Developing e-Government indicators

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The Geneva Plan of Action states: "All countries and regions should develop tools so as to provide statistical information on the Information Society, with basic indicators and analysis of its key dimensions. Priority should be given to setting up coherent and internationally comparable indicator systems, taking into account different levels of development."
Launched in June 2004

Objectives:

- To work with NSOs, regulators, ministries, etc. to develop a common set of core ICT indicators
- Enhance the capacities of National Statistical Offices and other stakeholders on collection & processing of ICT indicators
- Develop a global database on ICT statistics
The Partnership indicators

- Launched in Tunis in 2005 with 42 indicators
- Divided under *four* categories:
  - ICT infrastructure and access;
  - Access to, and use of ICT by households and individuals;
  - Use of ICT by businesses; and
  - ICT sector and trade in ICT goods
- Endorsed by the UN Statistical Commission (UNSC) in 2007, which requested the “Partnership to continue work to update the list of indicators, especially in view of measuring use of ICT in education and in government”
- Education sector was added as 5th sector led by UNESCO in the Task Group on Education
- After revision and update, the list includes presently 46 indicators endorsed by the UNSC in February 2009
Objectives of the indicators

- To help countries that collect ICT statistics to produce high quality and internationally comparable data
- To have readily available standardized info:
  - Definitions of terms (e.g. computer, the Internet);
  - Model questions;
  - Calculation of indicators (e.g. use of appropriate denominators for proportions);
  - Collection scope (e.g. by business size or industry, age of individuals); and
  - Classificatory variables (e.g. business size; age ranges for individual ICT use core indicators).
Developing e-Gov indicators

- The list of 42 and now 46 indicators does not cover all vital sectors of the information society
- The Partnership agreed to develop specific sectors
- Establishment of a Task Group on development of e-Government indicators (TGEG), coordinated by UN ECA and 1 on Impact led by OECD
Work in progress of the TGEG

- Following preparation of a conceptual draft from ECA, the following meetings discussed development of the indicators:

  - The meeting of the Fifth African Technical Committee on the African Information Society Initiative (AISI), held in Addis Ababa in December 2006
  - The ECA-ITU-UNCTAD Regional Workshop on Information Society Measurements in Africa, in March 2007 in Addis
  - The WSIS Cluster of events (Action Line C7), held in Geneva in May 2007 and May 2008
ICT indicators in the African context

• The basic question is: how to address the developmental challenges of countries and accelerate their socio-economic development process through the development, deployment and exploitation of ICTs

• Hence the launch of AISI, with the main aim of supporting countries to develop/implement e-strategies (www.uneca.org.aisi)

• The process follows a phased methodology on the development and use of ICT indicators, including on e-government, for benchmarking, implementation and evaluation
The Baseline/e-readiness study

- The most important phase for the identification and collection of indicators is related to the baseline study, which constitutes the first step in developing e-strategies in Africa.
- It provides a basis for setting targets and projections for the various programmes and initiatives of the e-strategy.
- A methodological framework derived from the SCAN ICT programme was used for the e-strategy development process and for Africa’s contribution to the list of core ICT indicators of the Partnership.
Selecting Core e-Government indicators

• Based on the CUT (Capacity, Utilization, Transformation) model developed by UN ECA

• It provides an avenue for the development of suitable indicators for assessing the status of the development, deployment and the use of ICTs in African countries

• It guides and facilitate the ICT4D policy and plan development process and

• It monitors the ICT policy implementation
The ‘CUT’ Model for ICT4D Indicators

CAPACITY

TRANSFORMATION
‘impact’

USAGE

intensity

time

indicators
Indicators and the NICI Process

Phase 1
THE BASE/CASE

The FRAMEWORK

Phase 2
THE WHAT..?

The POLICY

guide the development and target setting

Phase 3
THE HOW..?

The PLAN

IMPLEMENTATION

Phase 1

provide basis and make case

Phase 2

guide policy formulation

Phase 3

monitor, assess, measure progress and ‘impact’
Framework – Summary Based on CUT Model

<table>
<thead>
<tr>
<th>Broad Category of e-Gov Indicators</th>
<th>Scope and Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1: Capacity Status Indicators</strong></td>
<td>Measuring the status of the ICT capacity, usage/exploitation deployment and development within Government</td>
</tr>
<tr>
<td><strong>Category 2: Usage of Information Society / Information and Knowledge Economy Development Monitoring Indicators</strong></td>
<td>Monitoring, Assessing and Measuring progress towards the development of the IS/IKE within Government</td>
</tr>
<tr>
<td><strong>Category 3: Impact Monitoring and Assessment and Measurement Indicators - Transformation</strong></td>
<td>Monitoring, Assessing and Measuring the impact of the development of the IS/IKE on Government systems, technology and operations</td>
</tr>
</tbody>
</table>
**Proposed List of Core of e-Government Indicators**

<table>
<thead>
<tr>
<th>CAPACITY indicators (10)</th>
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<tbody>
<tr>
<td><strong>EG1</strong></td>
</tr>
<tr>
<td><strong>EG2</strong></td>
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<td><strong>EG3</strong></td>
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<tr>
<td><strong>EG4</strong></td>
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<td><strong>EG5</strong></td>
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## Proposed List of Core of e-Government Indicators

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>EG6</strong></td>
<td>% of ICT personnel and by gender (per total staff) in MDAs</td>
</tr>
<tr>
<td><strong>EG7</strong></td>
<td>No and % of intrusions and hacking of networks and websites of MDAs</td>
</tr>
<tr>
<td><strong>EG8</strong></td>
<td>No. and % of spam messages per total emails received</td>
</tr>
<tr>
<td><strong>EG9</strong></td>
<td>% of expenditure on ICT per total expenditure of MDAs</td>
</tr>
<tr>
<td><strong>EG10</strong></td>
<td>% of ICT budget spent on institutional capacity building and human resource development</td>
</tr>
</tbody>
</table>
## Proposed List of Core of e-Government Indicators

<table>
<thead>
<tr>
<th>Usage Indicators (4)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG11</td>
<td>Total available bandwidth and % of usage</td>
</tr>
<tr>
<td>EG12</td>
<td>Type of software and % of open source software vis a vis proprietary</td>
</tr>
<tr>
<td>EG13</td>
<td>Type of applications and % vis a vis overall applications: Word processing, accounting, database, website</td>
</tr>
<tr>
<td>EG14</td>
<td>Number and type of training offered and % of staff and by gender of MDAs who are trained on use of ICTs</td>
</tr>
</tbody>
</table>
## Proposed List of Core of e-Government Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
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<tr>
<td><strong>EG15</strong></td>
<td>% of MDAs providing services online and type of services; e.g. retrieval and printing of online forms, use of interactive online forms, online bids, payment of bills, tax filing applications, company registration, car registration, voting, public grievance systems, online feedback</td>
</tr>
<tr>
<td><strong>EG16</strong></td>
<td>Number and types of projects/requests processed online each month</td>
</tr>
<tr>
<td><strong>EG17</strong></td>
<td>% of requests processed using ICTs vis a vis overall number of requests</td>
</tr>
<tr>
<td><strong>EG18</strong></td>
<td>% of requests processed online vis a vis overall number of requests processed using ICTs</td>
</tr>
<tr>
<td><strong>EG19</strong></td>
<td>Degree of satisfaction of e-Government service users and by gender</td>
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</tbody>
</table>
Conclusion

- Need for a limited list of indicators

- Need to develop various elements that accompany the indicators such as: definitions, scope, method of collection and data sources, method of calculation and interpretation; etc.
Thank You!

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Visit: www.uneca.org/aisi