

Uganda's Experience on Building ICT indicators

Joint ITU/ ECA Sub- regional workshop
26-29th October 2004
Gaborone, Botswana.

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Outline of Presentation

■ Overview

- Facts of Uganda
- Policy, Legal & Regulatory Framework and developments
- Institutional Arrangements

ICT indicators & infrastructure

- Categories and Indicators
- Collection, computation editing and verification
- Disseminations

■ Challenges & Issues

■ Present Activities

- Policy Initiatives and Processes

■ Way Forward

UGANDA - Some Facts

■ Population	27 million
■ Population growth rate	3.4%
■ Languages	80
■ English, Swahili, Luganda	
■ Land area	214,038 sq km
■ Population density	126 per sq km
■ Capital	Kampala
■ population	2,000,000
■ GDP growth rate	5.3%
■ GDP per capita	USD 200
■ Inflation rate	3.5%
■ Exchange rate	1750 Depreciation

Policy, Legal & Regulatory Developments

- Prior 1996:
- 1996: A Communications Policy announced
 - Enabling legal framework for communications development
 - Facilitation of private sector participation in overall national development;
 - Separation of roles; policy, regulation, operations
 - Introduce Competition thru multiple operator licensing
- 1997: A Uganda Communications Act Cap 106 was announced
- 1998: **Independent** Regulator Uganda Communications Commission established

