Stakeholders Workshop on Information Sharing within the Telecom Industry
Lagos, Nigeria
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Telecommunication statistics for effective regulation

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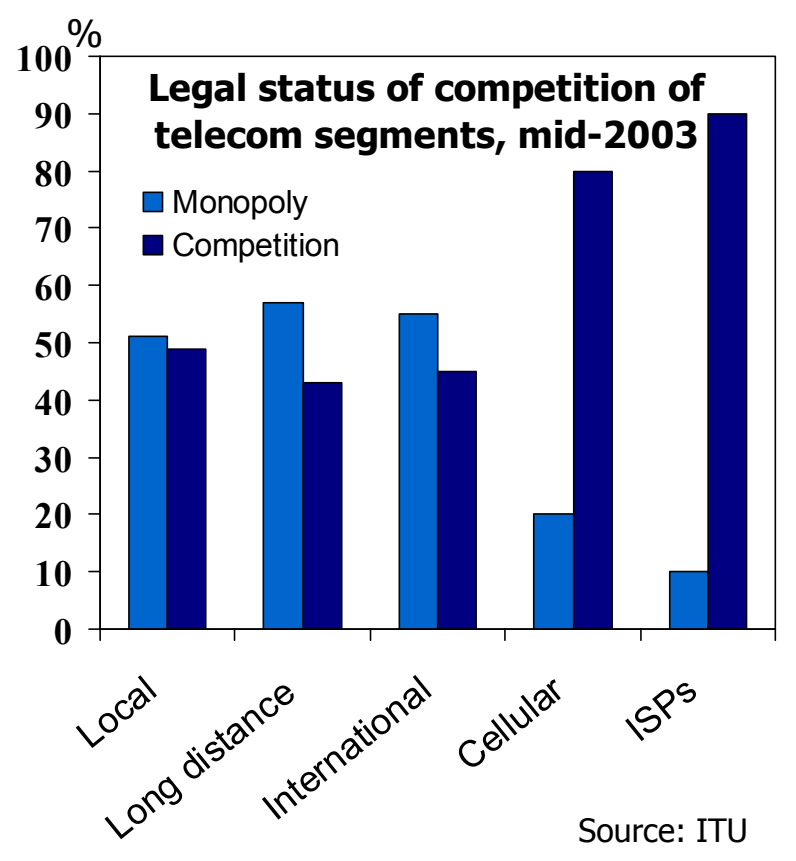
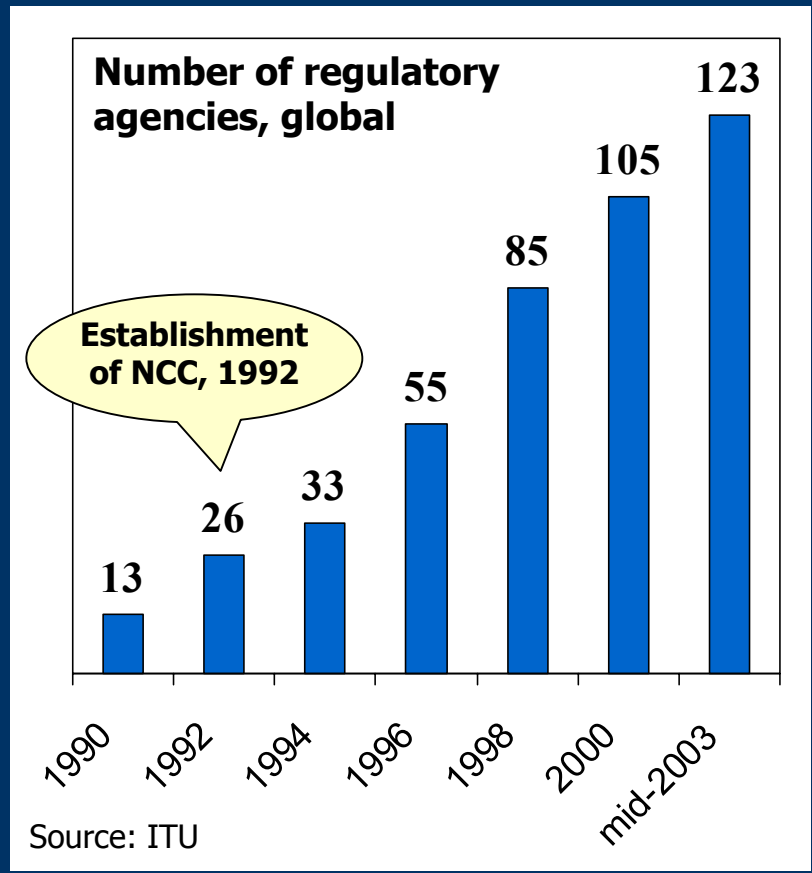
To be discussed…

- Global liberalization and regulation trends
- Why regulators need to collect market statistics
- Data groups and types
- Data methodology
- Data source: operators and surveys
- Best Practices
  - UK (Ofcom), Hong Kong, China (OFTA)
  - Africa: Uganda (UCC), Ivory Coast (ATC)
- Regional cooperation (ECOWAS) and data collection tools

