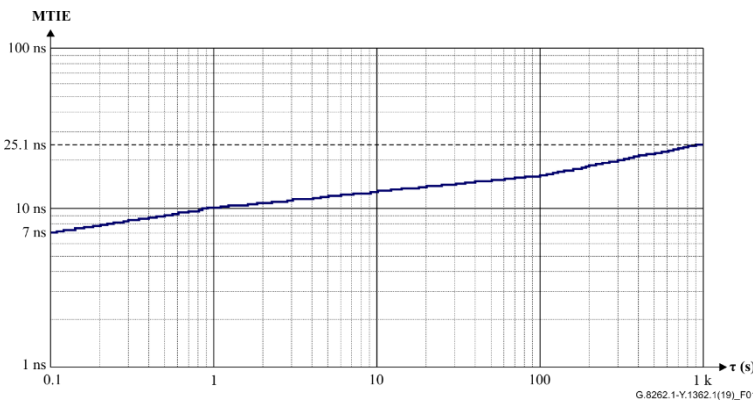
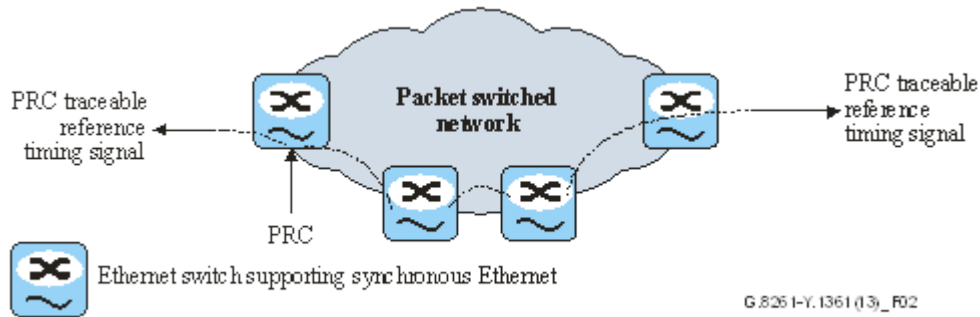
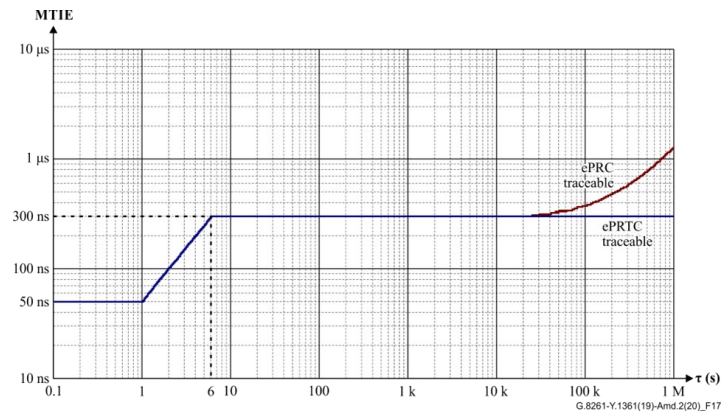


- Architecture and network limits related to the distribution of frequency synchronization over the physical layer.
- Specification of Clocks to be used in the sync PHY distribution chain



enhanced Clock specification



enhanced Network limit

1. ITU-T G.8261 – Timing and synchronization aspects in packet networks

Recommendation ITU-T G.8261 defines frequency synchronization aspects in packet networks. It specifies the maximum network limits of jitter and wander that should not be exceeded. It specifies the minimum equipment tolerance to jitter and wander that should be provided at the boundary of these packet networks at TDM and synchronization interfaces. It also outlines the minimum requirements for the synchronization function of network elements. In particular, it defines the network limits applicable to the distribution of frequency synchronization over the physical layer (e.g., via synchronous Ethernet).

2. ITU-T G.8264 -Distribution of timing information through packet networks

Recommendation ITU-T G.8264 outlines aspects of distribution of timing information through packet networks and initially focuses on Ethernet networks. This Recommendation specifies the synchronization status message (SSM) protocol and formats for use with synchronous Ethernet

**3. ITU-T G.8262 - Timing characteristics of synchronous equipment slave clock;
4. ITU-T G.8262.1 - Timing characteristics of enhanced synchronous equipment slave clock**

Recommendations ITU-T G.8262 and G.8262.1 outline requirements for timing devices used in synchronizing network equipment that uses the

physical layer to deliver frequency synchronization. G.8262 focuses on the requirements for the synchronous Ethernet equipment clock (EEC) and the synchronous OTN equipment clock (OEC) ; G.8262.1 focuses on the requirements for the enhanced synchronous Ethernet equipment clock (eEEC) and the enhanced synchronous OTN equipment clock (eOEC). These Recommendations define the requirements for clocks, e.g., clock filtering bandwidth, frequency accuracy, holdover and noise generation.