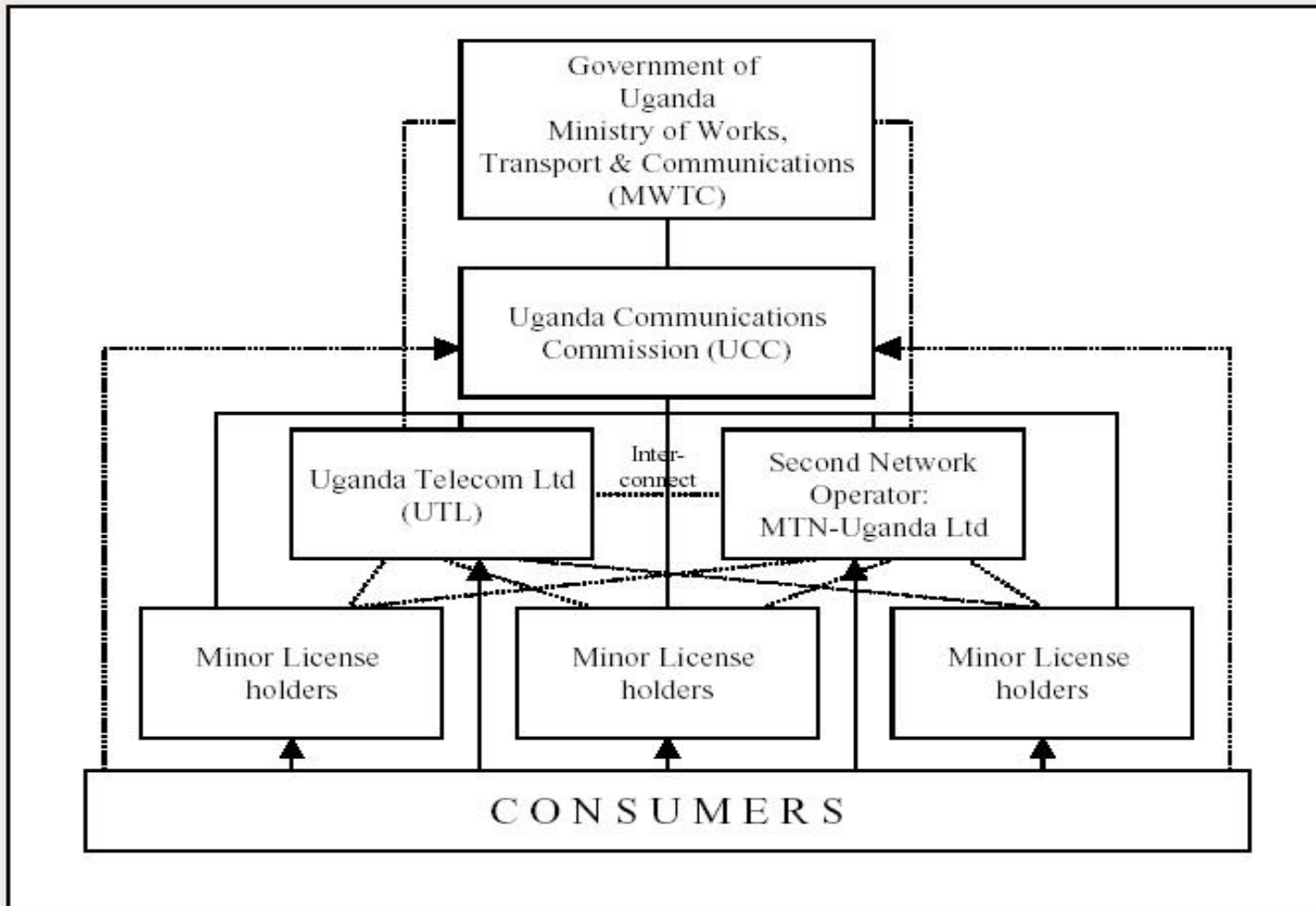
Policy, Legal & Regulatory Developments

- **1998:** Unbundling of the Incumbent UPTC
 - Post Uganda Post, Uganda Telecom and Post Bank Uganda
- **1998:** Competition introduced
- **1998:** MTN licensed as a Second National Operator to compete with UTL in provision of all services; fixed, mobile etc
- **1995:** Celtel mobile licence
- **2001:** Sale of 51% of UTL to 'Strategic Investor'
- **2001:** Rural Communications policy established
- **2003:** Postal Policy
- **2004:** ICT Policy

Legal Framework

- Telecommunications Act 1996
- The Press and Journalist Statute 2001
- The Electronic Media Statute 1996
- The Communications (Establishment and Management of the Rural Communications Fund)statutory instrument 2002

Institutional Arrangements



Note: Celtel is regarded as a "minor license holder".

Source: Government of Uganda, Privatization of Uganda Telecom, Information Memorandum.

Uganda ICT indicators

■ GENERAL NOTES

- Telecommunications indicators as per the current Mandate.
- ICT policy proposes for the UCC to become an ICT Secretariat
- UCC has Undertaken steps to Collect some indicators related ICT Usage
- Data collection responsibility handled by office of the Economist/ Statistics.

Categories and indicators Cont.

1-BASIC/ BACKGROUND DATA Source Uganda Bureau of statistics.

Demographic

- **Population:** 27 M
- Growth rate: 3.4%
- Female: 58%
- Male: 42%
- Urban: 12%
- Distribution by Age
- By coverage

Economic

- **GDP:** 6.1%
- **GDP per capita:** USD 200
- **Financials Rates:**
 - Lending: 27%
 - Saving: 2%
 - Bank rates:
- **Foreign Market**
 - Exchange rate: 3.8%
 - Vol. Of purchases and sales
- **Prices**
 - Inflation: 3.5%

Social

- **Health**
 - Life expectancy: 45yrs
 - Infant mortality: 88/1000
 - HIV Prevalence
 - Malaria etc
- **Sanitation:** Coverage 51%
- **Education:**
 - Teacher student ratio
 - Gender

Categories and indicators

2-TELECOMMUNICATIONS INFRASTRUCTURE.

