

ITU Sync Simulation Liaison Request

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IEEE 1914.1 TF



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IEEE 1914
Next Generation Fronthaul Interface
Jinri Huang, huangjinri@chinamobile.com

ITU Sync Simulation Results Request

Date: 2017-06-28

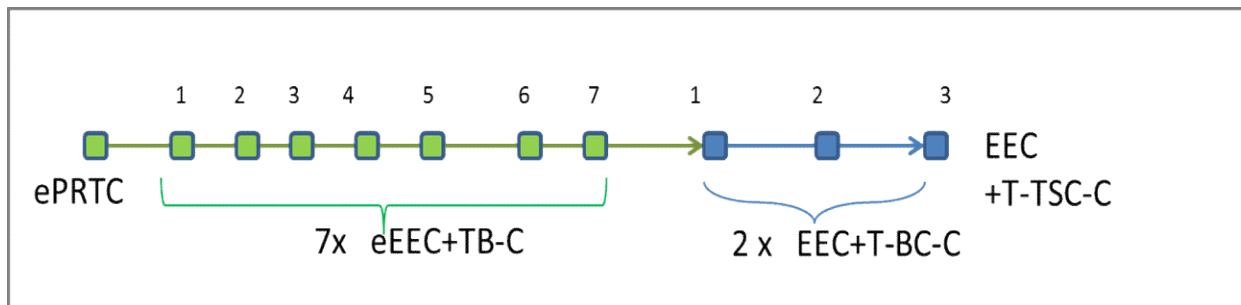
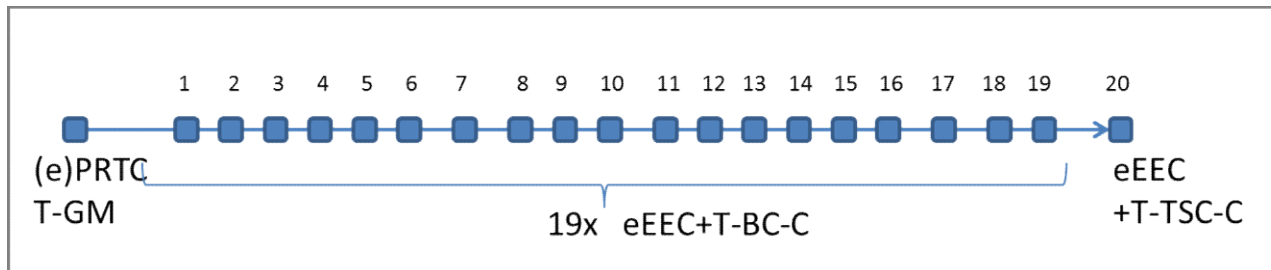
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ITU-T SG15/Q13 Contribution

- At the June 2017 ITU-T meeting, a contribution (C-0259) showed Time Alignment Error simulation results for a fronthaul-like network
- The Hypothetical Reference Model (HRM) uses:
 - ePRTC (enhanced Primary Reference Clock)
 - eEECs and EECs (enhanced or regular Ethernet Equipment Clocks)
 - T-BC-C (Class C Telecom Boundary Clocks)
 - T-SC-C (Class C Telecom Slave Clock)
 - “Class C” specs are still not standardized, but may become:
 - $\pm 5\text{ns}$ max static error
 - $\pm 5\text{ns}$ max dynamic error

HRMs simulated



Contribution Results

- Results:
 - Results are given for a 20-hop network (using eEECs) and a 10-hop network (using a mix of eEECs and EECs)
 - Results are given for timestamping granularities of 8ns, 4ns, and 2ns
 - Results showed that the TAE peaked around 45ns and decreased monotonically with improved timestamp granularities
- IEEE 1914.1 can reference these HRMs and these results (and those of future simulations) to define its network and nodal synchronization requirements

Motion # _____

- Send Liaison to SG 15 Q13 to ask for access to contribution C-0259 from the June 2017 ITU meeting
- Mover: Richard Tse
- Seconder:
- Yes:___ No:___ Abstain:___