

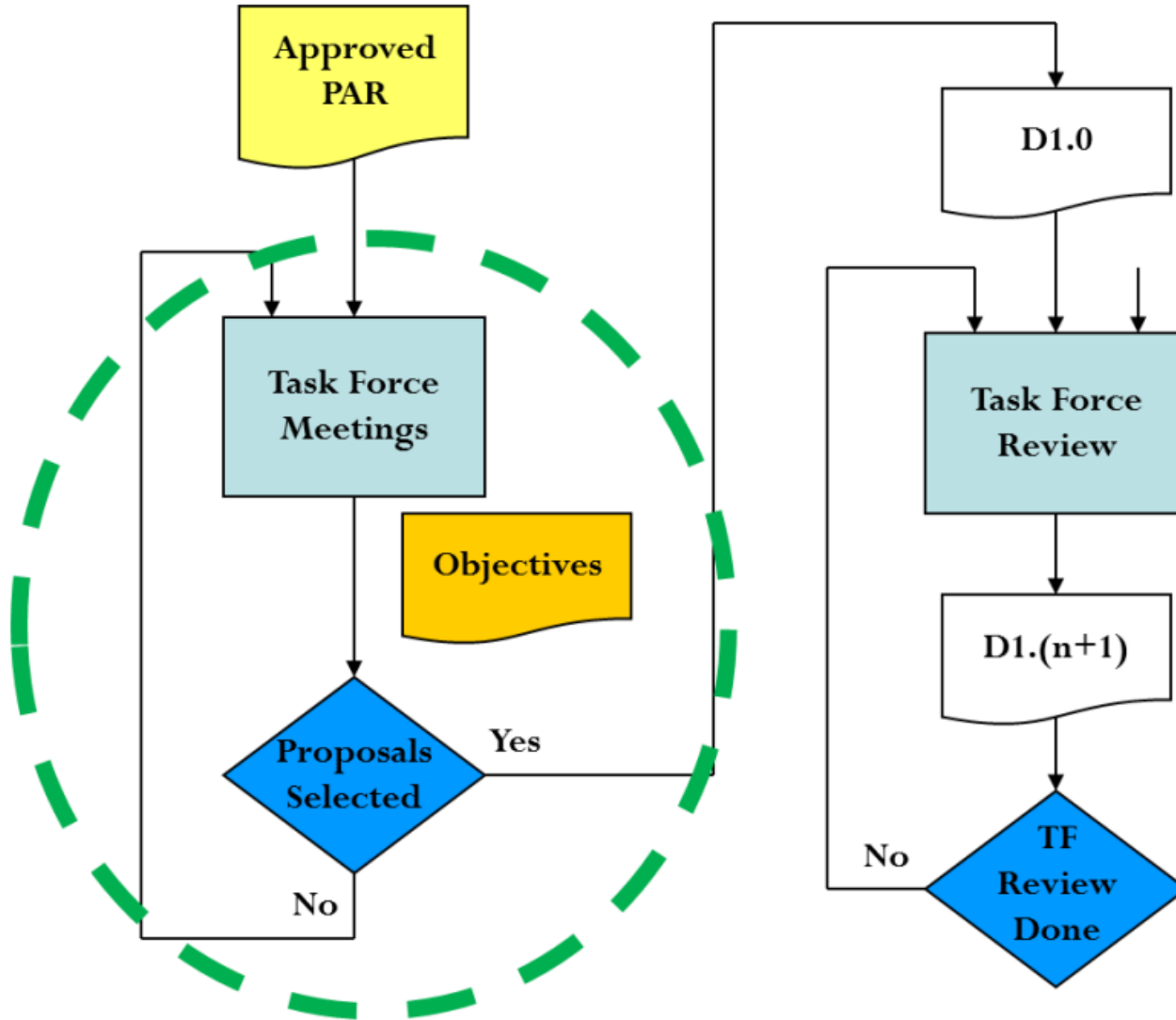
# Editor's Report: P802.3dg draft 0.1

Yan Zhuang (Chief Editor), Huawei Technologies  
Valerie Maguire (Editor), Copperopolis  
George Zimmerman (Chair), CME Consulting, Inc.  
IEEE P802.3dg Task Force September 2024

# Introduction

- The way to Draft 1.0
- Review of the adopted baselines
- Introduce the draft outline and indicates where baselines are needed
- Discussion on the MII clause amendment

