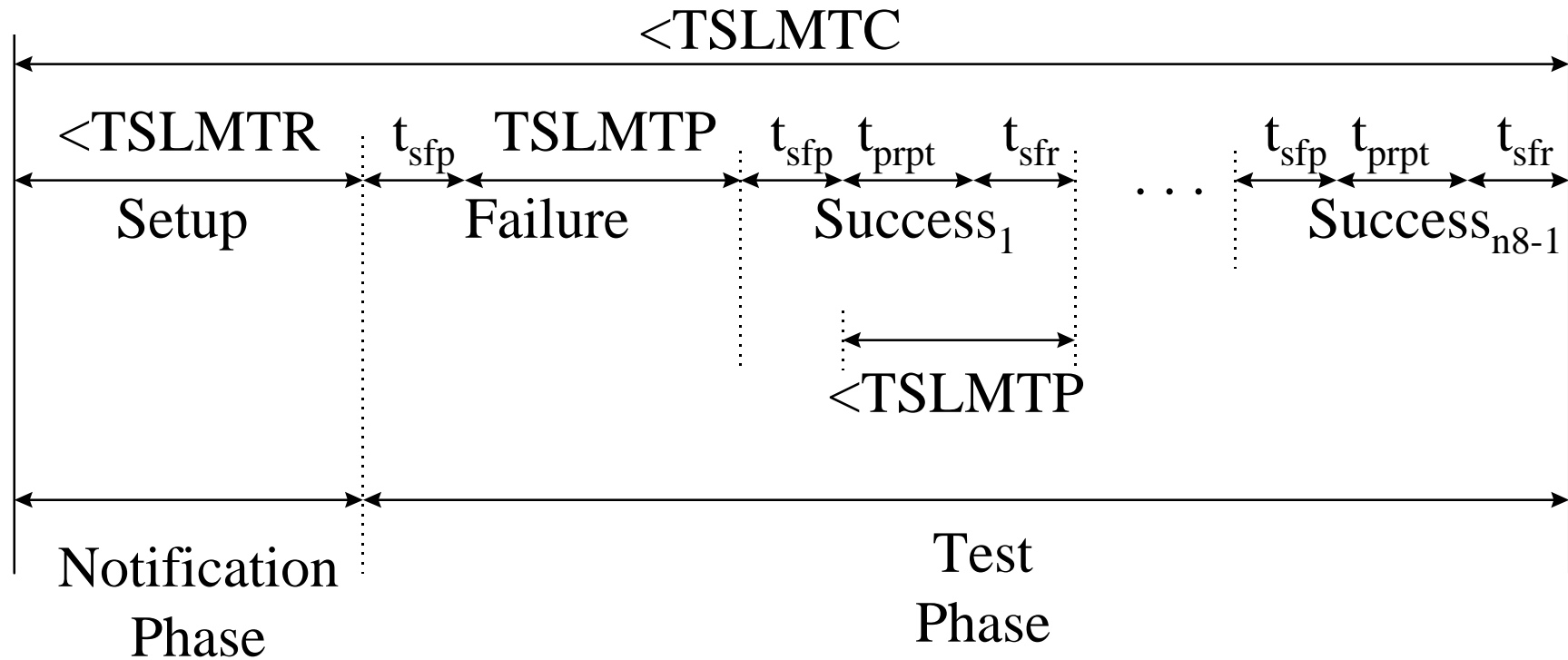


Lobe Media Test Timing

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Lobe Media Test Timeline



Timers, Times and other values

- TSLMTC (2.3s to 2.5s)
- TSLMTP (10ms to 30ms)
- TSLMTR (200ms to 250ms)
- n8 (1117 to 1123)
- t_{sfp} - Station Frame Prepare time
- t_{sfr} - Station Frame Reception/Parsing time
- t_{prpt} - C-Port Frame Repeat time

How much time do we have?

- Formulae:

$$\Rightarrow \text{TSLMTC} > \text{TSLMTR} + t_{\text{sfp}} + \text{TSLMTP} + (n8-1)(t_{\text{sfp}} + t_{\text{prpt}} + t_{\text{sfr}})$$

$$\Rightarrow \text{TSLMTC} - \text{TSLMTR} - t_{\text{sfp}} - \text{TSLMTP} > (n8-1)(t_{\text{sfp}} + t_{\text{prpt}} + t_{\text{sfr}})$$

$$\Rightarrow t_{\text{sfp}} + t_{\text{prpt}} + t_{\text{sfr}} < (\text{TSLMTC} - \text{TSLMTR} - \text{TSLMTP} - t_{\text{sfp}})/(n8-1)$$

- Worst case:

- TSLMTC=2.3s, TSLMTR=250ms, TSLMTP=30ms, n8=1123, $t_{\text{sfp}} \sim 0$

$$\Rightarrow t_{\text{sfp}} + t_{\text{prpt}} + t_{\text{sfr}} < 1.8\text{ms}$$

- Best case:

- TSLMTC=2.5s, TSLMTR=200ms, TSLMTP=10ms, n8=1117, $t_{\text{sfp}} \sim 0$

$$\Rightarrow t_{\text{sfp}} + t_{\text{prpt}} + t_{\text{sfr}} < 2.05\text{ms}$$

Conclusion

- Split budget between Station and C-Port
- Averaged across all the LMT frames
 - The Station has 0.9 ms to both prepare and transmit the LMT frame and receive and process the repeated LMT frame.
 - The C-Port has 0.9 ms to repeat an LMT frame.