MAINLINES

- **Infrastructure**
- Maps (configuration)
- Switching Capacity: **200,000**
- **Subscribers:**
- No of lines: **71,271**
- Lines per 100: **0.28**
- % of H/H: **1.15%**
- Residents: N/A
- Urban: N/A
- Pre-paid and Post paid
- **Traffic**
- **Tariffs**
- **QoS**
- **Staff**

MOBILE

- **Infrastructure + coverage**
- Maps of coverage + Network configuration
- Number of BTS:
- Installed capacity: **1,500,000**
- **Subscribers:**
- No. of lines: **987,456**
- Lines per 100: **3.82**
- Pre paid subscribers
- Post Paid
- **Traffic**
- **Tariffs**
- **QoS**
- **Staff**

Categories and indicators

2-TELECOMMUNICATIONS INFRASTRUCTURE.

INTERNET

TECHNOLOGY

- Access network
- Switches, Routers,
- Number of links
- Radio equipment
- Access modes and categories

SUBSCRIBERS:

- Per access mode
- Dial up, leased lines, wireless, satellite etc
- Cyber cafes, Corporate companies

Tariffs per access mode

Operational Stats

- Percentage Up time
- Connection time
- Faults on networks
- Faults on customer access networks
- Faults recovery period

COVERAGE

- District and towns etc

STAFF

- Customer websites hosted
- Global domain names registered

USERS

COMPUTERS/ PCs in use

Categories and indicators

2-BROADCASTING/ MEDIA

▪ TELEVISION STATIONS

- Number of licenses per Channel
 - Location
- Frequency allocated

▪ DETAILS

- Television receivers
- Satellite home receivers
 - STAFF

▪ RADIO

- Number of radio station FM etc
 - Locations
- Frequency allocated

▪ DETAILS

- Radio receivers
 - STAFF

Categories and indicators

POSTAL

▪ Major License:1

- Tariffs
- Services provided
- Coverage
- Number of employees
- Volume of postage per category

▪ Minor license: 19

- Services provided
- Number of employees
- Volume of postage per category
- Tariff (notifications)

Data Collection

- Mandate derived from
 - Section 55 and 56 of the Communications ACT
 - Article 7.16 Major (National) license
 - Article 24, ISP license
- Collection
 - Quarterly report
 - Annual compliance reports
 - Financial Reports
 - reports
 - Ad-hoc
- Survey
 - Internet usage, cafés, NGO's offices
- Consultancies and Research bodies

Data Processing and storage

- No specific software for data entry
 - Excel and Access
- No specific software for Processing
 - Excel, Access, SPSS, Eviews, STRATA etc
- Tentative Data bank in Excel and Access
- Data Bank on Main server (Restricted access)
- IMIS System in place

Data dissemination

- Over the net www.ucc.co.ug
- Regular publications Annual, quarterly etc
- Networking with member countries
- Networking with international organizations, ITU, COMESA,
- Data source for researcher
- Note: All data disseminated is aggregated unless specified

