IEEE P802.3da Objective Modifications

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TF Motion

The TF supports the objective changes contained in 802d3da_objectives_proposed_modifications_0723a.pdf and instructs the TF Chair to present these changes to the WG for approval.

Mover: Tim Baggett Seconder: Bob Voss

Y: 20 N: 0 A: 2

IEEE P802.3da Objective 4

Was: Support interoperability with Clause 147 multidrop

Change to: Define a PHY which supports backward compatibility with Clause 147 PHYs on Clause 147 compliant mixing segments

Reason: Original suggests forward and backward compatibility, which is impossible. New objective clearly states the original intent of objective 4.

IEEE P802.3da Objective 6

Was: Select a single MDI connector

Change to: Specify required electrical and mechanical characteristics for connection methods necessary to achieve communications and powering objectives that allows multiple connector types.

Reason: A single connector won't cover all the desired use cases. For example, some industrial applications want screw terminals not a connector. We have proposed SPE as part of a multipair cable that will require a variety of connectors to enable.

IEEE P802.3da Objective 7

Was: Specify improvements for Energy Efficient Ethernet compared to current 10Mb/s multidrop single balanced pair networks

Change to: Support energy efficient operation for 10Mb/s single balanced pair multidrop networks

Reason: original was vague and EEE as we know it does not apply to SPE links. New one simply states to support energy efficient operation.

IEEE P802.3da Objective 10

Was: PSE shall only energize the mixing segment when at least one PD is connected

Change to: Define a method to detect at least one MPD before applying full operating power

Reason: a mixing segment must be minimally energized to detect, meaning the objective as originally approved cannot be met.

IEEE P802.3da Objective 11

Was: Support addition and removal of a node or set of nodes to a continuously operating powered mixing segment

Change to: Specify device characteristics necessary to enable addition and/or removal of a node or set of nodes to a powered mixing segment with a bounded interruption

Reason: Our work has demonstrated that it's not economically feasible to guarantee continuous power on a mixing segment for addition and removal. Also, removal of an MPD in the middle guarantees that all the MPDs after lose power. The new objective states that the TF will specify the power interruption magnitude and duration that MPDs that stay connected to the MPSE must tolerate.