

# ETHERNET BASED COMMUNICATION FOR SAFETY RELATED UNDERGROUND APPLICATIONS

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**Abstract:** *The paper discusses requirements and potential methods for using Ethernet based wired and wireless networks in underground installations such as tunnels and mines. Especially the aspect of high availability and functional safety is of high importance if the network shall be used as a replacement for communications used for safety applications such as evacuation of people or search and rescue operations.*

**Key words:** *Ethernet, mining, safety, communication.*

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