

# **ITU Workshop on Telecommunications Service Quality**

Rio de Janeiro, Brazil, 27-29 November 2017

## **Question 12/12 and QSDG: Operational and regulatory aspects of QoS and QoE**

**Tiago Prado**

Anatel – Brazil

Vice Chairman, ITU-T Study Group 12

[tiago.prado@anatel.gov.br](mailto:tiago.prado@anatel.gov.br)

# Agenda

## Resolution 95 (WTSA-16)

- Focus
- Topics to be studied
- Recent work
- Questionnaire on National Regulatory Frameworks

## Question 12/12

- Scope
- ITU-T Recs Approved (2012-2017)
- Current work items

## QSDG

- Background
- Management Team
- Terms of Reference
- Meetings and Workshops
- Recent Achievements

# Resolution 95 (WTSA-16)

- Res. 95 – “ITU-T initiatives to raise awareness on best practices and policies related to service quality”
- Focus:
  - ➔ defining how the studies related with quality regulatory approaches should be conducted on the next study period, indicating some deliverables to be developed by SG 12 and other relevant ITU-T Study Groups.

# Resolution 95 (WTSA-16)

## ■ Topics to be studied:

- Strategies to establish national quality measurement frameworks
- QoS/QoE evaluation scenarios, testing and sampling methodologies;
- References relating to minimal satisfactory KPIs/KQIs
- Strategies to make users informed
- Identifying human and institutional capacity-building necessities of the countries;
- Promoting wider participation in the international debate on quality

# Resolution 95 (WTSA-16)

## ■ Recent work:

- Operational Plan for Res 95 implementation ([TD380](#))
  - Involves TSB, BDT, ITU-D SG1 and all SG12 Questions
- Many new work items approved in Q12/12
- Opened workshops around the world
- Questionnaire approved to collect information on QoS/QoE regulatory frameworks

# Resolution 95 (WTSA-16)

## ■ Questionnaire on Service Quality Regulatory Frameworks

- ➔ Objective: collect information as input for the work of ITU-T SG 12 in creating international references on national regulatory approaches and assist countries in deploying their quality regulatory framework.
- ➔ Target audience: ITU Member States
- ➔ Deadline: March 31<sup>st</sup>, 2018

**<https://www.research.net/r/sg12-servicequality>**

# Q12/12 – Operational aspects of telecommunication service quality

- Scope:
  - Defining operational and regulatory aspects of QoS and QoE assessment and mechanisms to foster improvements on quality
  
- ITU-T Recs Approved (2012-2016):
  - ITU E.800-Suppl 9: Guidelines on Regulatory aspects of QoS. (2013)

# Q12/12 – Operational aspects of telecommunication network service quality

- Recs Approved (2012-2016):
  - ➔ ITU-T Rec. Y.1545: Roadmap for the QoS of Interconnected networks that use the IP. 2013
  - ➔ ITU-T Rec. E.804: QoS aspects for popular services in mobile networks. 2014
  - ➔ ITU-T Rec. E.807: Definitions, associated measurement methods and guidance targets of user-centric parameters for call handling. 2014
  - ➔ ITU-T Rec. E.803: QoS parameters for supporting service aspects. 2014
  - ➔ ITU-T Rec E.800-Suppl 10: QoS/QoE framework for the transition from network oriented to service oriented operations. 2016

# Q12/12 – Operational aspects of telecommunication network service quality

- Recs Approved (2017):
  - ➔ ITU-T Rec Y.1545.1: Framework for Monitoring the QoS of IP network services
  - ➔ ITU-T Rec. E.811: Quality Measurement in Major Events
  - ➔ ITU-T Rec. E.802: Amendment: New Annex A on guidelines on selection of representative samples

# Q12/12 – Operational aspects of telecommunication network service quality

- Current work items:
  - ➔ E.RQUAL "Strategies to Establish Quality Measurement Frameworks" ([TD348](#))
  - ➔ E.NetPerfRank "Statistical Framework for QoE Centric Benchmarking Scoring and Ranking" ([TD283R1](#))
  - ➔ E.RQST "Voice and Data QoS KPI thresholds on mobile networks" ([TD253R1](#))

# Q12/12 – Operational aspects of telecommunication network service quality

- Current work items:
  - ➔ E.QSIMBox "The effect of SIM-boxing on QoS and QoE" ([TD329](#))
  - ➔ ITU-T E.802Amd2 "Updates and additional information on the degree of variability function in support of E.802" ([TD324](#))
  - ➔ E.QoS Mgt Mod "QoS Management Model for Bridging the Gaps between QoS and QoE" ([TD339R1](#))

# Q12/12 – Operational aspects of telecommunication network service quality

- Current work items:
  - ITU-T Y.1545.1Amd1 "Amendment 1 to Recommendation ITU-T Y.1545.1 ([TD351R1](#))"
  - G.CSFB "Assessment of the LTE circuit switched fall back – impact on QoE and QoS" ([TD369R1](#))"
  - MTSM "Measurement scenarios, advanced measurement systems and sampling methodologies to monitor the QoS in mobile networks" ([TD345R2](#))"

# Quality of Service Development Group - QSDG

## ■ Background

- First meeting held in 1984
- Child group of ITU-T SG 12 since 2008
- Tasked by SG 12 to be its liaison to Workshops, Symposia and Forums

## ■ Management Team

- Chairperson: Ms. Yvonne Umutoni (Rwanda)
- Vice-chairmen: Afghanistan, Brazil, Ghana, Greece, India, Mozambique, China Mobile, Türk Telekom

# Quality of Service Development Group - QSDG

## ■ Terms of Reference

- Identify and study new technical and regulatory aspects/trends
- Encourage wider participation in discussions in an international level
- Disseminate information relating to performance, QoS and QoE techniques, procedures and regulatory aspects

# Quality of Service Development Group - QSDG

## ■ Meetings and Workshops

Year	Location
1984	The Hague
1985	Orlando
1986	Hong-Kong
1987	Manila
1988	Albufeira
1989	Bern
1990	Padova
1991	Blois
1993	S.Francisco
1994	Chester
1995	João Pessoa

Year	Location
1996	Cape Town
1997	Bahrain
1998	Fidji
1999	Budapest
2000	Montreal
2001	Berlin
2002	Washington
2003	Sal Island
2004	Lyon
2005	Xi'an
2006	Singapore

Month/Year	Location
2007	Swakopmund
2008	Vienna
2009	Maputo
2010	Mbabane
2011	Kampala
2012	Nairobi
2013	Accra
04/2014	Maputo
06/2014	Kampala
07/2014	Buenos Aires
11/2014	Dubai

Month/Year	Location
02/2015	Istanbul
03/2015	Dakar
09/2015	Athens
11/2015	Nairobi
03/2016	Livingstone
05/2016	Haarlem
07/2017	Johannesburg

# Quality of Service Development Group - QSDG

## ■ Recent Achievements

- In November 2016, WTSA-16 approved the ITU Resolution 95, about Quality of Service issues.
- In January 2017, SG12 meeting approved two ITU-T recommendations that were initiated in QSDG meetings:
  - ITU-T E.811: Quality Measurement in Major Events
  - ITU-T Y.1545.1: Framework for Monitoring the QoS of IP Network Services
- Greater participation of developing countries in SG12 activities

# Final Remarks

***ITU-T SG 12 has been discussing many new international standards on service quality, covering both operational and regulatory aspects. But this work is contribution driven and consensus based!***

***Greater participation of developing countries and private sector is required!!***

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# Thank you!

**Tiago Prado**

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Vice Chairman, ITU-T Study Group 12

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