With liberalization comes regulation





Monitoring license requirements

"The Ministry of Communications shall formulate policies on universal access, including specific targets to be achieved over a given period of time. The NCC is responsible for…defining development targets and other ..goals for national communications access"

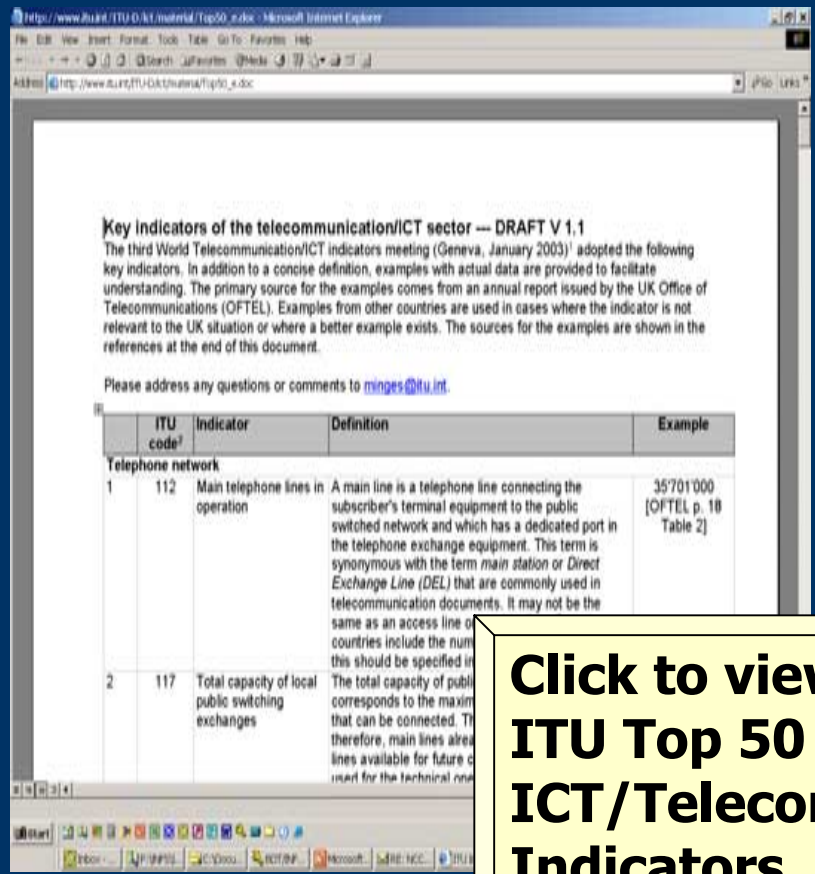
Source: Nigeria National Policy on Telecommunications, Chapter 9

Nigerian Communications Act 2003

- Part II: Monitoring and reporting (section 89)
  - (1) The Commission shall monitor all significant matters relating to the performance of all licensees …
  - (2) (a) use any of its powers…without limitations…of investigation and information-gathering…
  - (b) have regard to such industry performance indicators as the Commission considers appropriate
  - (3)…the Commission shall monitor and report..: (b) the efficiency in which licensees provide facilities and services…(c) the quality of services, …(d) industry statistics generally including but not limited to service provisioning, traffic pattern, industry operators, etc
- The license agreements also discuss "Requirement to Furnish Information to the Commission"

Telecommunication data categories

- Network subscribers (fixed, mobile etc)
- Quality of service
- Traffic
- Tariffs
- Revenue/Investment



Key indicators of the telecommunication/ICT sector — DRAFT V 1.1

The third World Telecommunication/ICT indicators meeting (Geneva, January 2003)[1] adopted the following key indicators. In addition to a concise definition, examples with actual data are provided to facilitate understanding. The primary source for the examples comes from an annual report issued by the UK Office of Telecommunications (OFTEL). Examples from other countries are used in cases where the indicator is not relevant to the UK situation or where a better example exists. The sources for the examples are shown in the references at the end of this document.

Please address any questions or comments to minges@itu.int.