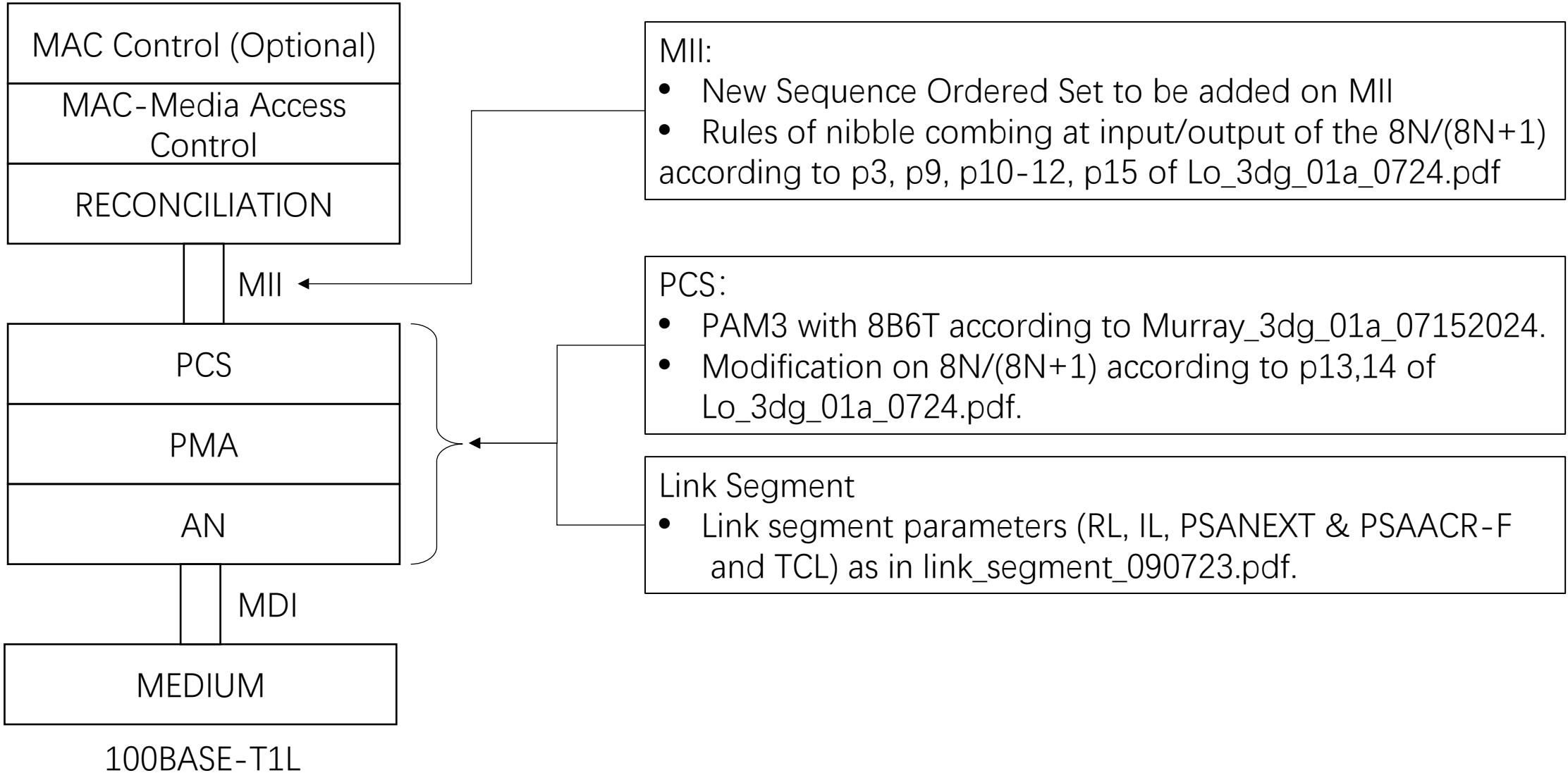
# The Road to Draft 1.0



We've been discuss on link segments, PHY modulation and PCS for a period and adopted several basslines.

But more baselines are needed to get D1.0.

# Adopted Baselines till now



# Clauses to amend

CL #	Clause title	Baseline status	Notes
1	Introduction	NA	new definitions, abbrs. etc.
22	Reconciliation Sublayer (RS) and Media Independent Interface (MII)	Adopted new Sequence Ordered Set on MII and Rules of nibbling $8N/(8N+1)$ encoder/decoder	A new MII type for 100BASE-T1L for this or add the sequence ordered Set to the existing MII clauses?
30	Management	NA	Updated according to the 100BASE-T1 PHY definition.
45	Management Data Input/Output(MDIO) Interface	NA	Updated according to the 100BASE-T1 PHY definition.
78	Energy-Efficient Ethernet (EEE)	NA	Stay still?
98	Auto-Negotiation for single differential-pair media	NA	We decide to have one 100BASE-T1L PHY with two modes, switch or pre-configured? How does it work? By AN or by configuration?
104	Power over Data Lines (PoDL) of Single Ethernet	NA	Consider power class for intrinsically safe?

# A new Clause for 100BASE-T1L PCS/PMA (CL199)

- PCS sublayer
  - Adopted PAM3 8B6T,  $8N/(8N+1)$  block code with  $N=2$  for LL mode and  $N=8$  for Burst error mode with a RS FEC RS(128,122,3,8) protection.
  - Adopted modification on  $8N/(8N+1)$  encoding/decoding for dribble nibble
  - Scramble and OAM bit details to be defined...
  - More detailed PCS baseline should be reviewed...
- PMA sublayer
  - Need proposal and baselines...
- PMA electrical specifications
  - Need proposal and baselines
- Management interface
  - Need baselines
- Link segment characteristics
  - Adopted RL, IL, PSANEXT & PSAACR-F and TCL specs
- MDI specification
  - Need proposals and baselines...
- Environmental specifications (if any)
- Delay constraints
- PICS

# Need decision on the MII enhancement

- We have adopted new Sequence Ordered Set on MII... and several new signals are discussed... the way to include the new SeqOS and potential new signals in the draft can be:
  1. Enhancements to clause 22 (existing RS/MII)
    - however the problem might be impact on the legacy devices...
  2. A new clause or subclause in clause 22
    - New encodings might be added as well ...

# Summary

- We are still working on draft (D0.1) but still need more baselines to be agreed on.
- Encourage contributions on the missing parts as mentioned.
- We encourage contributors to provide technical concepts and presentations along with pointers to similar sections in 802.3 that the parameters might change!
  - With this, editors can draft text and adopted at subsequent meeting
  - It can highly speed up our draft progress!.
- Next Step:
  - D0.1 is targeted to post for preview before the next meeting
  - Format draft review will be started in the future, when the draft is more technical complete and all major technical decisions are taken.



**Thank you!**