

**ITU Workshop on Performance, QoS and QoE for Multimedia Services  
Kigali, Rwanda, 4-5 March 2019**



# **INTRODUCTION**

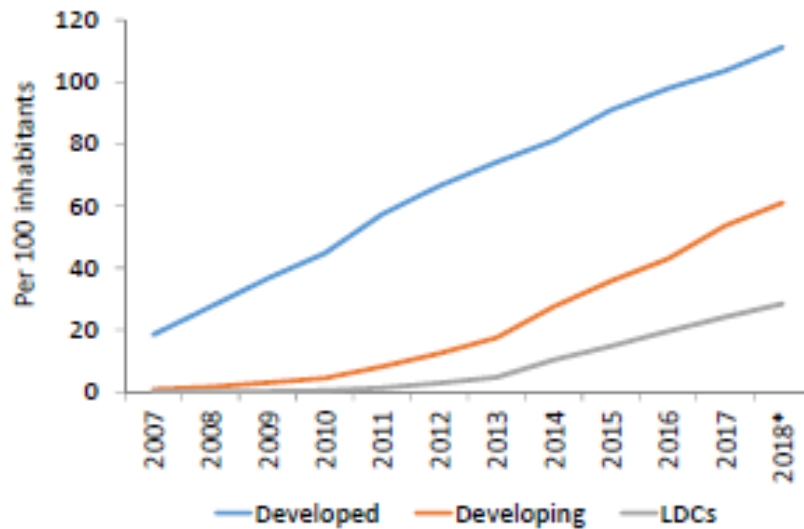
## **Overview of QoS Programs and Activities in the Region**

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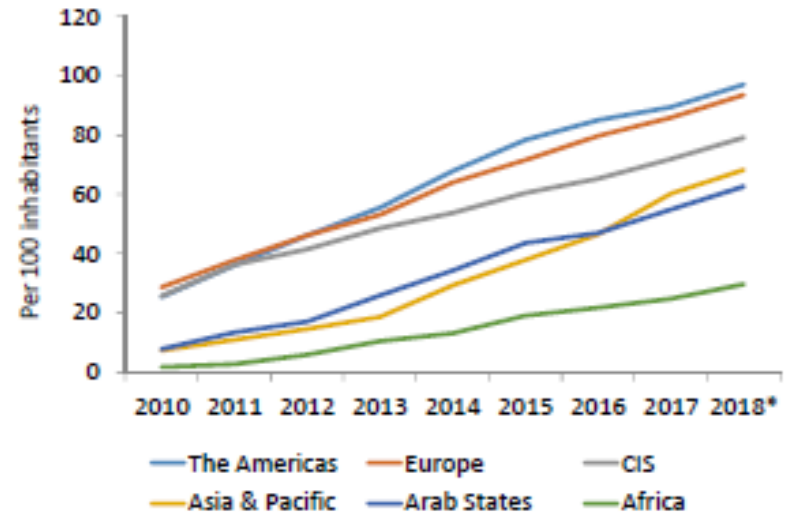
# Context- ICTs in Africa/ LDCs

Chart 1.16: Active mobile-broadband subscriptions per 100 inhabitants, by level of development, 2007–2018\*



Note: \* ITU estimate.  
Source: ITU.

Chart 1.17: Active mobile-broadband subscriptions per 100 inhabitants, by region, 2010–2018\*



Note: \* ITU estimate.  
Source: ITU.

# Introduction

- **QoS is important for both customers and service providers.**
  - Telecommunication networks are interconnected on a national, regional, and global basis, and the quality of telecommunication services applied in one network or one country influences the end-to-end quality of that service, so the quality cannot be considered only at national or regional level, but also globally
- A harmonized and common approach to regulating QoS would enable greater quality prospects irrespective of the locations of the consumer and service provider.

# Programs and Activities

- BDT/ ROA Supports Member States , RECs in defining Policy and Regulatory Models and Frameworks for QoS
- Mandate
  - RESOLUTION 64 (Rev. Dubai, 2014) -Protecting and supporting users/consumers of telecommunication/ information and communication technology services-
  - RESOLUTION 23 (Rev. Dubai, 2014) Internet access and availability for developing countries and charging principles for international Internet connection;

# QoS Regulation Manual

[https://www.itu.int/pub/D-PREF-BB.QOS\\_REG01-2017](https://www.itu.int/pub/D-PREF-BB.QOS_REG01-2017)