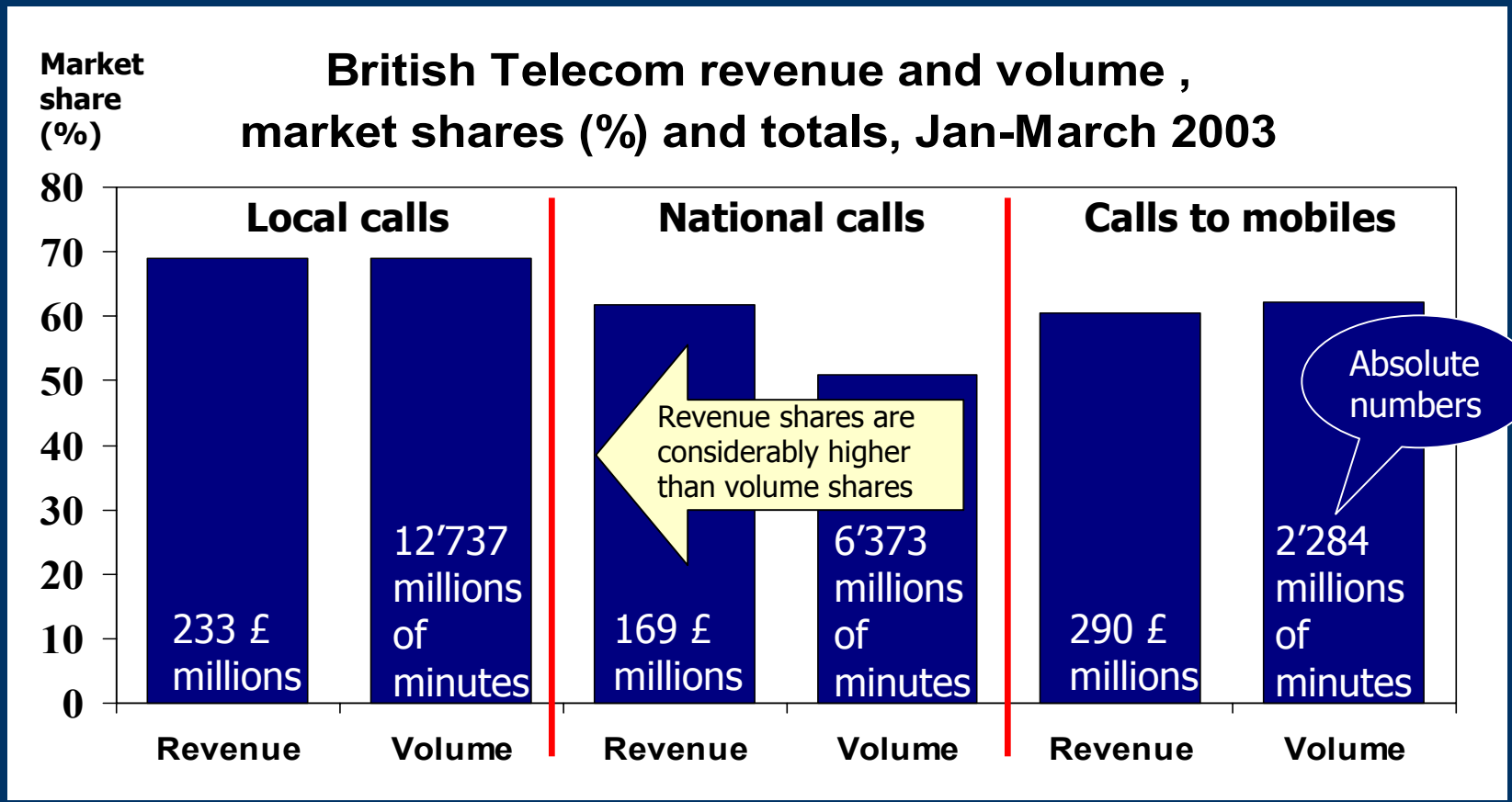
	ITU code[2]	Indicator	Definition	Example
Telephone network				
1	112	Main telephone lines in operation	A main line is a telephone line connecting the subscriber's terminal equipment to the public switched network and which has a dedicated port in the telephone exchange equipment. This term is synonymous with the term *main station* or *Direct Exchange Line (DEL)* that are commonly used in telecommunication documents. It may not be the same as an access line o… countries include the num… this should be specified in…	35'701'000 [OFTEL p. 18 Table 2]
2	117	Total capacity of local public switching exchanges	The total capacity of publi… corresponds to the maxim… that can be connected. Th… therefore, main lines alre… lines available for future c… used for the technical one…	

Click to view ITU Top 50 ICT/Telecom Indicators

Quarterly mobile data

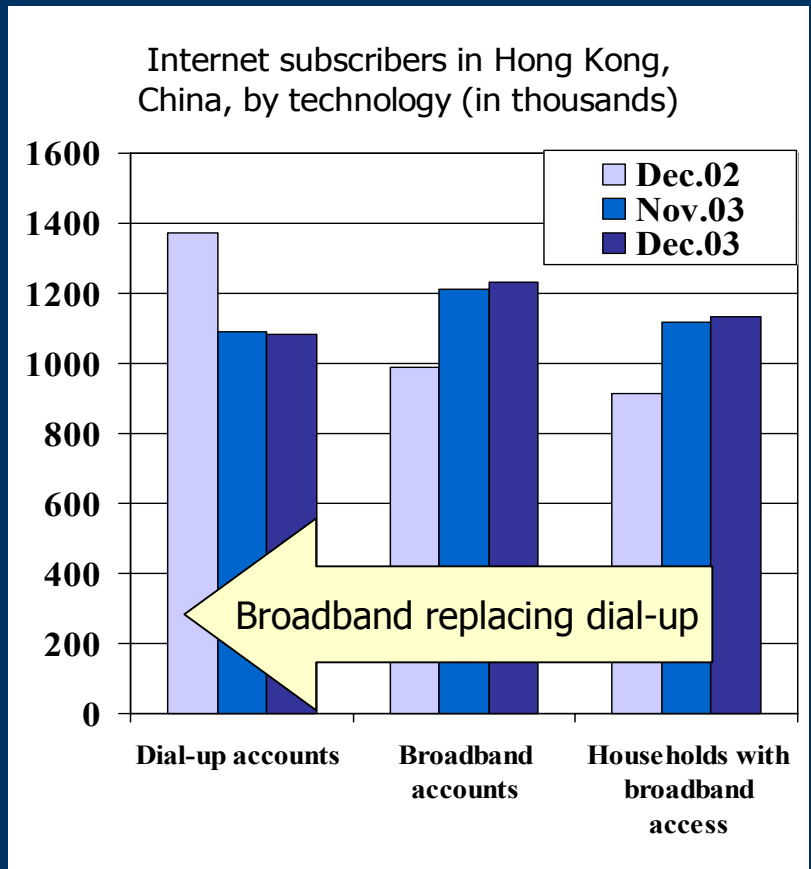
Revenue	Volume	Subscribers
•Calls •Connection •SSM+MMS •Interconnection •Revenue per subscriber (ARPU)	•UK calls •Outgoing intern. •Roaming •Interconnection • SSM+MMS (units)	•Postpaid/prepaid
Growth rate/change		
By operator/consolidated		

