

Q13 Standards Updates

IETF 79 / TICTOC

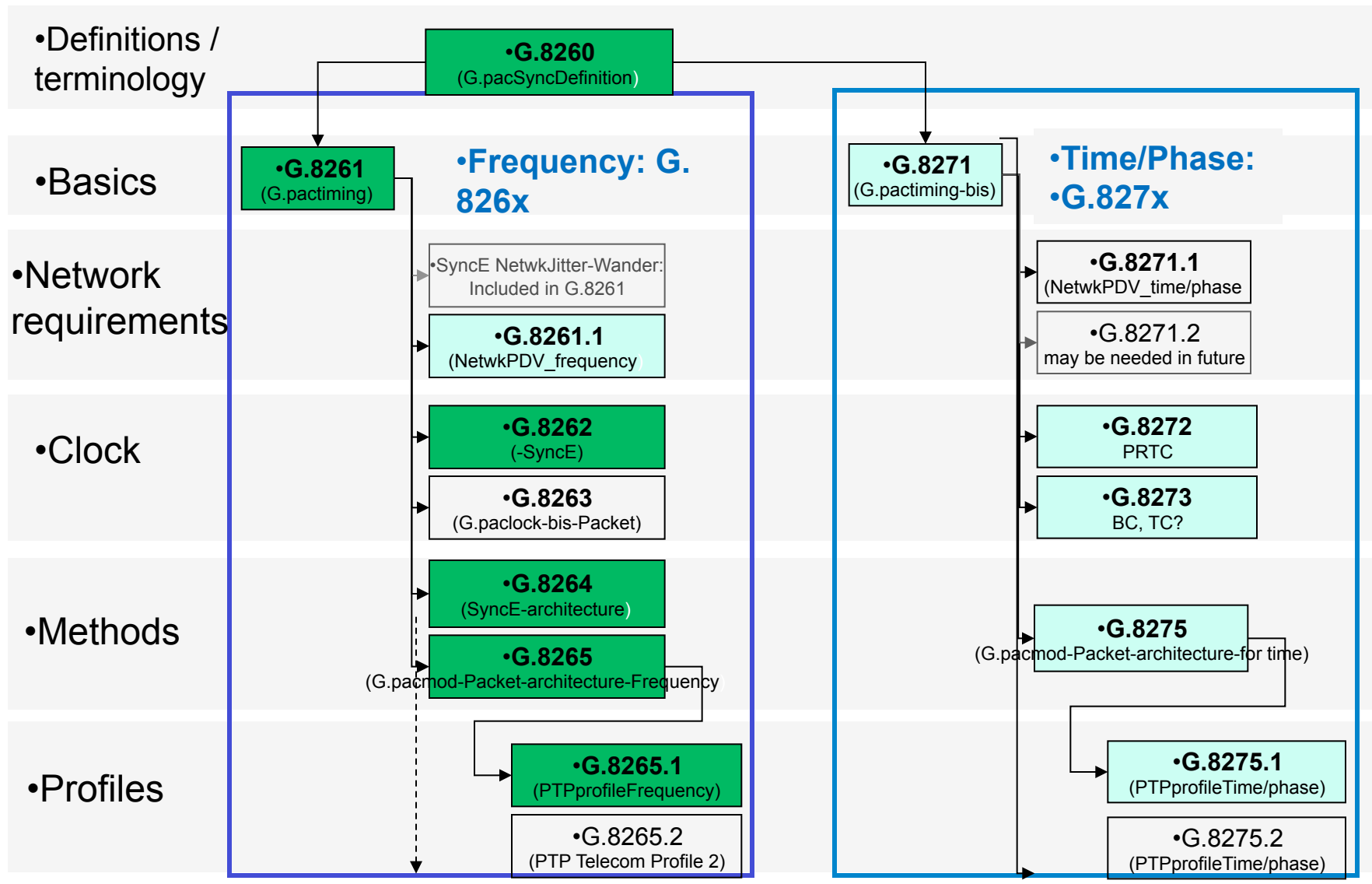
November 2010

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Status of Q13 standards in November 2010

•agreed •ongoing



Recommendations recently consented

All the recommendations consented in June 2010 have been finally approved:
G.8260, G.8261 Amd1, G.8262 Rev, G.8264 Amd1, G.8265, G.8265.1, G.8251 Rev

Transport of frequency: remaining items

G.8260 (2010) Definitions and terminology for synchronization in packet networks:

- To be complemented with PDV metrics definition

G.8261.1: New recommendation addressing network PDV

- It will start in December 2010
- Its goal is to characterize networks performance by means of PDV metrics, (depends on the progress of G.8260 on metrics)

Transport of phase and time: relevant recommendations

G.8271 defines the Network requirements

G.8272 defines the Primary Reference Time Clock (PRTC)

G.8273 defines clocks for Boundary Clock, etc

1588 profile

G.8275 defines the network architecture

G.8275.1 defines the protocol based on PTP

Transport of phase and time: status

- **G.8271 (network requirements)**
 - contributions discussed at the October meeting addressed: Network limits, Hypothetical Reference Model , Noise accumulation model, Analysis of noise sources, Evaluation of 2 network scenarios (Transport of frequency by the physical layer, i.e SyncE, Transport of frequency via PTP), Network protection, requirements
 - Expected consent date: November 2011
- **G.8272 (PRTC)**
 - At the October meeting progress were done on the definition of the clock giving reference to the time distribution chain
 - Expected consent date: November 2011
- **G.8273 (Specification of the clock performance of a boundary clock)**
 - This specification is needed in addition to IEEE 1588 specification to specify a boundary clock for use in telecom networks as IEEE 1588 specifies « only » a protocol.
 - It will address: Accuracy, Noise generation, Holdover, Etc
 - Expected consent date: November 2011

Telecom profile for the transport of phase and time

- **General architecture choices agreed**
 - Hop by hop (full support of the network) no end to end architecture
 - First profile will address BC
 - TC under evaluation / layer violation
- **G.8275 (Telecom profile-network architecture)**
 - Independence or not of the frequency and time planes
 - Analysis of Boundary and Transparent clocks
 - Effect on the network architecture
 - Choice of clock for the first profile
 - Evaluation of architecture based on 2 network scenarios
 - Transport of frequency by the physical layer, i.e SyncE
 - Transport of frequency via PTP
 - Network protection architecture
 - Analysis of asymmetry effect and ways to overcome it
 - Expected consent date: November 2011
- **G.8275.1 (telecom profile- protocol definition)**
 - Several aspects being discussed: Choice of clock, One step-two step, Unicast vs multicast, PTP mapping, messages, messages rates, Protection mechanism, PTP domains, Management aspects, Security aspects
- **Expected consent date: Novembre 2011**