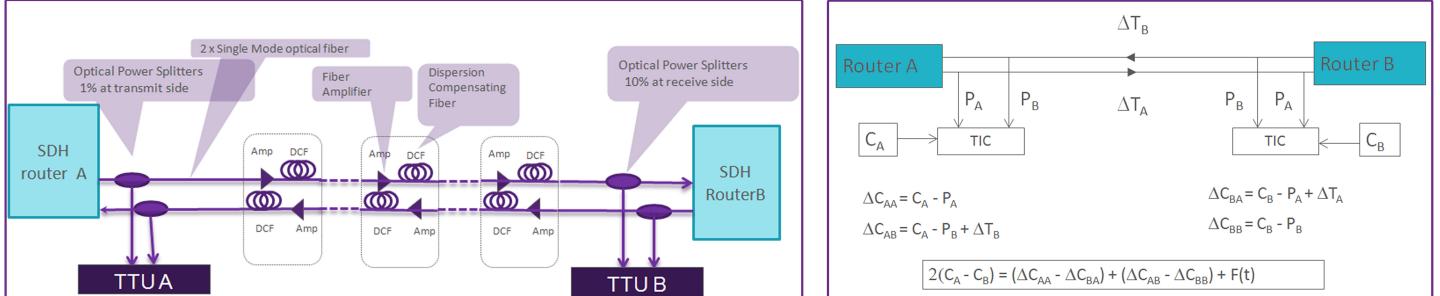
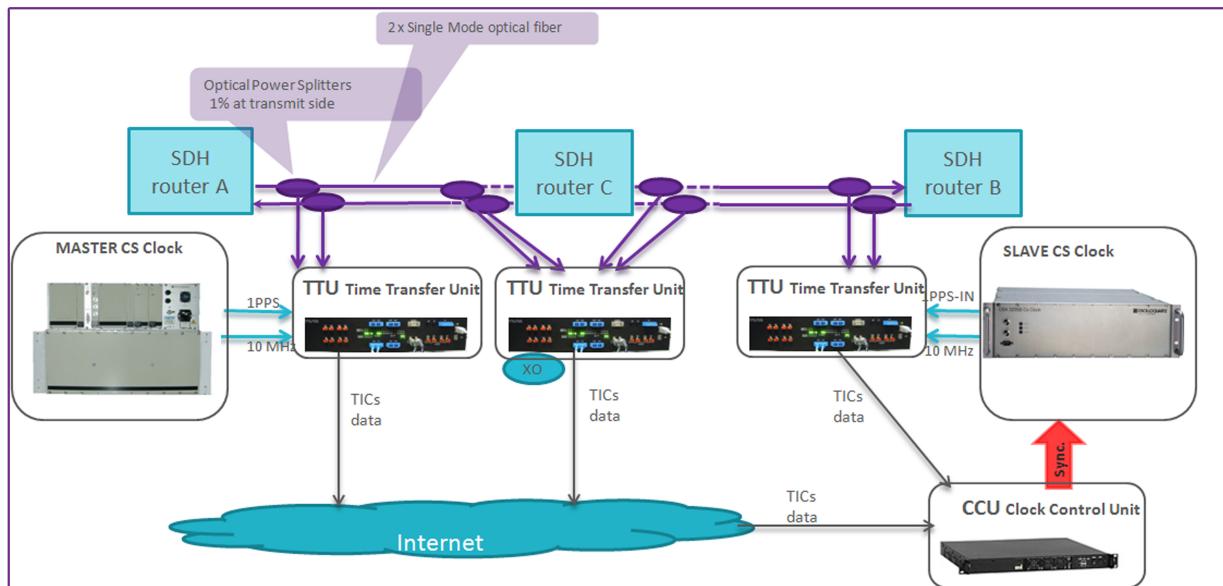
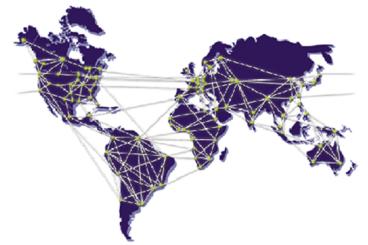


Nano second level Cesium clock synchronization Over Optical Fiber link



Two Way Time Transfer over Fiber (TWTT-F):

- Time Stamp STM64 frame header against remote clocks at 64 ps accuracy
- Calculate time difference between remote clocks
- Lock slave clock to master clock

Benefits:

- Fully resilient to jamming
- Nanosecond level accuracy
- Over 1000+ km
- No SDH/SONET traffic generated (passive listening)

TTU: Time Transfer Unit:

- Detection of STM64 headers
- Time stamping against external clock at 64 ps accuracy

CCU Clock Control Unit:

- Calculation of Remote clocks time difference based on TTUs time stamps
- Locking of Local Slave Clock to Remote Master Clock
- Management of Alarm / Status

Oscilloquartz TWTT-F is based on research results of "SP Technical Research Institute of Sweden Measurement Technology" and "InformAsic A.B. (Sweden)".