- i. QoS framework from a technical perspective, drawing from the work done by ITU-T on QoS standardization.
- ii. QoS regulatory framework and the role of National Regulatory Authorities (NRAs) in addressing QoS.
- iii. Traffic management , QoS parameters and Key Performance Indicators (KPIs)
- iv. Broadband QoS measurement, examining different measurement tools and platforms. The economic principles for QoS regulation
- v. Network neutrality and its regulation worldwide,
- vi. Consumer protection and privacy aspects.
- vii. QoS enforcement
- viii. 16 Country case studies 8 of which are from the SADC region



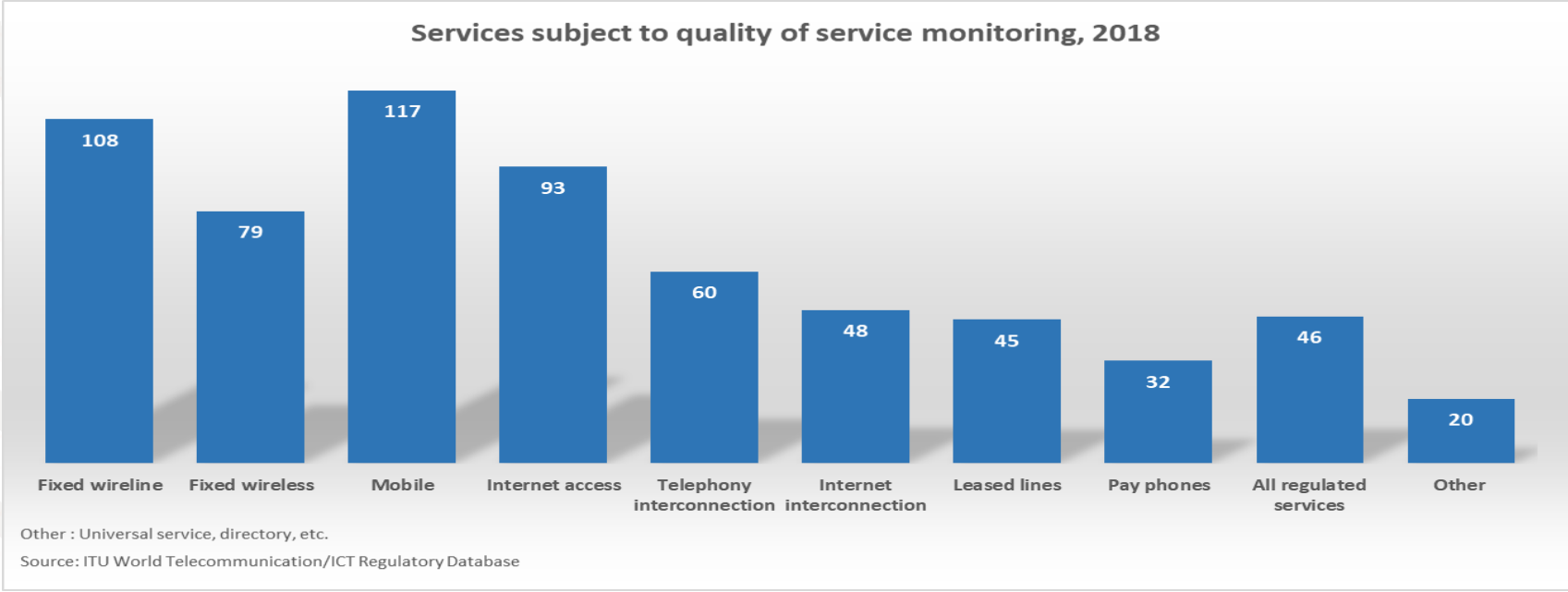
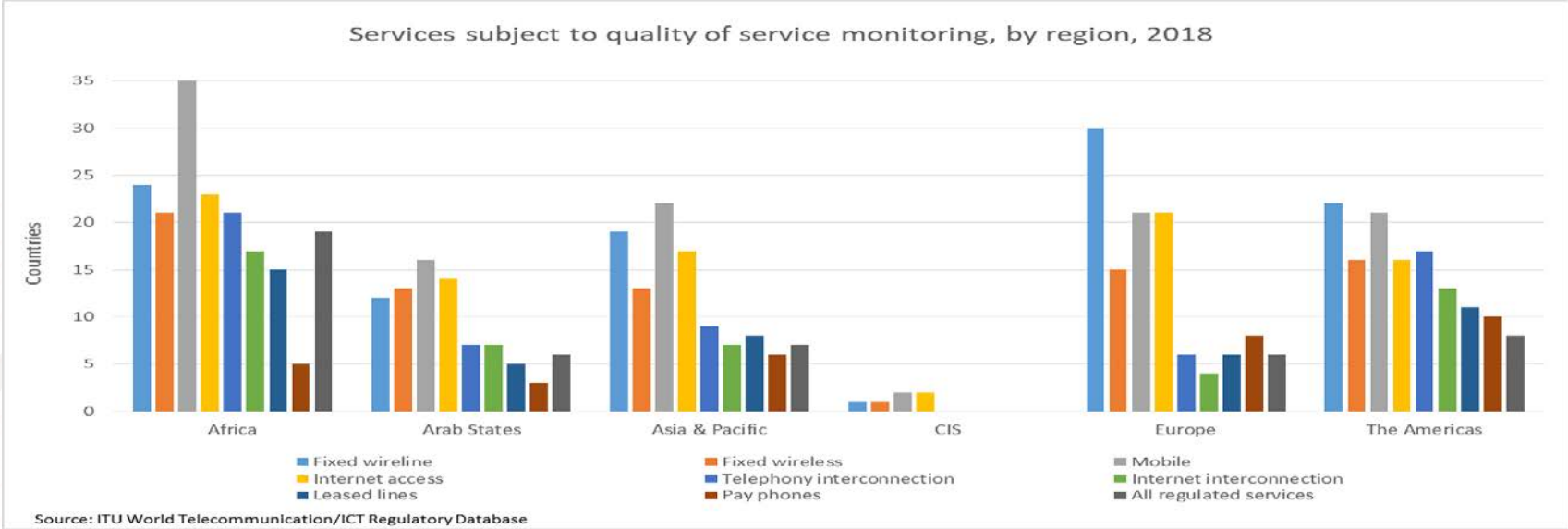
# Global Outputs Regulatory Tracker