Quarterly fixed data

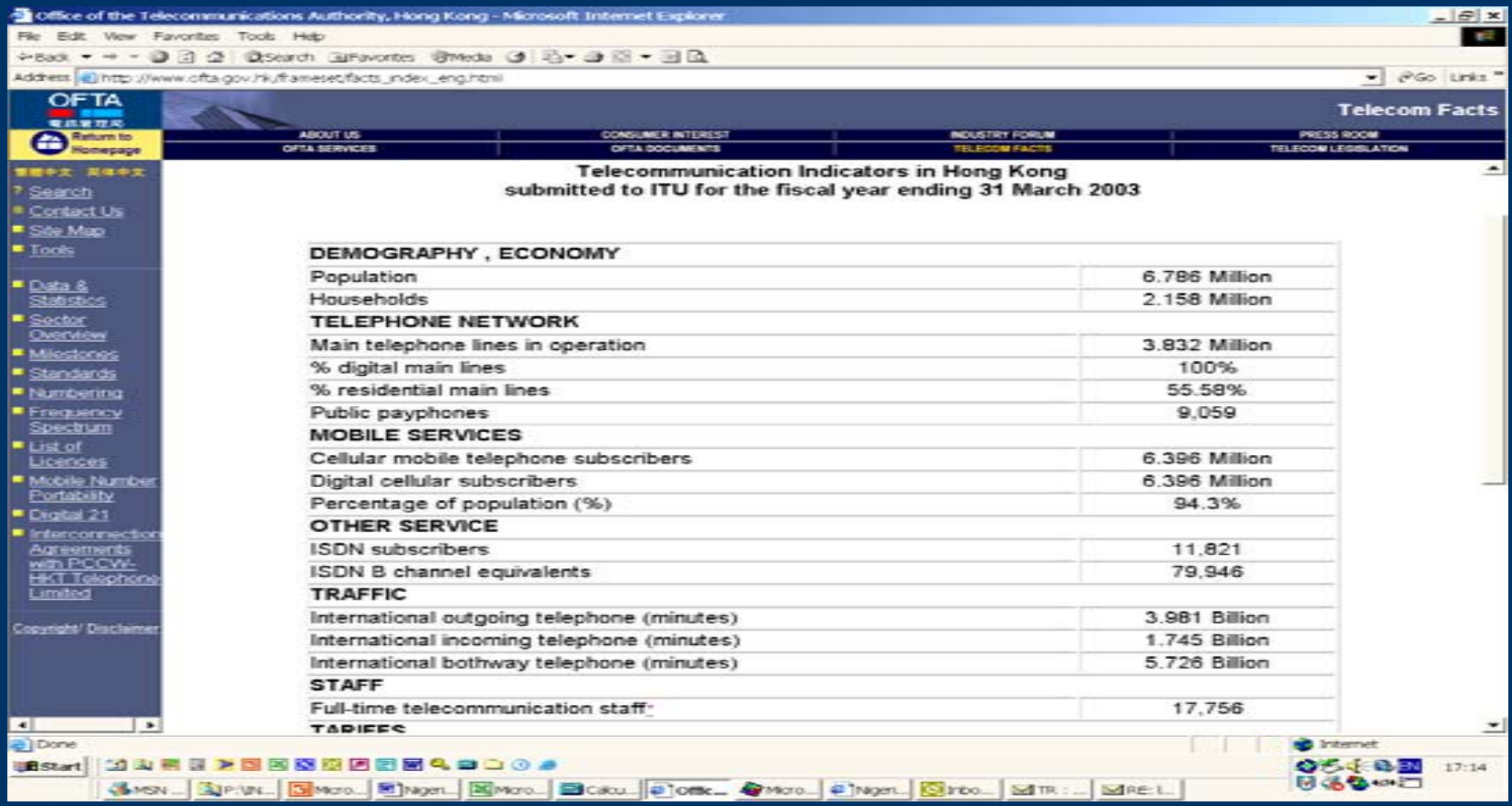


Regularity, timeliness, definitions

- OFTA collects (and publishes online!) detailed monthly telecommunication statistics since 1990
- Indicators are well defined
  - "Broadband Internet access refers to services with downloading speed of 1 Mbps or above using cable mode, ATM, ADSL, DSL or other technologies"
  - "The statistics are OFTA estimated figures based on the return from the ISPs. They do not include users who are not customers of the licensed ISP, such as users of the campus networks in the universities"



