

Developing Global E-Government Indicators for UN Economic Commission for Africa

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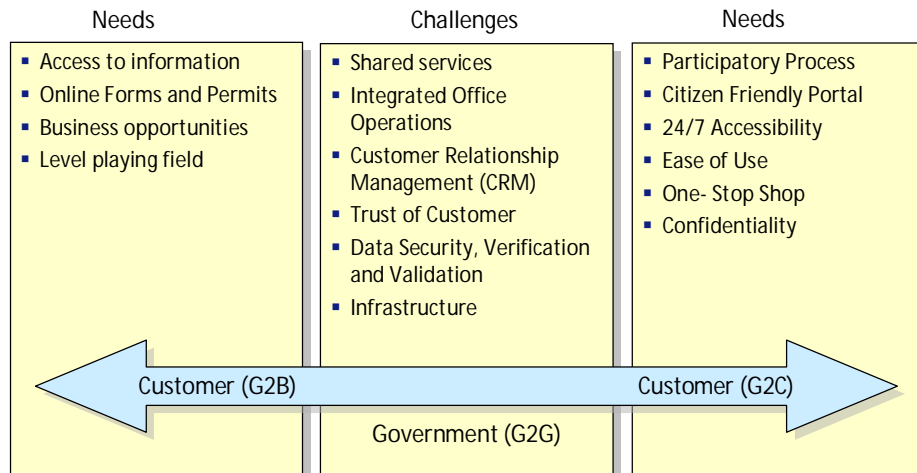
Background

- MFE: Aim to promote IS development in African countries
- Umbrella: World Summit on the Information Society (WSIS)
 - Geneva 10-12 December 2003, Tunis 16-18 March 2005
- Support: The Finnish Ministry for Foreign Affairs
- E-government activities by
 - The Task Group on development of e-Government indicators (TGEG)
 - The UN Economic Commission for Africa (ECA)
 - ➔ *Terms of Reference for Consultant to Develop e-Government Indicators (10th of February 2010)*
- The meeting between the representatives of UNECA and Finnish consultants on the 18th of February 2010

Objectives

- Drafting core e-government indicators and detailing scope, definition, applicability, data collection and processing for indicators, reflecting needs and priorities of African countries in particular
- Project benefits from experiences of e-government indicators worldwide
- Indicators help to produce qualified internationally comparable data
- The basic question is how to address developmental challenges of countries and accelerate socio-economic development process through the development, deployment, and exploitation of ICTs
- The objective of e-government is to improve efficiency of administration through extensive deployment of ICT, streamline services for businesses, and improve access to government e-services for citizens, as well as the transparency and participation to decision-making

E-Government Model



(Source: UN E-GOVERNMENT SURVEY 2008)

Conceptual review I

- e-government refers to web-based services from local, state and federal governments, and focuses on the use of ICTs by governments as applied to the full range of functions
- The networking potential of Internet and other IT have a potential to transform structures and operations of government, and they support government operations, engage citizens, and provide public services
- The interaction is in the form of obtaining information, filings, or making payments and a host of other activities via the WWW
- Definitions vary but have a common theme – e-government
 - involves using ICTs to improve the delivery of public services to citizens, businesses, and government agencies
 - enables citizens to interact and receive services from the federal, state or local governments 24/7

Conceptual review II

- Recently, there has been talk of mobile government or m-government, the use of wireless technologies like mobile phones, laptops and PDAs for offering and delivering government services.
- m-government rather complements than substitutes e-government
- e-government shall be separated from e-governance *using ICTs at various levels of the government and the public sector for the purpose of enhancing governance*
- e-government concentrates on operations of government, while e-governance *extends the scope by including citizen engagement and participation in governance*
- e-governance refers to the use of ICTs as a *tool to achieve better governance*

Overview on international and regional practices e-Government indicators in global context I

- To realize true potential of e-government governments have to restructure and transform business processes
- e-government transforms processes generating and delivering public services, and transforms the entire range of relationships of public bodies with citizens, businesses and governments
- For assessing the status and developments of e-government, *statistics and indices* are developed by intern'l organisations (UN, OECD...)
- E.g. the index by UN Div. for Public Economics and Public Administration consists of UN member countries' progress in implementing services
 - *Indicators relate to measures on web presence and telecom infrastructure of country's ICT capacity, human capital measures (UNDP Human Development Index, Information Access Index, urban/rural population ratio as indicators)*
- For policy purposes an interesting e-government indicator is the "number of basic public services fully available online"

Overview on international and regional practices e-Government indicators in global context II

- *UN e-government readiness index* is a composite index of a capacity of countries to use e-government for ICT-led development
- It comprises Web Measure Index, Telecom Infrastructure Index, Human Capital Index and e-Participation Index
- e-government index has been used for comparative purposes also in Finland – *Technology Barometer (TEKBARO)* has as reference countries DK, DE, Japan, NL, SE, UK and USA
- TEKBARO compares 20 basic government services with online availability as indicators of available Internet-based basic services
- In 2007 Finland rated 4th after UK (89%), Sweden (75%), and Germany (74%) in the provision of Internet-based official services – in Finland 67% of the basic services were available by Internet

