

# IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet (10SPE) Study Group (SG)

## Contribution to CSD and Objectives

- Comment on Topic “Incorporate Link Quality Diagnostics”

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# Comment on Topic “Incorporate Link Quality Diagnostics”

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## **Goals:**

- In today’s automation applications a huge variety of cable types are used and installed. Installed cables could be 2wire fieldbus cables with undefined behaviour for the usage with high frequency communication. A “Link Quality Diagnostic” should provide the possibility to check the channel quality to forecast an error-free communication.
- Link Quality Diagnostic should enable the costumer to check and reuse his installed cable infrastructure for the usage of 10SPE communication, if technically feasible.

## **Why should it be part of the standard?**

Because it could be easier to perform the diagnostic, if both ends of the channel do it together. Furthermore the result should be compatible and with that standardized.

NOTE: Including further cable types is NOT the intention.

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## **Comments:**

- The “Link Quality Diagnostic” could be part of the Auto-Negotiation or Training procedure.
- The result should be available as a register-value
- No need for an objective, but should be part of the task force work

Questions?

Thank you!