Summary of Session 5 : QoS and QoE aspects of OTTs; QoS and QoE assessment and benchmarking for mobile networks

Author Ya Amie Touray

Operators QoS and QoE Aspects affecting OTT Applications & Content Providers

Presenter

❖ Mohamad Kiwan,
MTN, Rwanda

- **QOS & Technical Capability**
  - The QOS differentiation Tool box - QOS Handling and Profile Handling
  - Network Transformation Project - Data Volume increased from 24TB/Day to 65TB/Day. Speed “Throughput” improved by 250%
  - PCRF Deployment - Service Aware Policy Controller & innovative Solutions
  - Service Caching and Video On Demand – Google & Netflix

QOE & Brand Perception

- NPS Measurement System - performance ratings & analysis of brand status

Evaluating QoS in 3G networks with ITU-T standards: Case study Yaoundé

Presenter

- Bertrand Kisito Nga,
  MINPOSTEL, Cameroon

- Conducted a QOS monitoring Exercise in 2018 for both Fixed and Mobile networks in 11 areas around Yaounde
- Measured indicators – Success communication rate, File transfer rate (1Mb), Successful Video Streaming rate
- Monitoring Methodology – data collection software (Nemo Outdoor Handy & Mobile Handsets)
- Monitoring Results- Operators exceeded the 98.5% threshold for successful communication rate; File transfer rate of 60 % is below the standard threshold and the video streaming rate is significantly better for 4G Networks compared to 3G and 2G

QoS monitoring in Uganda

Presenter

- Robert Echeda & Fiona Kamikazi, UCC, Uganda

- **Legal Framework**
  - Mandate Of UCC -promote and safeguard the interests of consumers and operators as regards the quality of communications services and equipment
  - Mandate of Other Stakeholders – Public Infrastructure Provider & Public Service Provider
- **Monitoring Framework**
  - Framework developed 2007 sets out QOS Parameters
  - Monitoring Strategies – Scheduled (semiannual& publication) and Unscheduled Monitoring (24/7 all year round & real time data on dashboard)
  - Monitoring Systems – Tems (24/7 & automatic) & Sigos (Local Units mobile & Fixed)

QoS &QoE benchmarking: experiences and challenges

Presenter

- Ntsane Mole, LCA, Lesotho

- Regulatory Framework – ACT 2012 and QOS Rules 2016
- Operational Aspects
  - Xplorer system - control center, probe units & mobile probe units
  - 5 Probe units are deployed for a period of 3 months in one location
  - Information is transferred automatically from the probe units to the control center
  - Measure both Fixed and Mobile
- Challenges
  - Inadequate probe units
  - Operators failure to meet set standards
  - No broadband policy

QoS monitoring in Côte d'Ivoire

Presenter

- Derou Fabrice Kouhon,
  ARTCI,
  Côte d'Ivoire

- Regulatory and Legislative frame work
  - Ordinance 2012
  - License obligations
- QOS Audit Exercise
  - Unscheduled QOS Checks
  - OMCR Data Analysis
  - User Satisfaction Surveys
- New Methods
  - Deploy user friendly mobile app
  - Increase unannounced checks
  - Revise thresholds for certain indicators

Takeaways & Conclusion

- The need to understand customers needs and data usage in order to provide minimum bit rate per second
- Moving KPIs closer to the user experience, by unifying market, networks and systems in proactive feedback loops, in order to focus attention where it matters the most
- Revision and amendment of QOS frameworks to reflect the current technologies and networks
- Combination of network and drive test probes for better results
- Increase in Unscheduled monitoring exercise

THANK YOU