

5G transport network benchmarking

draft-contreras-bmwg-5g-02

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Motivation and draft scope

- Motivation
 - 5G is being gradually deployed by operators
 - It is then relevant to have a good basis of benchmarking solutions
- Scope
 - Overview available solutions and define guidelines to assist on the benchmarking of 5G transport networks
 - Identify gaps that could require further work
 - Provide guidelines on 5G transport Networks benchmarking

Updates from -00 version (1/2)

- Discussion on KPIs for assessment of technologies
 - Control and management plane KPIs
 - Leveraging on the concept of IETF Network Slice controller as being proposed by TEAS WG and outcomes from RFC8456 on SDN controller benchmarking
 - Performance, scalability, security, reliability, etc
 - Data plane KPIs
 - Focus on existing measurable SLOs: bandwidth, latency, jitter, etc
 - Consider other data-plane related issues specific to 5G such as e.g. the capability of isolation

Updates from -00 version (2/2)

- <----- 5G E2E Network Slice -----> Consideration <----> RS -----> <- CS -> <--- INS 3 ---> <-- INS 4 --> <-- INS 1 --> <--- INS 2 ---> of topologies for RAN benchmarking RU | : FN : | DU | : MN : | CU | : : TN1 : | Core | :TN2 : ----| : : |----| : : |-----| : : |-----1..... 1 1...... :...
- Link with the concept of IETF Network Slices being defined in TEAS WG

Other related initiatives

- New ETSI INT work items for E2E testing and validation of vertical applications over 5G and beyond Networks
- Ongoing activity in ORAN for testing of fronthaul / midhaul / backhaul networks

Next steps

- Collect feedback / comments from the WG
 - Interested people is invited to participate and provide inputs/views
- Keep working on the draft for identifying the requirements and characteristics that 5G imposes in each of the subjects of interest
- Prepare a new version for IETF#110