



Two PoE chapters vs. 1: pro's and con's.
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Objectives

- To discuss and try to evaluate the need and benefits of:
 - One PoE chapter that address all PSEs and PD types or
 - Two PoE chapters: one for Type 1 /2 and one for Type 3 /4.

Main arguments why to separate to two chapters

- Now the type 1 and 2 is combined with Type 3 and 4: It is hard to read and understand due to insertions and deletions marks.
- Type 1, 2 PSE has to address all PDs
- More text that addresses Type and 3 and 4
- We will receive many comments during comment resolution
- We may break something in Type 1 and 2 when addressing Type 3 and 4
- PSE vendor that wants to do PSE Type 1 and 2 or PD Type 1 and 2 doesn't care of Type 3 and 4 so why he needs to read all Type 3 and 4 new material?

Why two chapters

- PSE vendor that wants to do PSE Type 1 and 2 or PD Type 1 and 2 doesn't care of Type 3 and 4 so why he needs to read all Type 3 and 4 new material?
- **On the other hand:**
 - PSE vendors need to pay attention when PD type 3 and 4 connected to Type 1 , 2
 - OR when PSE Type 3 or 4 connected to PSE Type 1 and 2
- PSE vendor need to know some T3 and Type 4 requirements
 - Other wise he may miss it..
- It is better that all relevant requirements will be located in one place for specific topic.
- **So better to keep one chapter for all Types.**

Why not separating—The practical reasons for one chapter

- PSE system vendors like clear spec that all needs are in one page if possible... OR one chapter, but not two.
 - All information regarding a topic is in one place.
 - Differences between types can be quickly understood
 - No need to jump from chapter to chapter
 - Multiport PSE vendor often need in the same box to have Type 1, 2 3 and 4 ports on the same box. It is helpful that all in the same place, less probability to do mistakes.
 - There are many cases that there are interaction between Type 3 or 4 and Type 1 and 2 requirements e.g. moving from 2P to 4P, from between classes, between different MPS requirements see Table 33-11 and 18 for example and more
 - During 802.3bt work with two chapters there is a risk that we break something in Type 1, 2 or Type 3 ,4 because we don't see all the picture since the picture is broken to two.
 - **So better to keep one chapter for all Types.**

Why not separating – Almost twice the pages with two chapters compared to one chapter

- Clause 33 contains
 - many parts that are required for all PSE and PD types.
 - Many parts that are not depend on PSE/PD Types
 - The main information is concentrated in Tables and drawings.
 - As a result, moving to two chapters will require almost twice the pages and LESS CLARITY
 - So better to keep one chapter for all Types.

Why not separating – less comments during WG ballot with one chapter

- With two chapters we have two standards to review
- We will have more comments... ←
- We will need much more time
- We need to verify and jump between the chapters that we didn't break something.
- The probability for mistakes will be higher
- End results:
 - Much more comments
 - Much more work
 - More delay for the project
- **WITH NO CLEAR VALUE → Stay with one chapter**

Why not separating - New spec reader test

- For new reader one chapter is better than two.
 - All information of specific topic is in one page.
 - No need to jump between chapters and see differences
 - Spec may not be clear, but not because Type 1 and Type 2 is there.
 - In most case Type 1 and 2 items are small fraction of the text/table/figure....
 - IEEE802.3-2012 COVERING TYPE 1 AND 2 WAS SHOWN TO NON POE EXPERT – IT WAS HARD TO UNDERSTAND SOME PARTS OF IT AT FIRST READING AND SECOND...AND STARTED GETTING IMPROVING WHEN CONTINUE TO LEARN THE SUBJECT ...AND THERE IS NO TYPE 3 AND 4 THERE.
 - We just need to do better job when we write the spec!
 - We will never be 100% perfect.
 - Always we can find somebody that will say that we could done better job.
- better to keep one chapter for all Types.**

Summary

- The presentation was about one chapter vs two chapters – Pros and Cons
- So what are the Pros for TWO chapter, we see all are Cons?
 - I still working on it to find what are they.
- Meanwhile: Little or non value with two chapters
- One chapter has significant advantages
 - When we finish the 802.3bt all insertion and deletion marks will be gone.
 - We may need a different sub clauses for Type 1/ 2 and 3/4 to clarify the differences, in most cases we do it.
- **Keep working with one chapter**

Discussion

THANK YOU