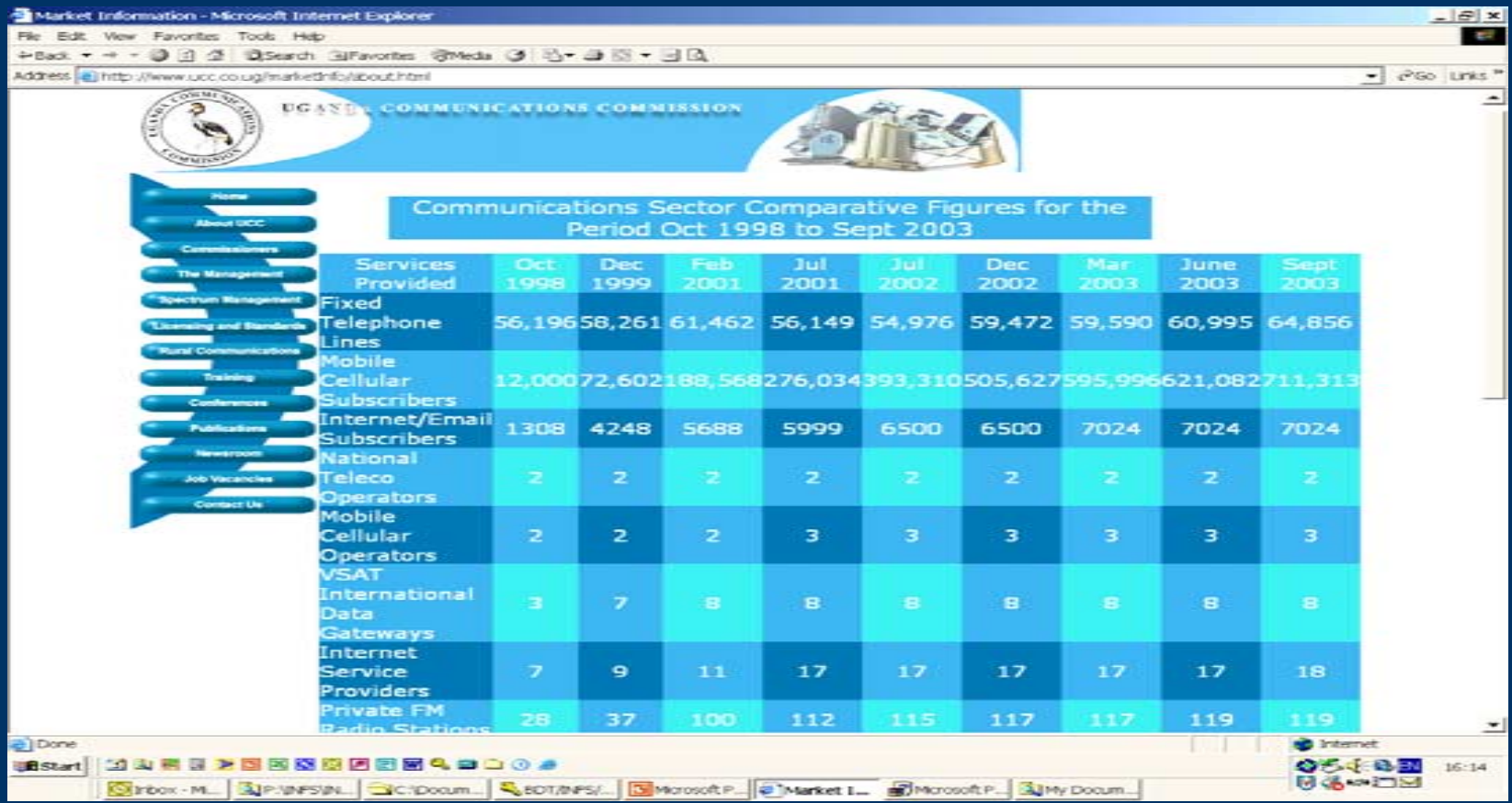
International comparability



Telecommunication Indicators in Hong Kong
submitted to ITU for the fiscal year ending 31 March 2003

DEMOGRAPHY , ECONOMY	
Population	6.786 Million
Households	2.158 Million
TELEPHONE NETWORK	
Main telephone lines in operation	3.832 Million
% digital main lines	100%
% residential main lines	55.58%
Public payphones	9,059
MOBILE SERVICES	
Cellular mobile telephone subscribers	6.396 Million
Digital cellular subscribers	6.396 Million
Percentage of population (%)	94.3%
OTHER SERVICE	
ISDN subscribers	11,821
ISDN B channel equivalents	79,946
TRAFFIC	
International outgoing telephone (minutes)	3.981 Billion
International incoming telephone (minutes)	1.745 Billion
International bothway telephone (minutes)	5.726 Billion
STAFF	
Full-time telecommunication staff	17,756
TARIFFS	

