10th World Telecommunication/ICT Indicators Meeting (WTIM-12)
Bangkok, Thailand, 25-27 September 2012

Contribution to WTIM-12 session

SOURCE:	EGTI Chair
TITLE:	Measuring data traffic and backbone infrastructure

10th World Telecommunication / ICT Indicators Meeting (WTIM) Bangkok, 25-27 September 2012

Expert Group on Telecommunication/ICT Indicators (EGTI)

Measuring data traffic and backbone infrastructure
EGTI Chair

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Summary

WTIM entrusted EGTI to propose, discuss and develop indicators to measure broadband capacity, with attention to: national backbone infrastructure, fibre reach (over population) and data traffic flows.

The discussion on EGTI focused on a set of indicators for:

a) Terrestrial transmission capacity

b) Fixed and mobile data traffic

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a) Terrestrial transmission capacity

The meeting agreed on seven indicators to measure backbone terrestrial transmission capacity:

1. Transmission network cable length (route kms)
2. Node locations
3. Equipment type of terrestrial transmission network
4. Network capacity (bit rate)
5. Number of optical fibres within the cable
6. Operational status of the transmission network
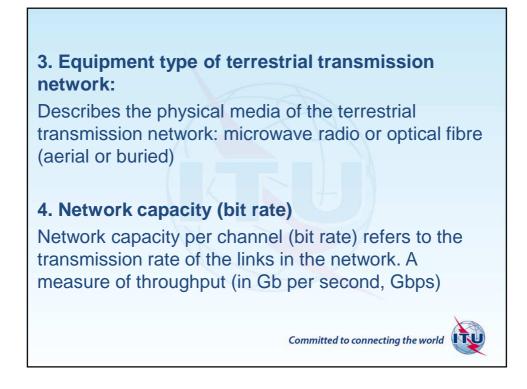7. Percentage of population within reach of transmission networks

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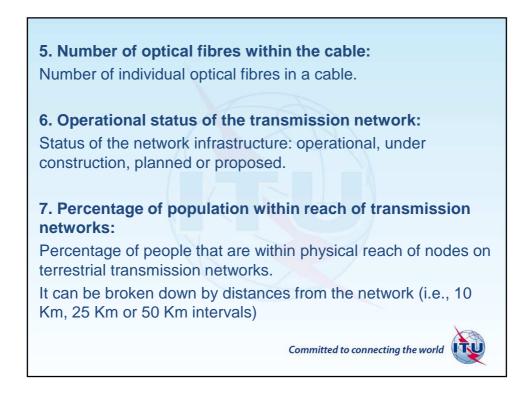### 1. Transmission network cable length (route kms)

Physical length of the terrestrial cable in a network, irrespective of the number of optical fibres contained within the constitutent cables of that network. Expressed in route- Kms.

Also applied to microwave terrestrial transmission networks

2. Node locations

Geographic location of the nodes in a transmission network. Node is an access point to a transmission network. Geographic coordinates are to be provided

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3. Equipment type of terrestrial transmission network:

Describes the physical media of the terrestrial transmission network: microwave radio or optical fibre (aerial or buried)

4. Network capacity (bit rate)

Network capacity per channel (bit rate) refers to the transmission rate of the links in the network. A measure of throughput (in Gb per second, Gbps)

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5. Number of optical fibres within the cable:

Number of individual optical fibres in a cable.

6. Operational status of the transmission network:

Status of the network infrastructure: operational, under construction, planned or proposed.

7. Percentage of population within reach of transmission networks:

Percentage of people that are within physical reach of nodes on terrestrial transmission networks.

It can be broken down by distances from the network (i.e., 10 Km, 25 Km or 50 Km intervals)

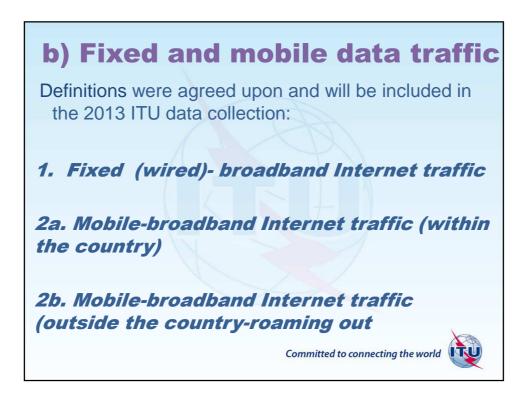*Committed to connecting the world* **ITU**

a) Terrestrial transmission capacity
Conclusion:

- In order to test the feasibility of collecting the data for these indicators, the meeting agreed that the initial data collection will be conducted by ITU under a pilot project to create an interactive online transmission map, with the help of external collaborator(s).
- The data collected will be shared with the regulator or ministry for verification.
- Some refinements of the definitions will be made.
- The item remains as a topic in the EGTI discussion forum.

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b) Fixed and mobile data traffic

Definitions were agreed upon and will be included in the 2013 ITU data collection:

1. Fixed (wired)- broadband Internet traffic

2a. Mobile-broadband Internet traffic (within the country)

2b. Mobile-broadband Internet traffic (outside the country-roaming out

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1.Fixed (wired)- broadband Internet traffic

- **The indicator on *Fixed (wired) broadband Internet traffic* (exabytes) – was agreed**
- **Traffic should refer to those generated by fixed broadband subscribers, and should be measured at the end-user access point. This should be measured for download and upload traffic**
- **This should exclude wholesale traffic and walled garden, IP-TV and cable TV traffic**
- **Suggest to include the indicator in the 2013 ITU data collections**

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2. Mobile-broadband Internet traffic (1)

The meeting agreed on two indicators:

2.a. Mobile-broadband Internet traffic (within the country)

2.b. Mobile-broadband Internet traffic (outside the country-roaming out)

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2. Mobile-broadband Internet traffic (2)

Definition:

Broadband traffic volumes with origin in the 3G network upgrades, evolutions or equivalent standards, measured in exabytes. Traffic should be collected regardless of the network used . This should be measured for download and upload. Walled-garden traffic should be excluded.

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many thanks !

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