1. Examines regulatory practices across ITU Membership in a range of areas including QoS. See country by country tracker <https://www.itu.int/net4/itu-d/irt/>

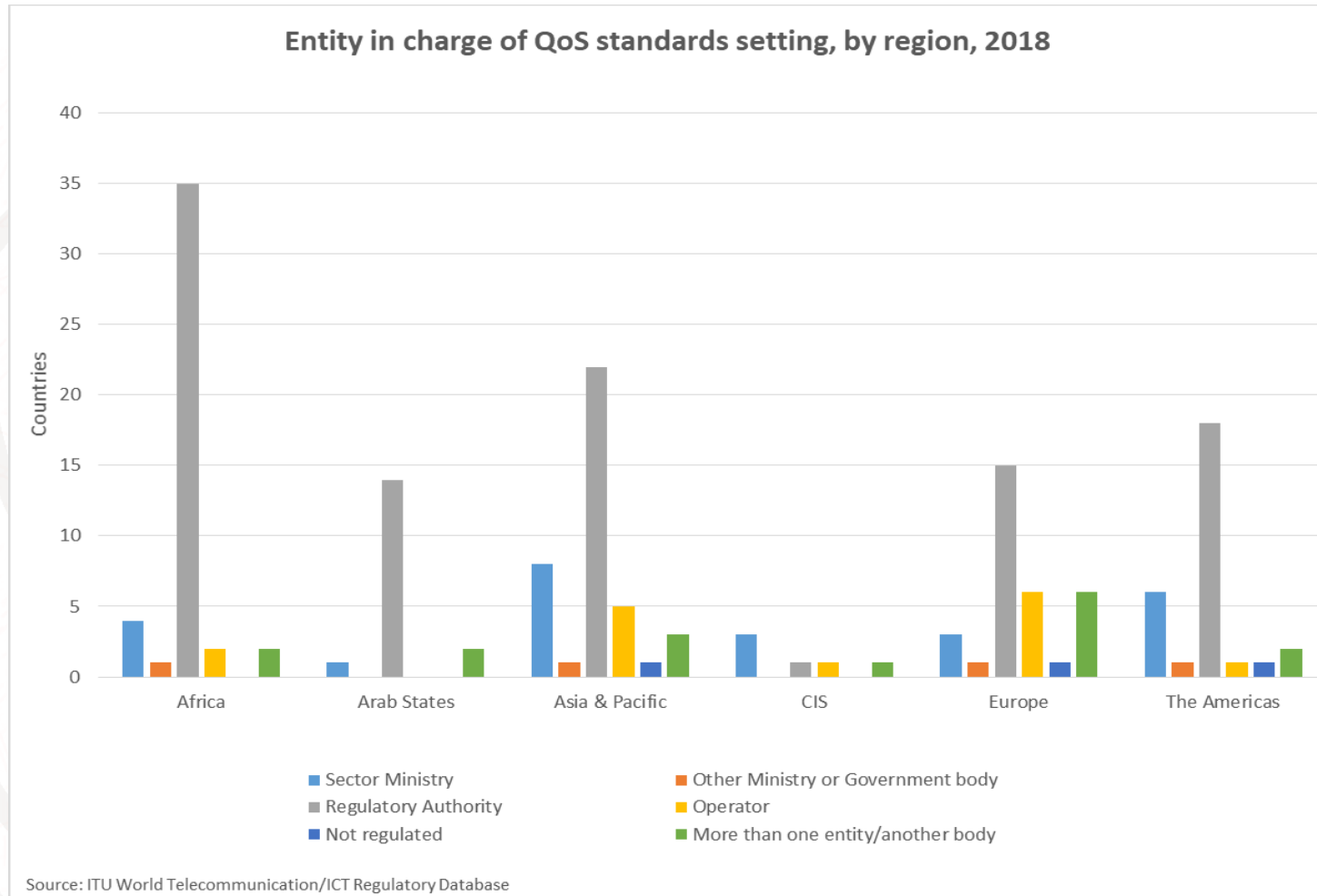
QOS Parameters tracked include