Uganda Communication Commission



Communications Sector Comparative Figures for the Period Oct 1998 to Sept 2003

Services Provided	Oct 1998	Dec 1999	Feb 2001	Jul 2001	Jul 2002	Dec 2002	Mar 2003	June 2003	Sept 2003
Fixed Telephone Lines	56,196	58,261	61,462	56,149	54,976	59,472	59,590	60,995	64,856
Mobile Cellular Subscribers	12,000	72,602	188,568	276,034	393,310	505,627	595,996	621,082	711,313
Internet/Email Subscribers	1308	4248	5688	5999	6500	6500	7024	7024	7024
National Teleco Operators	2	2	2	2	2	2	2	2	2
Mobile Cellular Operators	2	2	2	3	3	3	3	3	3
VSAT International Data Gateways	3	7	8	8	8	8	8	8	8
Internet Service Providers	7	9	11	17	17	17	17	17	18
Private FM Radio Stations	28	37	100	112	115	117	117	119	119

ATC: Agence des télécommunications de Côte d'Ivoire

Agence des Télécommunications de Côte d'Ivoire - Microsoft Internet Explorer

http://www.atci.ci/

ATCI

JEUDI 26 FEVRIER 2004

Présentation
Textes
Régulateurs
Archives

Statistique du marché des Mobiles

NB: Les chiffres ci-dessous ont été fournis par les opérateurs cellulaires.les différents taux proviennent de nos calculs.

Premier semestre 2003: Evolution mensuelle des abonnés par Opérateur

Opérateurs	JANVIER 03	Février 03	Mars 03	Avril 03	Mai 03	Juin 03
Orange	528 591	546 808	562 692	574 018	584 434	589 530
TELECEL	509 982	480 414	496 132	502 739	512 077	546 873
CORA	36 351	36 878	39 114	39 306	39 294	39 445
Total Abonnés	1 074 924	1 064 100	1 097 938	1 113 063	1 134 805	1 175 848

Second semestre 2003:Evolution mensuelle des abonnés par Opérateur

Opérateurs	Juillet 03	Août 03	Sept 03	Octobre 03	Novembre 03	Décembre 03
Orange	593 491	546 300	554 031	582 687	608 217	
TELECEL	545 015	542 830	549 426	539 632	552 240	599 204
CORA						
Total Abonnés	1 138 506	1 089 130	1 103 439	1 122 319	1 160 457	

Premier semestre 2003: Evolution mensuelle des Recettes des Opérateurs en (FCFA).

Opérateurs	JANVIER 03	Février 03	Mars 03	Avril 03	Mai 03	Juin 03
Orange	7 112 329 000	6 979 608 000	6 943 591 000	7 457 685 000	7 237 714 000	7 518 362 000

Done

Internet

Start

16:25

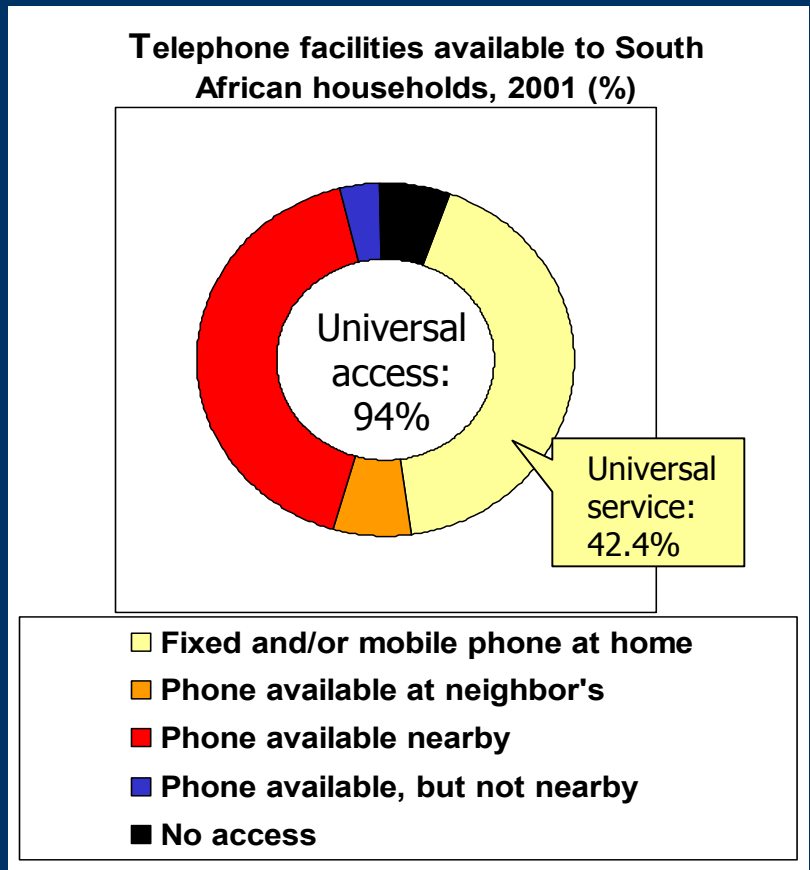
Data collection and methodology

- Avoid information overload
- Close coordination between regulator and operators (optimal information supply)
- Data should be clearly defined
- Information needs to be consistent and comparable, in type, in form and in timeliness

