
Requirements for Edge-to-Edge Emulation of TDM Circuits over Packet Switching Networks

draft-riegel-pwe3-tdm-requirements-00.txt

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Motivation

- ❑ Ongoing discussion on TDM emulation protocols
- ❑ No agreed statement “what shall be accomplished”
- ❑ *The goal for the document:*
Establish common ground for discussions about TDM emulation protocols by defining common understanding
- ❑ Joint work:
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Results

- ❑ Document extends PWE3-REQ especially for TDM emulation and is aligned with PWE3-FW and PWE3-LAYER.
- ❑ Agreement on emulated TDM services to be regarded (including references)
 - Structured TDM Circuits
 - ↙ *Transparent N*DS0, 1 <= N <= 31 as described in [G.704].*
 - Unstructured TDM Circuits
 - ↙ *Unstructured E1 as described in [G.704].*
 - ↙ *Unstructured T1 (DS1) as described in [G.704].*
 - ↙ *Unstructured E3 as defined in [G.751].*
 - ↙ *Unstructured T3 (DS3) as described in [T.107].*
- ❑ Agreement on basic set of requirements for TDM emulation
 - still many details open; see e.g. following slide

Open issues

- ❑ More terminology necessary for TDM emulation?
 - Current I-D just lists “CE-/PSN-bound”, “IWF”, “CAS”, “CCS”
- ❑ Detailed specification of Channel-Associated Signaling (CAS)
- ❑ Detailed specification of Common Channel Signaling (CCS)
- ❑ Network Synchronization Reference Model
 - ↙ *Synchronous Network scenarios*
 - One Synchronous Network
 - Synchronous “Carrier” of “Carriers”
 - ↙ *Asynchronous “Carrier” of “Carriers” scenario*
 - Section needs more explanation and common wording.
- ❑ Out-of order delivery: Packets SHOULD or MAY reordered?
- ❑ Are requirements missing?

How to proceed?

- ❑ More input from others is very appreciated.
- ❑ Should requirements for SONET/SDH emulation be added?
- ❑ How much should be added on network synchronization reference model?
- ❑ Authors meet during the week to clarify open issues and define further enhancements.
 - Are others interested to come in?
- ❑ Questions to the working group:
 - Is the attempt worth the effort?
 - Is it leading in the right direction?
 - Should it become working group topic?