Overview on international and regional practices e-Government indicators in global and development context

- e-government is still in early development phase globally and even more in development economies as the World e-Government Readiness Index 2003 - 2008 indicates

Region	Year			
	2008	2005	2004	2003
North America	0.8408	0.8744	0.8751	0.8670
Europe	0.6490	0.6012	0.5866	0.5580
Western Asia	0.4857	0.4384	0.4093	0.4100
Caribbean	0.4480	0.4282	0.4106	0.4010
Oceania	0.4338	0.2888	0.3006	0.3510
Africa	0.2739	0.2642	0.2528	0.2460
World Average	0.4514	0.4267	0.4130	0.4020

Overview on international and regional practices Conclusions

- Globally e-government is still in *early development stage* especially in developing countries
- This conclusion accentuates *urgency* of the initiatives of launching systematic development work such as the initiative of UNECA and TGEG in Africa
- Within a general context of e-government indicators, such factors affect as *IS infrastructure* and the related share of responsibilities on general government level and regional and local administrations
- On infrastructural level, devices of access (PC, PDA, mobile phone) will affect to e-government solutions
- A reliable indicator data should be develop to direct IS policy and ICT investments of each country
- E-government indicators are at a core of administrative efficiency

Criteria in assessment of e-government indicators

Indicators shall be

- *relevant* in describing essential phenomenon from right aspects
- *reliable* for giving a robust data basis for decision-making
- *available* now or in a reasonable time frame in the near future required by the organisation of data collection
- *understandable* and *transparent* for citizens, companies and other government bodies benefitting of e-government services (e.g. growth of productivity of administrations)
- *statistically robust* and accordingly *comparable* and *consistent* in order to form a basis for statistical practice and to be applied for benchmarking
- linked to arising *benefits* and *other internal (later also external) impacts* that using of e-government indicators causes in government institutions, permitting also *benefits / costs* comparisons of e-government investments)
- *Streamlined* and *systemic* in its structure, data collection, etc.
- E-government indicators will be assessed vis-à-vis these criteria

e-Government indicators by guidelines of the Economic Commission for Latin America and the Caribbean (ECLAC)

- Definition of basic indicator
- Purpose
- Data requirement
- Method of collection
- Data source(s)
- Formula
- Suggested model question
- Interpretation
- Methodological and definition issues or operational limitations

CEG1	% of staff in Government institutions routinely using computers
CEG2	% of staff in Government institutions routinely using Internet
CEG3	% of staff in Government institutions who use e-mail for their daily activities
CEG4	% of Government institutions with a web presence (website or homepage hosted on another entity's website, but with control over content publishing)
CEG5	% of Government institutions with corporate networks (LAN, WAN, Intranet, Extranet)
CEG6	% of Government institutions offering online services by level of service:
CEG7	% of Government institutions offering general information (about the institutions, services offered, requirements, and/or documentation)
CEG8	% of Government institutions offering information by e-mail
	Receiving answers to email/phone inquiries
	Downloading forms
	Downloading forms
	Completing forms
	Making online payments
	Obtaining online services
	Health services
	Education services
	Social Security services
	Justice services
	Labour mediation
	Online training
	Companies Registry
	Other

Assessment of provisional indicators I

- Provisional indicators capture important aspects of e-government, and provide a platform of extending e-government indicators to other areas like the use and consumption of e-services
- Emphasis of indicators is in assessing *government technological and human resource capacity* in providing and mapping the extent of existing e-services
- Provisional indicators measure *supply-side* of e-government, governmental capacity and infrastructure to create and deliver e-services
- The credibility and value of indicators is considered presumably on *what may be possible in collecting accurate data* especially in developing countries

Assessment of provisional indicators II

- Provisional indicators *do not* capture the *user or consumption side* of e-government services by organizations, businesses or citizens
- User / demand side would cast light on effectiveness of e-services and may allow *impact assessment* of higher potential than proposed indicators (cf. example)
- The proposed core indicators may allow *indirect impact assessment* of e-government services, as we can estimate the value or effect of identified e-services and their potential
- Such estimates include the *speed* of services, *administrative efficiency*, *availability* of services, *organization* of services (*one-stop-shop* service access, *transparency* of service, etc.)
- However, in the absence of *direct user experience information*, impact assessment may not be done directly with regard to key services

Example of impact assessment of using e-government indicators

To what extent the use of e-government indicators have impact on						
	Major impact	Some impact	Minor impact	None	Don't know	Not relevant
Changes in organisational structure						
Release of resources in some part of organisation						
Increased demand for resources in some part of organisation						
Changes in personnel skill structure						
Recruitment in some part of organisation						
Removal of personnel in some part of						
Ease of the decision making process						

