What Will it Take to Create the IEEE 802.17 Resilient Packet Ring Standard?

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Look at Published IEEE 802 Standards

- IEEE 802.3 – 1,515 pages long
- IEEE 802.5 – 243 pages long
- IEEE 802.6 – 363 pages long
- IEEE 802.9 – 427 pages long
- IEEE 802.11 – 512 pages long
- IEEE 802.12 – 429 pages long

Examine the Smallest One, 802.5

- Focus on Content, not style:
  What kind of information does it contain?

- What subset is relevant to IEEE 802.17?

- What unique subject matter will be in the
  802.17 standard that is not in 802.5?

802.5 - Content

- Overview 13pp
- General Description 6pp
- Formats and Facilities 28pp
- Protocols 57pp
- Station Specific Components (mostly PHY) 12pp
- Management 27pp
- Station Attachment Specifications (PHY) 29pp
- Concentrator Specifications (Doesn't Apply) 11pp
- Appendices (Look at in more detail) 60pp

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802.5 – Relevant Appendices

- Protocol Implementation Conformance Statement (PICS) proforma

- Safety and Environmental Considerations

- Low Level Finite State Machines

- Example of a MAC frame parsing algorithm

- Recommended Use of Priorities

- *Bit Error Rate criteria for lobe media tests*

Special Sections for 802.17

- Reconfiguration Protocol
- Interface to Existing Signaling Layer
  - One Chapter per Specified Physical Layer
- Description of Operation for Allowable Topologies Other than a Closed Ring
  - One Chapter per Topology?
- Performance Considerations
- Bridging Considerations
- Others???

How Do We Proceed?

- Two-pronged parallel approach
  - Begin outline of document and sections
  - Establish the technology we will standardize
- Some sections will be technology independent (we can write them today)
- Some sections can be outlined before choosing a technology
- Some sections cannot be started prior to selecting our technology

Who will do the work?

- Best way to begin is by reviewing "Strawman" documents

- Aspiring editors needed to write the Strawman drafts
  - Begin review of material and start the outlines

Time Frame

- Study existing standards now

- Outlining should begin immediately following the March meeting

- By July meeting outlines for large sections of the standard should be ready.

- By November meeting large sections of the Standard should have detailed outlines or first drafts

- Most editors chosen by end of November meeting