  → Ideally statistics are collected monthly and basic statistics (fixed lines/mobile subscribers/Internet subscribers/traffic) should be collected and disseminated no less than on a quarterly basis
- Consider international efforts to collect/harmonize ICT/Telecom statistics for maximum comparability (ITU)

Universal service & universal access

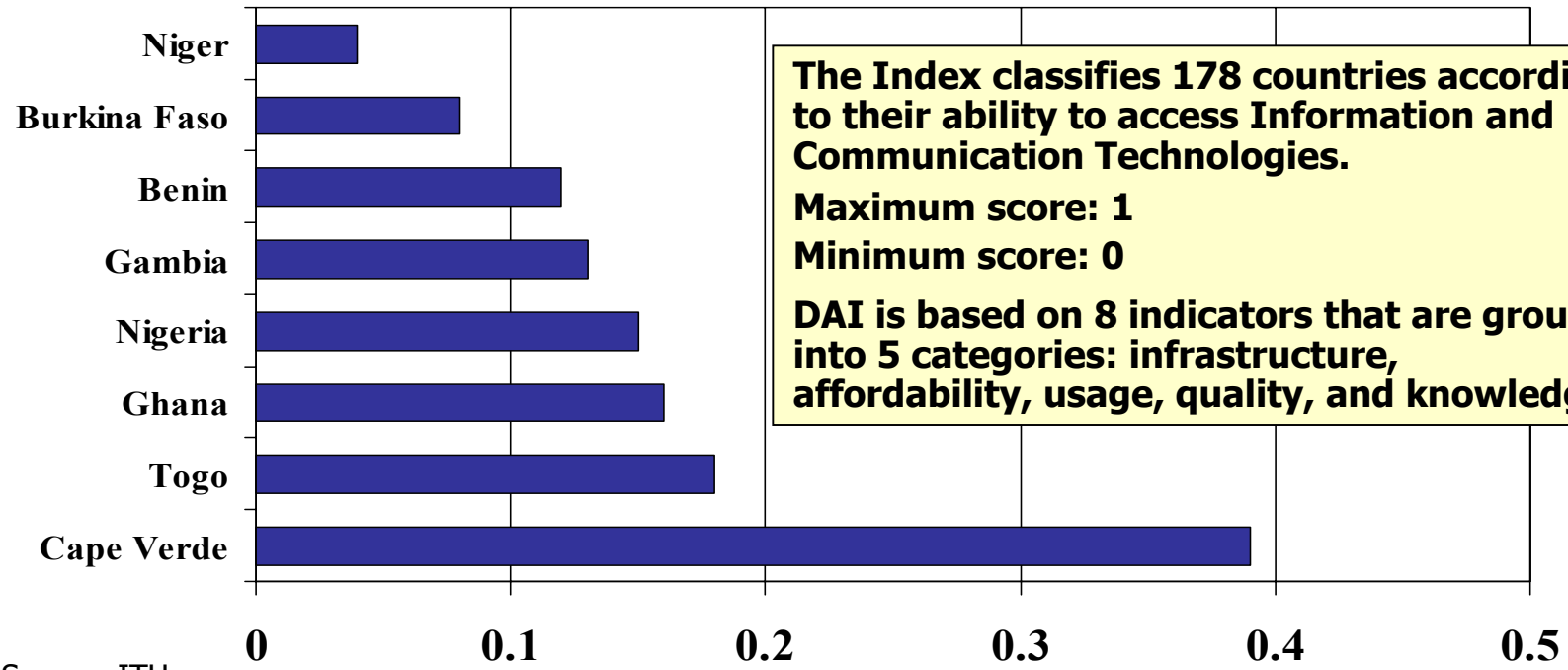
- Both per capita and universal service (household level) measurements have limits
- Developing countries should strive to achieve universal access
  - Availability of a service
  - Percentage of the population that is covered by a mobile cellular signal
- Community measurements help evaluate availability of services in localities (cities, towns, villages)



Administrative data versus surveys

- Regulators can collect data through administrative records (regular data supply from operators) or through surveys
- In certain areas administrative data needs to be complemented by surveys:
  - Internet usage (as opposed to subscription!)
  - ICT availability in households (PCs, Internet, etc)
  - Consumer satisfaction, household telecom expenditure
- Collaboration with National Statistical Office is crucial in carrying out surveys!

International benchmarking: ITU's Digital Access Index (DAI)



The Index classifies 178 countries according to their ability to access Information and Communication Technologies.