(Source: Adapted from Airaksinen, 2003)

Modified list of e-government indicators

CEG1	% of staff in Government institutions routinely using computers (as it is)
CEG2	% of staff in Government institutions routinely using Internet (as it is)
CEG3	No of staff with computer skills in their daily activities (new)
	Basic, handling the mouse to navigate computers
	Basic software (word processing, spread sheet, presentation)
	Competent internet user: navigating net using e-mail, critical information retrieval
CEG4	% of Government institutions with a web presence (website or homepage hosted on another entity's website, but with control over content publishing)
CEG5	% of Government institutions with corporate networks (LAN, WAN, Intranet, Extranet)
CEG6	% of Government institutions with interoperability standards
CEG7	% of Government institutions with Internet access by type of access (access by fixed broadband and mobile broadband)
CEG8	% of Government institutions offering online services by level of service:
	Accessing to general information (about the institutions, services offered, requirements, and/or documentation)
	Requesting information
	Receiving answers to e-mail/phone inquiries
	Downloading forms (only)
	Downloading and sending forms (attach documents)
	Completing/lodging online forms
	Making online payments (bills, taxes, health, licenses, certificates)
	Obtaining official certificates (through certification or electronic signature)
CEG9	% of population (companies, citizens; access / total) using e-government services by level of service
	Accessing to general information (about the institutions, services offered, requirements, and/or documentation)
	Requesting information by e-mail
	Receiving answers to e-mail/phone inquiries
	Downloading forms (only)
	Downloading and sending forms (attach documents)
	Completing/lodging online forms
	Making online payments (bills, taxes, health, licenses, certificates)
	Obtaining official certificates (through certification or electronic signature)
CEG10	% of population (companies, citizens; access / total) using e-government services by type of services
	To pay taxes
	Make requests / bids for service
	Citizen participation (vote system, public queries)
	File reports, complaints and claims
	Health services
	Education services
	Social Security services
	Justice services
	Labour mediation
CEG11	% of Government institutions offering services on line by type of service, for citizens and companies:
	To pay taxes
	Make requests / bids for service
	Citizen participation (vote system, public queries)
	File reports, complaints and claims
	Health services
	Education services
	Social Security services
	Justice services
	Labour mediation

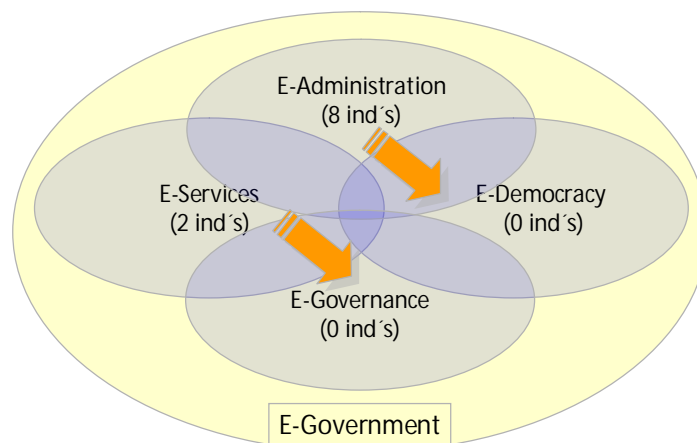
Conclusions I

- e-government development and related indicators are still globally *in an early development stage*
- Global differences, as indicated by the global e-government readiness between developed and developing countries, is a *challenge for identifying and collecting globally applicable indicators*
- WSIS-initiated effort bears a high relevance as global statistical mapping of e-government by
 - allowing identification of *critical bottlenecks*,
 - highlighting areas potential for *exchange of best practices*, and
 - supporting efforts to *improve strategic management* of e-government initiatives and policies

Conclusions II

- Provisional indicators provide a basis for collecting data and establishing global information on status and performance of e-government
- Provisional indicators capture the readiness of governments in terms of technology and human resources to undertake e-government development, and the range and nature of e-government services offered
- Provisional e-government indicators do not include measure of *use or users' experiences* of e-services - this is suggested in the modified list of indicators, which in addition raises a perspective towards *impact assessment* of e-services
- As a whole, proposed indicators establish a systematic and comprehensive information base allowing further development and improvement
 - to such end, a review of the scope and nature of proposed indicators, as launched with the modified list of indicators, will be completed in this assignment according to original schedule

E-Government Model - Perspective





The image features the VTT logo in the top left corner, set against a background of binary code (0s and 1s) and a glowing blue light effect. Below the logo is a horizontal row of six circular images: 1) A circular graphic with binary code and a central light flare. 2) A woman in a lab coat working with a microscope. 3) A man in a lab coat and safety glasses working with a multi-well plate. 4) A man in a lab coat working with a microscope. 5) A man in a blue uniform and white hard hat working at a workstation. 6) A small globe with a green plant growing out of it, symbolizing sustainability.

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