addresses
ST5: Human Capital Development

1. ICT manpower (in absolute numbers) with tertiary education and above, and percentage growth year-on-year
2. Number of ICT graduates
3. Number of employed ICT professionals and percentage growth year-on-year
4. Number of qualified experts under ICT certification/skillsets programme
ST6: Bridging the Digital Divide

1. Percentage of public schools with broadband access
2. Percentage of population (15 years+) with formal financial access (bank or other registered financial account)
ASEAN ICT MASTERPLAN 2020 (AIM 2020)

Launched November 2015
8 Strategic Thrusts in AIM 2020

- Economic Development and Transformation
- People Integration and Empowerment through ICT
- Innovation
- ICT Infrastructure Development
- Human Capital Development
- ICT in the Single Market
- New Media and Content
- Information Security and Assurance
8 Strategic Thrusts but what indicators?

- Think about what indicators to use for these 8 strategic thrusts.
- Use indicators that are already collected or mentioned in:
8 Strategic Thrusts but what indicators?

- Economic Development and Transformation
  - ASEAN will work to strategically position its member states to be linchpins in the digital economy, especially in key priority areas such as digital trade and services.

- People Integration and Empowerment through ICT
  - Bridge digital divides and build a common ASEAN identity. A committed focus to increase broadband penetration, affordability and ICT usage in the region, ASEAN citizens will be empowered through easily accessible information and affordable services to achieve...

- Innovation
  - ASEAN will work to spur and encourage more entrepreneurship and idea generation so as to become a leader in ICT and next-generation applications.

- ICT Infrastructure Development
  - ICT infrastructure development remains a necessary foundation for all other ICT development. Continue to develop and improve a strong infrastructural backbone, so that a sustainable digital economy can grow and thrive.
8 Strategic Thrusts but what indicators?

- **Human Capital Development**
  - ... equip ASEAN citizens to be digital-literate participants in the digital economy. It also focuses on strengthening workforce talents ...

- **ICT in the Single Market**
  - ... first of three new Strategic Thrusts aims to enable an ASEAN digital economy to develop and grow .... lower the cost of doing business, achieve economies of scale and scope, and

- **New Media and Content**
  - ...second of three new Strategic Thrusts recognises the importance of both quality and quantity of ASEAN content being delivered across ICT channels. Increasing ASEAN content online for citizens will...

- **Information Security and Assurance**
  - ...final of three new Strategic Thrusts focuses on the increasing prospect of cyber threats – both economic and social – posed by malicious software, hacking, data theft and online fraud...
KPIs and Targets for AIM 2020

The issue of KPIs will be revisited this year in connection with monitoring the implementation of the new AIM2020
-Thank you-

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