

EPoC PCS Status Update (Clause 101)

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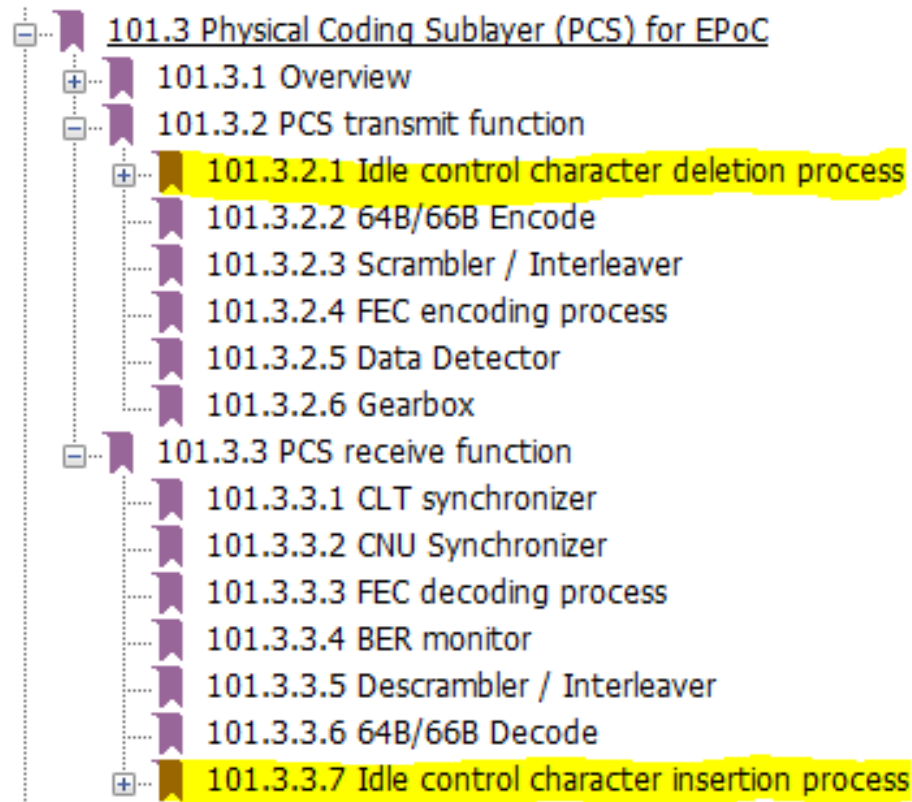
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Clause 101 Outline

- [-] 101. Reconciliation Sublayer, Physical Coding Sublayer, and Physical Media Attachment for EPoC
 - [-] 101.1 Overview
 - 101.1.1 Conventions
 - 101.1.2 Constraints for delay through RS, PCS, and PMA
 - [-] 101.2 Reconciliation Sublayer (RS) for EPoC
 - 101.2.1 Overview of EPoC RS operation
 - 101.2.2 Summary of major concepts
 - [+] 101.2.3 10 Gigabit Media Independent Interface (XGMII)
 - [+] 101.2.4 Functional specifications for multiple MAC instances
 - [-] 101.3 Physical Coding Sublayer (PCS) for EPoC
 - [+] 101.3.1 Overview
 - [+] 101.3.2 PCS transmit function
 - [+] 101.3.3 PCS receive function
 - 101.4 EPoC_PMD_Name PMA
 - 101.5 Power-saving capabilities
 - 101.6 TimeSync capability
 - [-] 101.7 Protocol implementation conformance statement (PICS) proforma for Clause 101,
 - 101.7.1 Introduction
 - [+] 101.7.2 Identification
 - 101.7.3 Major capabilities/options
 - [+] 101.7.4 PICS proforma tables for clause title