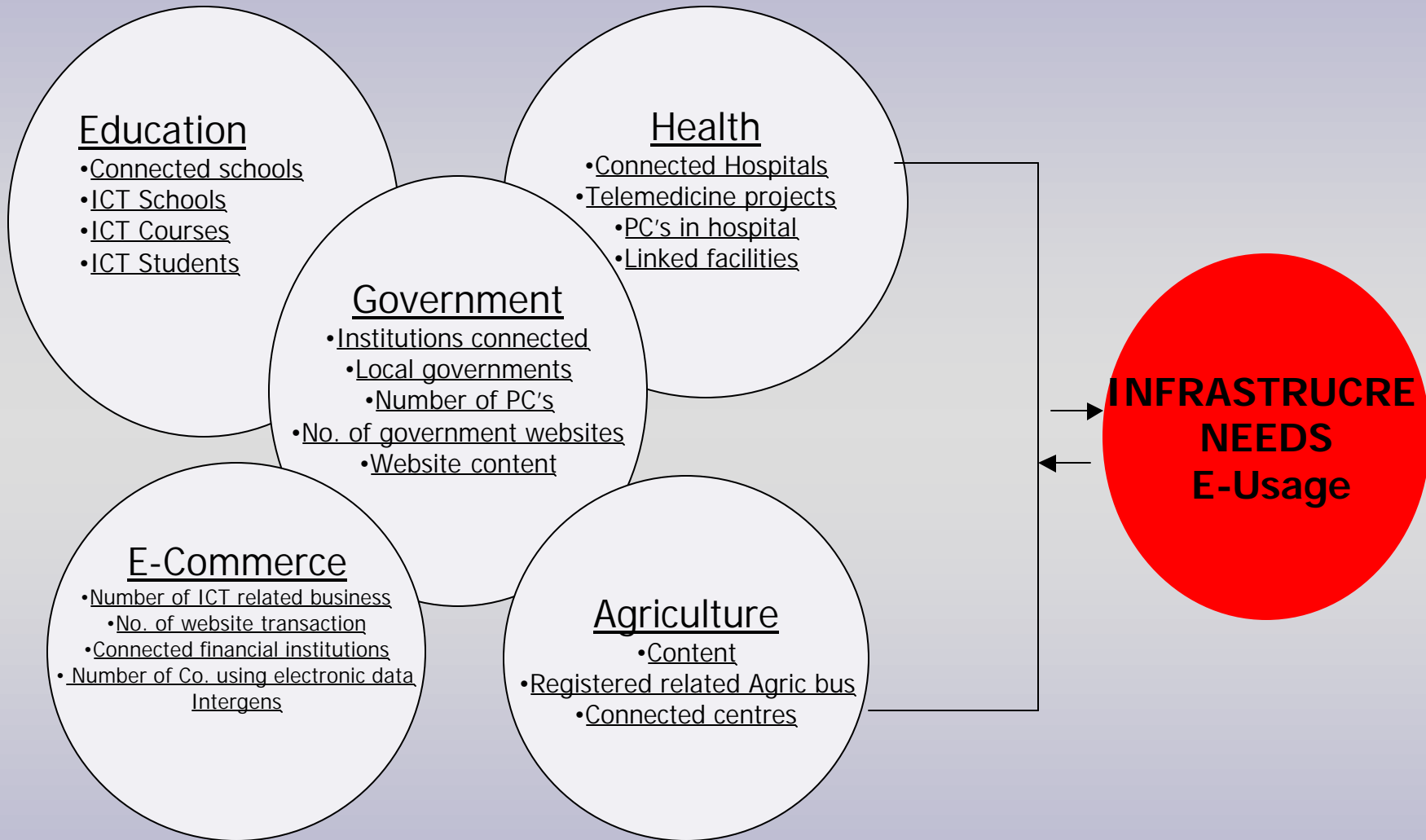
Challenges

- Collection, unwillingness for operators to disclose some data
- **Irregular** Reporting by operators
- **Verification:** No systematic mechanism in place costly
- No systematic processing mechanism in place (No software)
- **DEFINITION:** Need to revise some definitions for indicators
- **DISSEMINATION:** Not regular
- Specific to UCC is inadequate human resources

Challenges Continued

- Specific to Uganda
 - Non existence of an ICT secretariat
- Activities undertaken
 - An ICT policy
 - Reviewing the telecommunications policy
 - New policy to emphasis infrastructure need for ICT application

Challenges Cont. ICT



Challenges not specific to indicators

- Need to expedite the process of establishing an ICT secretariat
- need for ICT laws and regulations
- Insufficient network infrastructure to support ICT application
- lack of appropriate content & development
- lack of awareness
- high start-up and recurrent costs
- illiteracy and lack of ICT skills
- General Macro-Economic Insufficiencies
- Insecurity in some parts of the country

WAY FORWARD Indicators

- Redefine elements of indicators to include ICT application indicators
- Redefined modalities of data collection and **data dissemination**
- Impose strict obligations to ensure commitment from operators to supply data regularly
- Create a specific software for collection analysis, etc uniform to countries
- Specific to UCC MIS system
- **NEED FOR ACCURATE AND TIMELY INDICATORS**

Thank you