- i. Who defines policies for QoS
- ii. What services are subject to QoS Monitoring
- iii. Enforcement approaches among others

# Services subject to QoS Monitoring, 2018



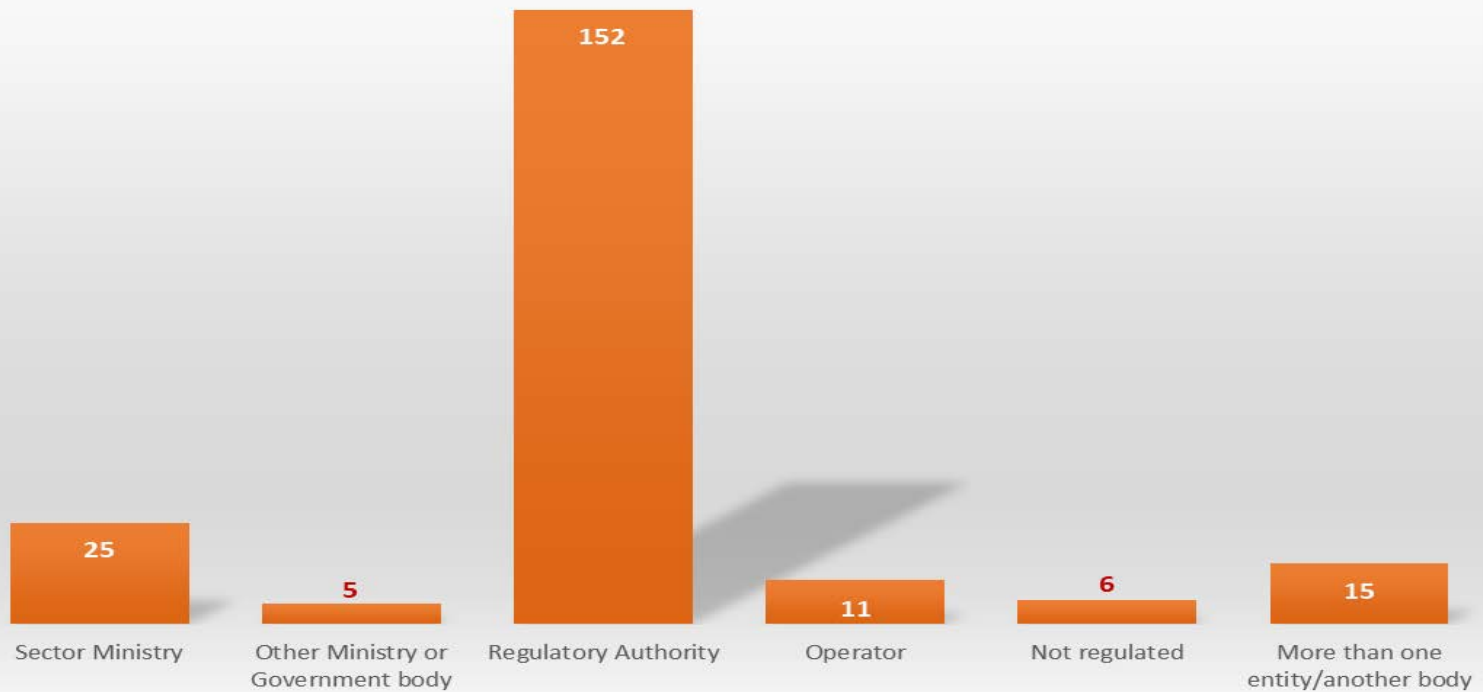
# Who's in Charge of setting standards of QoS?