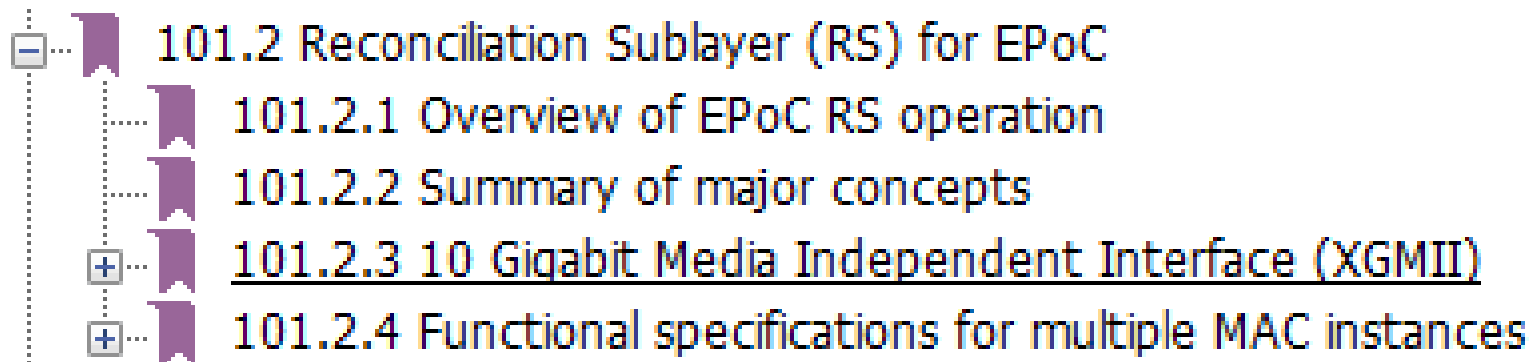
Accepted baselines (a)

- hajduczenia_3bn_01_0513.pdf covering technical decisions #43 and #45 (Idle Insertion and Idle Deletion processes)



Accepted baselines (b)

- hajduczenia_3bn_03_0513.pdf covering the definition of EPoC RS
 - Contribution into 101.2 was fairly complete
 - All subclauses within 101.2 are provided for and are ready for commenting

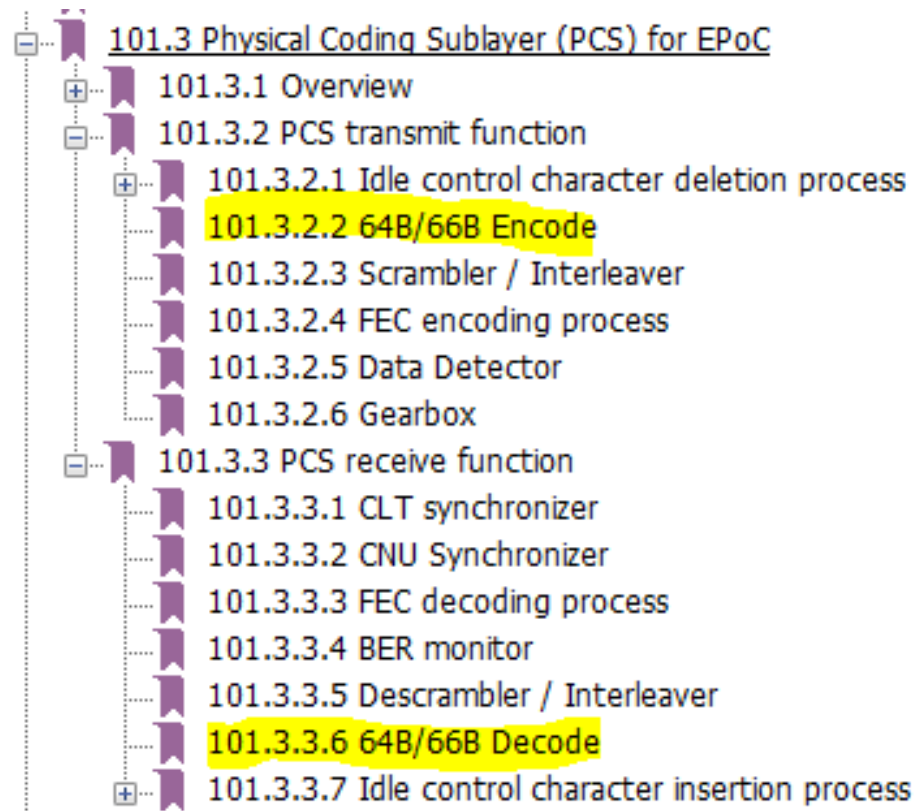


A table of contents for the document '101.2 Reconciliation Sublayer (RS) for EPoC'. The table is presented in a tree view with a vertical dotted line on the left. The root item is '101.2 Reconciliation Sublayer (RS) for EPoC', which is expanded to show four subclauses: '101.2.1 Overview of EPoC RS operation', '101.2.2 Summary of major concepts', '101.2.3 10 Gigabit Media Independent Interface (XGMII)', and '101.2.4 Functional specifications for multiple MAC instances'. The subclause '101.2.3 10 Gigabit Media Independent Interface (XGMII)' is underlined. Each item is preceded by a purple bookmark icon, and the expanded items have a small square icon with a minus sign to their left.

