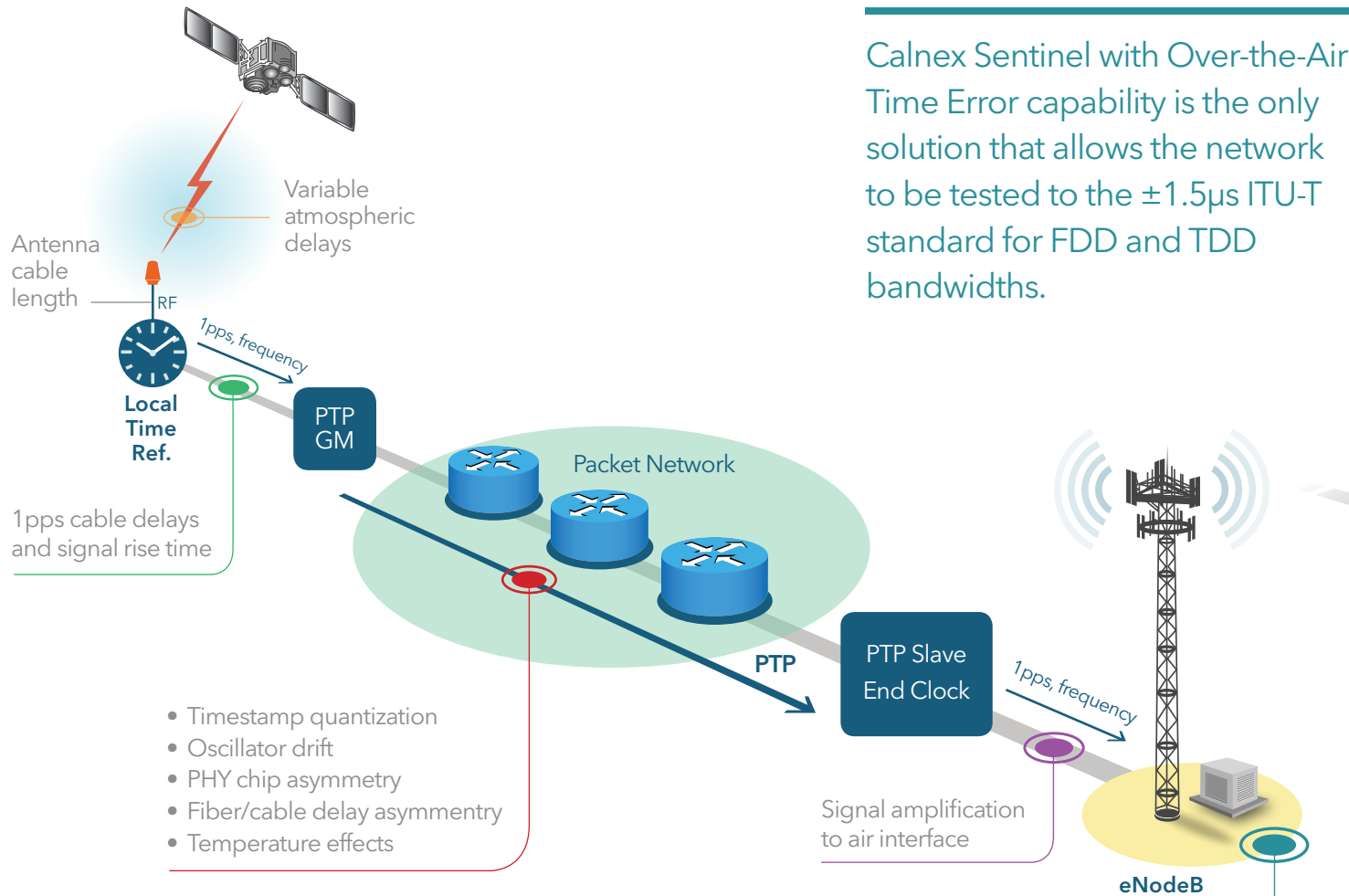


# Sync performance on the air interface is finally revealed.



Calnex Sentinel with Over-the-Air Time Error capability is the only solution that allows the network to be tested to the  $\pm 1.5\mu\text{s}$  ITU-T standard for FDD and TDD bandwidths.

Small cells such as Pico, Femto and Macro cells don't have 1pps outputs so there's no way to measure Time Error other than over the air with the Calnex Sentinel.

- Simultaneously measure with:
- Input/output PTP 2wayTE/pktSelected 2wayTE
  - Output 1pps TE
  - Input/output SyncE Wander and ESMC decode

The 3GPP standard of  $3\mu\text{s}$  phase difference between two air interfaces keeps the wireless network synchronised and all services working as expected. But the network is not perfect and there are many impairments that can have a major impact on timing and synchronization.

ITU-T G.8271.1 and G.8271.2 specify  $\pm 1.5\mu\text{s}$  in sync accuracy at the network output on the air side (the customer interface).

