P802.3ae Serial Jitter+ Test Pattern Ad-Hoc Summary

Ben Brown

Ad-Hoc Chair

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Participants

- Don Alderrou
- Piers Dawe
- Gareth Edwards
- John Ewen
- Steve Haddock
- Tom Lindsay
- Petar Pepeljugoski
- Anthony Sanders
- Pat Thaler

- Ben Brown
- Schelto van Doorn
- Jennifer Evans
- Bill Gintz
- Dawson Kesling
- Peter Ohlen
- Bill Reysen
- Jonathan Thatcher
- Tim Warland

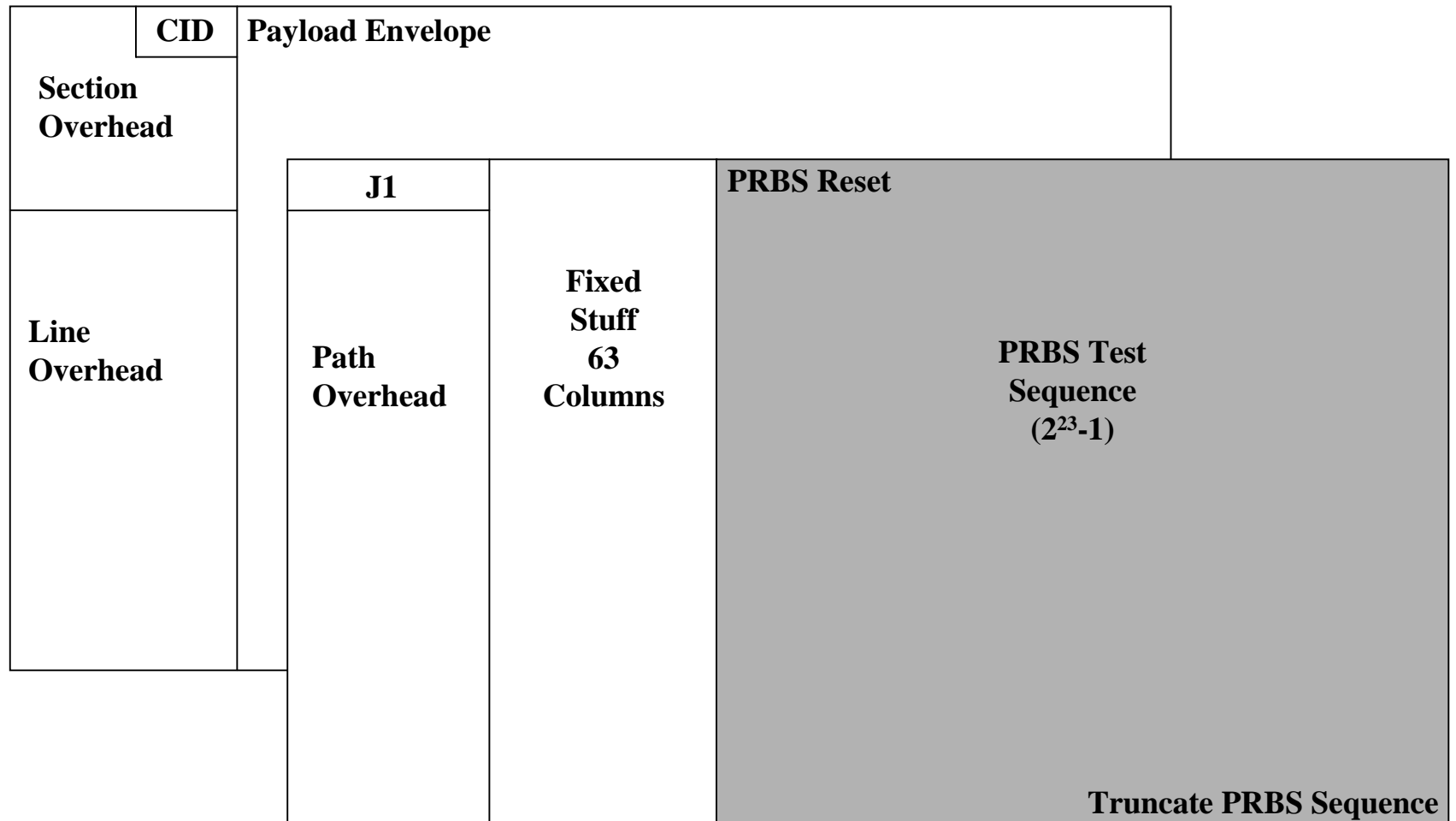# Agreed to at Last Meeting

- Provide a WAN methodology:
  - Square Wave
  - Pseudo-random using scrambled SONET frame with CID and constant payload

- Provide a LAN methodology:
  - Square Wave
  - Pseudo-random using seeds and PCS scrambler

- These patterns are described in D3.1

WAN Changes

- Tim Warland has proposed a modified WAN Pseudo-random pattern (warland_1_0701.pdf)
  - Use a $2^{23}-1$ PRBS as payload
    - PRBS resets at start and truncates at end of each SONET frame
    - Desire for bit-based (not SONET framed) tester
  - Pattern is 2 SONET frames long
  - CID in last 9 bytes of 192-byte Z0
    - All zeros in frame #1 / All ones in frame #2
  - J1 is provisionable to stress CID

New Test Signal Structure (TSS)

First Frame (CID = 0s) / Second Frame (CID = 1s)

CID	**Payload Envelope**	
Section Overhead		
	J1	**PRBS Reset**
Line Overhead	**Path Overhead**	**Fixed Stuff 63 Columns**	**PRBS Test Sequence ($2^{23}-1$)**
		Truncate PRBS Sequence

LAN Seeds/Data Inputs

- John Ewen provided 4 LAN seed/data input combinations (ewen_1_0701.pdf)
  - Running Disparity
  - Baseline Wander
  - Transition Density

Pattern	Data Input	Seed [57:0]
A	00s	0x3C8B44DCAB6804F
B	00s	0x3129CCCCF3B9C73
C	00s	0x3CA21447ACD4A8A
D	LF	0x34906BB85A38884

Continuing work

- Get the new WAN methodology into the draft

- Get testing on the new WAN pattern and verify the starting point for the PRBS and J1 byte

- How is BER measured for WAN pattern?
  - B1/B2/B3 bytes?
  - Direct byte comparison?

- Get testing on the 4 LAN patterns