Maximum score: 1

Minimum score: 0

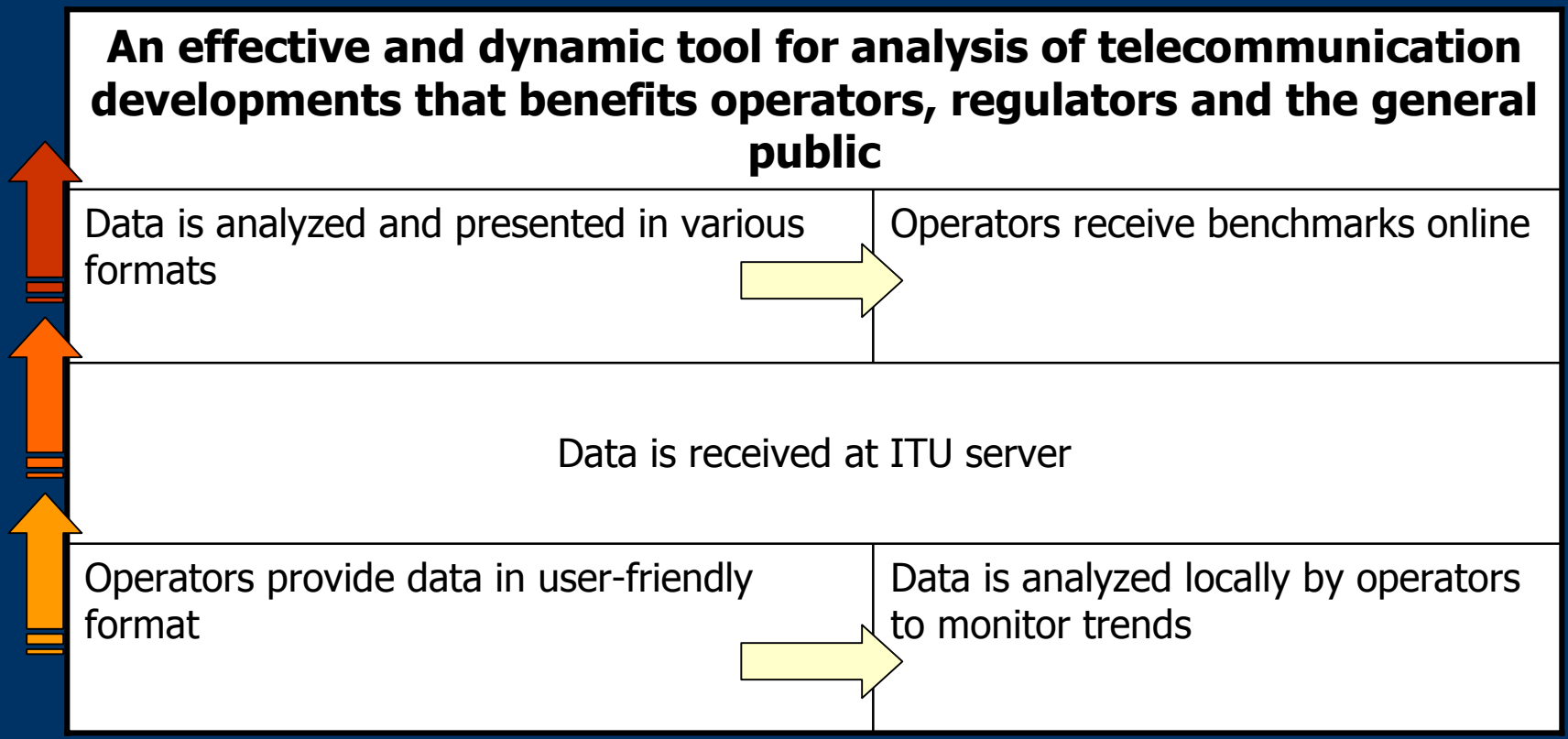
DAI is based on 8 indicators that are grouped into 5 categories: infrastructure, affordability, usage, quality, and knowledge

Source: ITU

ITU-ECOWAS data collection project

- To collect telecom market data of ECOWAS countries from telecom operators
- To present and analyze the data in the form adapted to different user groups
  - A tool used for business decisions and growth analysis for operators
  - A tool to monitor market developments for regulators
  - An information tool to telecom users and investors

Collect, disseminate, analyze



Who gets what

- Operators have access to national and regional telecommunication trends
  - ⇒ Track market position and potential
  - ⇒ International benchmarking exercises
- Regulators receive (national & regional) overview
  - ⇒ Identify trends and benchmark results
  - ⇒ Make informed policy decisions
  - ⇒ Make regional/international comparisons
- Public is informed on trends and services
- Investors identify new market opportunities
- ITU fulfills its commitment with regard to bridging the digital divide

Project implementation

- Preparation of draft system structure and data formats (ITU)
- Operators and regulators to discuss and decide form and processes at a workshop (date and venue to be confirmed)
- Adjustment of project based on feedback
- Software development (ITU) and pilot testing is launched
- System becomes operational

For information on ITU-ECOWAS data collection project contact:

Mr. Seydoux BASSAVE, at Bassave@itu.int

ITU statistical work in Africa

- In June the ITU will organize an ICT indicators workshop for the Southern African Development Community (SADC) in Botswana* for regulators and national statistical offices
- In May - and on time for Africa Telecom - ITU will publish the African Telecommunication Indicators
- For further information, visit: www.itu.int/ict

Thank you

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* Both, venue and date, are provisional