# Who's in Charge of enforcement of QoS?

Entity in charge of QoS obligations enforcement, world, 2018



Source: ITU World Telecommunication/ICT Regulatory Database

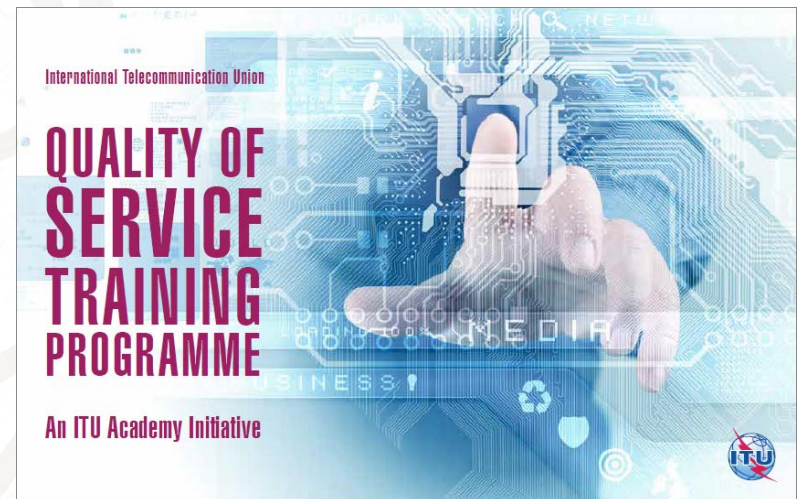
# Quality of Service Training Programme

## Programs

1. OM5- Regulatory Aspects of QoS- Online training
2. QoSSTP is a second in a series of high-level training programs developed under the ITU Academy;

[https://academy.itu.int/index.php?option=com\\_content&view=article&id=101&Itemid=642&lang=en](https://academy.itu.int/index.php?option=com_content&view=article&id=101&Itemid=642&lang=en)

***Agreement underway with National Communications Authority of Ghana ( NCA) and ITU to become training partner in Africa for QOSTP training material. Training to run free of charge in Ghana and for member states in African***



# Regional Initiative – Africa

## AFR 1:

**Building digital economies and fostering innovation in Africa**

**Expected Results = 8**

### **OBJECTIVE**

Assist Member States in the Africa region to reap the full benefits of the digital economy by addressing the emerging policy and regulatory challenges and support Member States in the Africa region to build more effective ICT-based innovation ecosystems.

### **Expected Result 1**

Assistance in the development of national digital economy strategies focusing on enabling policies and regulations that can enhance the use of digital technologies

### **Expected Result 4**

Assistance in the adoption and implementation of relevant standards that are targeted at addressing challenges of interoperability stemming from the disruptive and transformative spread of digital innovation

# Regional Initiative – Africa

## AFR 3:

### Building trust and security in the use of telecommunications/information and communication technology

To assist Member States in developing and implementing policies and strategies, standards and mechanisms to enhance the security of information systems and networks, ensure interoperability of digital technologies, protect data and people and guarantee digital trust. To protect the ICT infrastructure and build confidence in the use of ICT and its applications.

**Expected results = 10**

#### Expected result 6:

Developing measures to protect consumers, children and other vulnerable persons when using ICTs

#### Expected result 7:

Raising awareness of cyber threats, cybersecurity *measures and quality of service in the use of ICTs*

# Programs in Africa

1. Quality of Service and Quality of Experience (QoS/QoE) training for SADC co-organised with CRASA and hosted by Botswana Communications Regulatory Authority (BOCRA) from the 8th to 10th May 2017
2. ITU Training workshop and meeting on QoS and QoE Framework for ECOWAS region, Dakar, Senegal, 11-14 December 2017
3. Validation meeting on (QoS) and (QoE) Framework & Guideline for ECOWAS region, Abidjan, Côte d'Ivoire, 16-19 July 2018
4. SADC/CRASA on a Quality of Service and Quality of Experience Guidelines for SADC Region (2018).
  - A training workshop and validation meeting was held in Luanda 6-7 August, 2018.
    - The guideline to be adopted at the 2019 SADC Ministers meeting

# Future/ planned activities

1. Completion of the ECOWAS Guideline
  2. Support SADC member states to domesticate guideline in national regulatory frameworks
  3. Rollout of the QoSTP and identification of more flagship countries, partners, programs and projects for the Regional Initiative
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**THANK YOU FOR YOUR ATTENSION !!**

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