

# ITU Workshop on QoS and QoE of Multimedia Applications and Services

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## QoS/QoE Framework for the transition from network oriented to service oriented operations

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# INTRODUCTION

- This presentation focuses on supplement E.SUPPL.FTSO ( ITU-T suppl. E 800 series Supplement 10)
- The supplement provides the basis of the SQM & CEM, related KPIs for supporting operations within the SOC
- Scope of work: E.SUPPL.FTSO supplement:
  - Provides the framework for SOC built on SQM functions & solutions and CEM – aware operations for converged networks & services.
  - Identifies KPIs related to SQM, QoE and Performance for supporting operations within SOC environment.

# SERVICE OPERATION CENTER CONCEPT

- Before, to understand consumer experience was not very important to CNPs & CSPs;
- CNPs & CSPs were focusing more on measuring network related KPIs (e.g: bandwidth) than consumer experience related parameters.
- SOC concept is the key for service and user centric operation transformation.
- SOC enables better service quality experience and operational effectiveness
- Two concepts adopted in SOC are:
  - CEM
  - SQM

# CEM AND SQM CONCEPTS

- Customer experience management (CEM): is the approach designed to focus on procedures and methodology to satisfy the service quality needs of each end-user
- Service Quality Management (SQM): is the process of monitoring and maintaining an acceptable level of quality for end-to-end services delivered to an individual or a group of customers.

# CEM AND SQM TOGETHER

- Integration of SQM and CEM system adds the customer dimension to the service assurance process. With this, operators are able to detect the customers affected by service quality issues in order to resolve the detected problem.
- Accordingly, SQM can send alerts to network management systems to fix service performance issues based on customer value, SLA, location or any other customer insight or metric.

# KEY PARAMETERS RELATED TO SQM AND CEM

- Key parameters related to SQM and CEM for supporting operations within environments of SOC:
  - Technical parameters: Voice service: Perceived call drop rate, call success rate & voice quality rate
  - Non-Technical: Service provisioning / activation time, Service availability / Uptime (for all users), Fault Repair / Restoration time, Customer Complaint Resolution

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