Expert Group on Telecom/ICT Indicators (EGTI)

Geneva, 12 November 2018

Summary and conclusions of the EGTI work in 2018

EGTI 2018: online forum

Online forum total registered members
1.014

Sub-group
1

Written contributions
60

Topics for discussions
5

EGTI 2018: 9th Meeting

Participants	Countries	Agenda items
127	54	7

Agenda items

1. 5G related indicators

2. Indicators on spectrum allocation/assignment

3. Indicators on the Internet of Things (IoT)

4. Fixed-broadband Internet traffic measurement methodology

5. Indicators on convergence (incl. fixed-mobile bundles)

6. Quality of Service (QoS)

7. Future work

1. 5G Related indicators

- The next generation of mobile networks (5G) is expected to offer much faster speeds and more reliable connections. It will be one of the main pillars of the Internet of Things (IoT).

- The development of 5G is at a preliminary stage in most countries. There were several technical trials and commercial rollouts are expected for 2018/2019.

- Given that many countries are not presently colleting any supply-side indicators related to the deployment of 5G and that the development of 5G is at an early stage, the group decided to continue discussion and experience sharing on the online forum together and merge this topic with IoT indicators.

2. Indicators on spectrum allocation/assignment

A proposal was presented by an EGTI sub-group led by Tariq Al Awadhi, from the UAE Telecommunications Regulatory Authority.

Key points of the proposal:

- Two indicators: one on spectrum allocation and another on spectrum assignment for IMT systems (i.e. IMT-2000, IMT-Advanced and IMT-2020):

Agenda item 2

➤ Indicator 1: Amount of spectrum offered for IMT systems, in MHz

> Total spectrum, in MHz, made available for use (i.e. allocated) through any formal national publication, such as the National Frequency Plan, for IMT systems, including any of the air interfaces in accordance with ITU-R Recommendations concerning these standards for mobile communications.

➤ Indicator 2: Amount of spectrum licensed for IMT systems, in MHz

> Total spectrum, in MHz, assigned nationally for use for IMT systems, including any of the air interfaces in accordance with ITU-R Recommendations concerning these standards for mobile communications.

Agenda item 2

- Both indicators are broken down by the following bands (indicated in MHz):

1- Block < 1 GHz:
- a. 450 MHz (450-470)
- b. UHF band (470-608)
- c. 600 MHz (610-69/698)
- d. 700 MHz (698-790/806)
- e. 800 MHz (790/806-902)
- f. 900 MHz (902-960)

2- Block from 1 to 6 GHz:
- a. L-band (1427-1518)
- b. 1.7/1.8 GHz (1710-1885)*
- c. 1.9 GHz (1885-2025)
- d. 2.1 GHz (2110-2200)
- e. 2.3 GHz (2300-2400)
- f. 2.5 GHz, C-band (2500-2690)
- g. 3300-3400
- h. 3400-3500
- i. 3500-3600
- j. 3600-3700
- k. 4.8 GHz (4800-4900)
- l. 4.9 GHz (4900-4990)

3- Block > 6 GHz (WRC-19):
- a. 24 250-27 500
- b. 31 800 -33 400
- c. 37 000 -40 500
- d. 40 500 -42 500
- e. 42 500 -43 500
- f. 45 500-47 000
- g. 47 000-47 200
- h. 47 200-50 200
- i. 50 400-52 600
- j. 66 000-71 000
- k. 71 000-76 000
- l. 81 000-86 000

* Countries that use AWS-1 use 1710-1755 MHz for UL and 2110-2155 MHz for DL.

Agenda item 2

- In order to benchmark countries at the international level, data on spectrum allocation and assignment should be normalized based on the spectrum identified for IMT systems in the Radio Regulations (RR) on a per Region basis.

- In the calculation of the spectrum identified for each Region, each band will be considered as identified for IMT systems for the Region based on the percentage of countries in the Region having identified a band for IMT systems in the RR footnotes.

Agenda item 2

This proposal was open for inputs until the end of November.

Unfortunately the sub-group was not able to finalize the indicators in time for WTIS 2018.

3. Indicators on the Internet of Things (IoT)

- The emergence of IoT may have an impact on a number of ICT indicators beyond those specific to IoT. For instance, it may require to separate M2M from other types of mobile-cellular subscriptions to facilitate the analysis.

- The emergence of IoT might call for data collections for specific apps/devices (e.g. connected cars) or specific IoT technologies.

- Given the limited national and international experience in collecting supply-side indicators on the IoT, it was agreed to merge the discussion with 5G and continue the discussion on the online forum.

4. Fixed-broadband Internet traffic measurement methodology

- ITU collects data on "Fixed-broadband Internet traffic" since 2013.

- Following the request for more details on the method of collection of this indicator, ITU produced a detailed methodological note in 2018.

- EGTI agreed to create a sub-group to finalize the methodology for the indicator "Fixed-broadband Internet traffic", taking into account country experiences and barriers to data collection.

5. Indicators on convergence (incl. fixed-mobile bundles)

- Bundling has been one of the main trends in telecommunication markets in the last few years.

- ITU collects data on bundled ICT services since 2015, following the agreement reached at the 5th EGTI meeting, which took place in September 2014.

- Relevance of fixed-mobile bundles varies on a per country basis.

- Proposal is to include an indicator relating to convergent bundles in the ITU questionnaires to capture convergence trends.

6. Indicators on quality of service (QoS)

- EGTI discussed QoS indicators from 2011 to 2013. As an outcome of the discussions, the indicators on QoS collected in ITU questionnaire were reduced to the following three: mobile-cellular unsuccessful call ratio; mobile-cellular dropped call ratio; and service activation time for fixed-broadband services.

- Given the relevance of QoS indicators for national regulatory authorities and the progress made in monitoring QoS at the national level in the last few years, EGTI agreed to create a sub-group to revise the existing QoS indicators included in the ITU Long Questionnaire based on a common reduced list of QoS indicators relevant to most countries at the international level.

7. Future work

1. Carry over 5G and IoT indicators (shared with EGH)

2. International roaming indicators

3. Fixed-broadband Internet traffic
   A sub-group will be created within EGTI

4. Indicators on Quality of Service (QoS)
   A sub-group will be created within EGTI

5. Revision of existing indicators

6. Sharing innovative practices and Open topic for Q&A

THANK YOU!

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