



10GBASE-T Technical Feasibility

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Technical Feasibility

- **As per 802.3 rules**
 - Demonstrated feasibility; reports – working models
 - Proven technology, reasonable testing
 - Confidence in reliability
- **Goal**
 - Interoperability of devices?
 - Viability of technology?
- **Past experiences**
 - 802.3z did not have this requirement
 - 802.3ab was almost held up due to this requirement
 - No specific requirement permitted the draft to move forward
 - 802.3ae set a bar of demonstration
 - Interoperability was used to provide proof
 - Timing of the proof was very vague
- **How to provide in a more timely manner?**

Possible Means to an End

- Interpretation of the rules
 - Working models (devices or simulations)
 - Reasonable testing
 - Confidence in reliability
 - Last two are intangible, only the first is really tangible
- Options
 - Working devices
 - Vendors may not start development until D1.0
 - Interoperable parts dependent on vendors' design cycles
 - Working simulations
 - Extend the model development to provide proof of viability
 - Interoperability cannot be proven
 - Develop tangible measurements for the intangible
 - Provide interoperability demonstration
 - Dependent on the PHY vendors

Model and Draft

- **Continue cable and PHY modeling development**
 - Build consensus
 - Generate a “system” model (XGMII to XGMII)
 - Model used to build baseline proposals for D1.0
- **Model and Task Force draft**
 - Develop together
 - Use the Model as a milestone for technical completeness
 - Draft moves to Working Group ballot once Model and Draft are complete
 - Model provided to all Task Force or Working Group members
- **Big question**
 - Do we hold up closing Sponsor Ballot until interoperability is demonstrated?



Conclusion

- **Insert the following into the Technical Feasibility section of the 5 Criteria**
 - **As a proof of technical feasibility, the Task Force will provide a simulation-based working model of the link for all Task Force and Working Group members prior to the draft entering Working Group ballot.**

