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| logogreen | ASIA-PACIFIC TELECOMMUNITY | **Document No.:****ASTAP-31/OUT-25** |
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WG PSC

**QUESTIONNAIRE ON THE MEASUREMENT SCENARIOS AND SAMPLING METHODOLOGIES TO ASSESS QUALITY OF POPULAR MOBILE SERVICES**

**Section 1: Elementary Part**

1. **Introduction:**

Mobile communication services are becoming more and more popular and play important roles in the digitized socio-economy and daily life. The regulation and management of mobile communications QoS is playing the key role to enforce quality ensure and improvement upon operators to satisfy the customer’s requirements as well as providing clear, transparent information to subscribers. Normally, regulators and operators perform approaches such as imposing standards, testing, monitoring, assessing and publishing information on QoS. Measurement methods might be drive test, walking test, reporting, crowd-sourcing data. The different method of sampling and testing scenarios might result in different outcome. In order to improve the reliability of testing result, it is needed to have a decent plan of measurement scenarios and sampling method before performing testing.

We would like to propose this questionnaire to collect information among member countries about measurement scenarios and sampling methodologies to assess quality of popular mobile services. The collected information will be used to draft the report and shared between countries about experience of testing and measuring mobile services .

1. **Objective of the Questionnaire:**

At the ASTAP-30 meeting, the new work item on measurement scenarios and sampling methodologies to assess quality of popular mobile services (ASTAP-30/INP-13) has been adopted. The object of this questionnaire is to gather information as input for report on measurement scenarios and sampling methodologies to assess quality of popular mobile services.

1. **Responsible Group:**

Expert Group on Policies, Regulatory and Strategies (EG PRS)

1. **Rapporteur of the Questionnaire:**

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1. **Meeting at which the Questionnaire was approved:**

ASTAP - 31.

1. **Target Responder:**

The APT Member Administrations that is responsible for developing/ enforcing/ implementing quality of service policies.

1. **Deadline for Responses: *Before meeting ASTAP-32***

**Section 2: Questionnaire Part**

**I. Contact information**

|  |  |  |  |
| --- | --- | --- | --- |
| *Country* |  | *Organization* |  |
| *Title* |  | *Email* |  |

**II. Questions**

1. Which are most popular mobile services in your country? Mark more than one if needed.

[ ]  Voice telephony

[ ]  Internet access

[ ]  Streaming video

[ ]  Short message

[ ]  Other Services (name it):

2. Do operators provide coverage map of popular mobile services on website?

(See example: https://vietteltelecom.vn/ho-tro/thong-tin-hotro/vung-phu)

[ ]  Yes

[ ]  No

Please provide the website link: ....

2.1 If answer is “**Yes”**, which parameters are main factor used to determine coverage map?

[ ]  Rx level/RSCP/RSRP

[ ]  Data rate

[ ]  Voice call availability

[ ]  Other parameters (name it):

3. Do you perform the measurement quality of mobile services?

[ ]  Yes

[ ]  No. Do you have regulation or standard specify the sampling method/testing scenarios?

**A. If answer is “Yes”**

3.1 Which services are being measured? Mark more than one if needed.

[ ]  Voice telephony

[ ]  Internet access

[ ]  Streaming video

[ ]  Others (name it):

3.2 Who is responsible for defining QoS measurement methodologies in your country?

[ ]  Regulator

[ ]  Operator

[ ]  Other organizations

3.3 What standards/recommendations does your country used to define QoS parameters as well as their evaluation methods?

3.4 Who perform the measurement QoS in your country?

[ ]  Regulator

[ ]  Operator

[ ]  Third party entity

[ ]  End user (by using crowdsourcing application)

3.5 Which QoS parameters does your country used to measure quality of service?

3.5.1 Voice telephony service

[ ]  Radio network available

[ ]  Call success rate

[ ]  Speech quality

[ ]  Call drop rate

[ ]  Other KPIs (name it):

3.5.2 Internet access service

[ ]  Radio network available

[ ]  Call success rate

[ ]  Speech quality

[ ]  Call drop rate

[ ]  Other KPIs (name it):

3.5.3 Streaming video service

[ ]  Radio network available

[ ]  Call success rate

[ ]  Speech quality

[ ]  Call drop rate

[ ]  Other KPIs (name it):

3.6 Which measurement methods does your country used to evaluate QoS parameters?

[ ]  Drive test

[ ]  Stationary test

[ ]  Data crowdsourcing

[ ]  Operator’s report

3.6.1 Which kind of roads are being used by drive test?

[ ]  Subways/highways

[ ]  Major roads

[ ]  Road in the major towns, rural towns

[ ]  All of the above

3.6.2 What kind of location types used during the stationary test?

[ ]  Airport

[ ]  Tourism areas

[ ]  Railway stations

[ ]  Bus stations

[ ]  Hospital/School

[ ]  Shopping centers

[ ]  Other locations:

3.6.3 Do you specify speed of vehicle while performing drive test?

3.7 What kind of scenarios do you use to measure quality of voice service?

[ ]  Mobile to mobile

[ ]  Mobile to fixed

[ ]  Other scenarios

3.8 Which durations of call do you use to measure quality of voice service?

[ ]  Long call (duration call >=1 min)

[ ]  Short call (duration call < 1 min)

[ ]  Both

3.9 What kind of scenarios do you use to measure quality of Internet access service/Streaming video service?

[ ]  Mobile to dedicated server

[ ]  Mobile to commercial website

[ ]  Other scenarios

3.10 What kind of method do you use to measure quality of Internet access service/Streaming video service?

[ ]  Fixed-size method (Transferring a fixed amount of data)

[ ]  Fixed-time method (Transferring data for a fixed amount of time)

[ ]  Other method, Please specify

3.11 Do you specify the time of the day to measure quality of service?

3.12 How many seconds timeout do you use between sessions/calls?

3.13 How many samples does your country gather to evaluate QoS?

3.14 What main issues does your country face in term of QoS measurement?

**B. If the answer is “No”**

3.15 What is your approach to monitor in term of quality for services on the mobile communications network?

4. Do you publish QoS measurement results?

[ ]  Yes

[ ]  No

4.1 If Yes, what kinds of media are being used to publish the quality measurement results of services on the mobile communications network? Mark more than one if needed.

[ ]  Website

[ ]  Newspapers

[ ]  Social media

[ ]  Others (name it):

4.2 If Yes, which periods are being used to publish the quality measurement results of services on the mobile communications network?

[ ]  Monthly

[ ]  Quarterly

[ ]  Half-yearly

[ ]  Yearly

[ ]  Others (name it):

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