[-]	101.2 Reconciliation Sublayer (RS) for EPoC
	101.2.1 Overview of EPoC RS operation
	101.2.2 Summary of major concepts
[+]	<u>101.2.3 10 Gigabit Media Independent Interface (XGMII)</u>
[+]	101.2.4 Functional specifications for multiple MAC instances

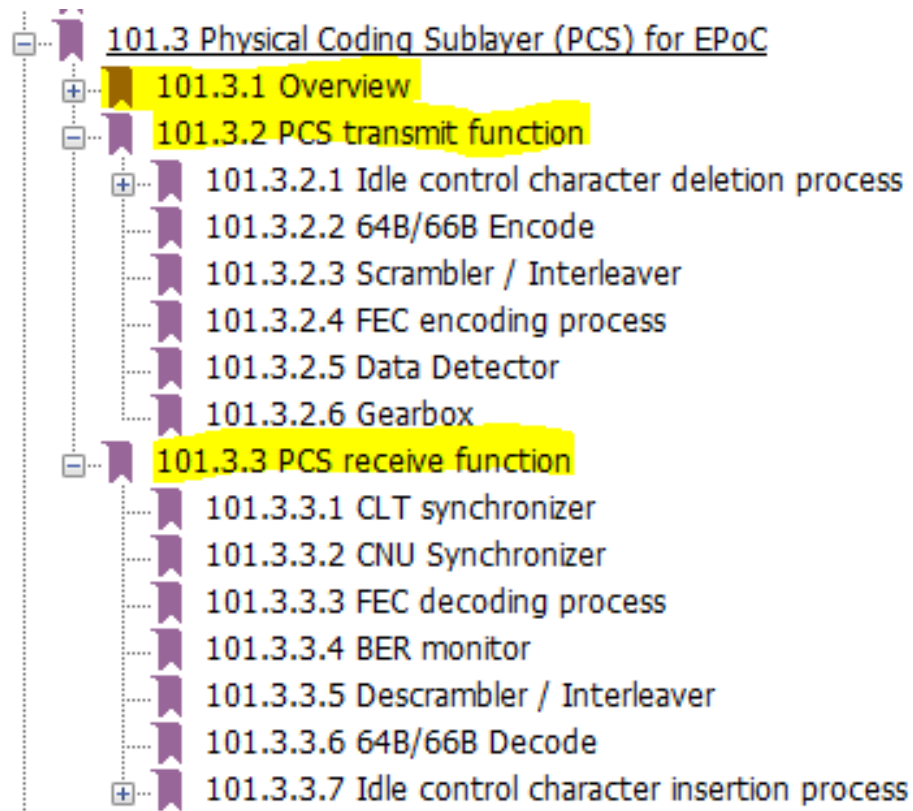
Accepted baselines (c)

- hajduczenia_3bn_04_0513.pdf covering the 64B/66B encode and decode processes (technical decision #20)



Accepted baselines (d)

- hajduczenia_3bn_06_0513.pdf covering the introduction text into 101.3 (PCS) and description of transmit and receive functions



Incoming contributions

- Here is the list of potential PCS-related baselines at this meeting:
 - NONE so far
- Focus on structure of provisioning registers
 - Discussion on registers de-focuses people from discussion on what actually needs to be done at this time – focus on PCS design first
 - Register structure can be figured out easily once we know how PCS works – that is what we do not know right now !!!

Missing contributions

- Missing bit-ticket items
 - FEC (location, type, operation, etc.)
 - Data detector in CNU and CLT
 - Gearbox in Tx direction
 - Scrambler / Interleaver
 - Synchronizer in CNU and CLT
 - BER / FER monitor
 - TimeSync capability
 - Power Saving capability
- Missing discussion on aligning TDD and FDD PCS definitions into a single clause material (?)

Summary

- A number of areas within EPoC PCS still requires direct contributions and technical decisions:
 - See previous slide and email discussion for more details on this topic
- Some baseline proposals were accepted at the last meeting
 - The snowball of contributions for PCS is still to start ...
- Configuration parameters (registers, etc.) are missing at this time (will be developed once PCS structure is more settled)
- PICS for PCS will be developed once PCS structure becomes more consolidated