SOCRATES QoS Optimisation: An Introduction

Neil Scully

Vodafone Group R&D

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Outline

- QoS optimisation in SOCRATES and NGMN

- Operator policy

- QoS optimisation use cases

QoS optimisation in SOCRATES and NGMN

- Aim of these slides is to highlight how the SOCRATES activities relate to the NMGN QoS optimisation topic

- Definitions used in SOCRATES:
  - Quality of Service (QoS)
    - Throughput, packet delay, etc.
  - Grade of Service (GoS)
    - Call blocking ratio, call dropping ratio, etc.
- Alternative definition is to consider GoS a sub-set of QoS

- QoS optimisation can be approached from different levels:
  - High-level: Setting QoS requirements
  - Mid-level: Managing QoS
    - Operator policy
  - Low-level: Optimising QoS
    - Use case solutions

Operator policy

- Determining the desired outcome of the QoS optimisation is not an easy task for an operator. Potential trade-offs are:
  - Mean throughput v. cell edge throughput
  - Blocked calls v. dropped calls
  - GoS v. QoS
  - Mean throughput, minimum throughput, peak throughput
- Achieving the desired outcome of the QoS optimisation is not an easy task for a SON algorithm
- Partially addressed by the use case presentations today, but also an ongoing activity in SOCRATES

QoS optimisation use cases

- Many use cases have an impact on QoS and GoS

- SOCRATES presentation will consider two use cases that are not covered by other NGMN OPE sub-topics
  - Admission control parameter optimisation
  - Packet scheduling parameter optimisation

- SOCRATES presentations consider potential for using SON to achieve QoS and GoS requirements