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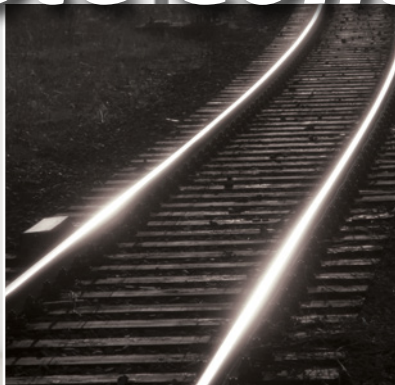


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# ZFWS 100

## Remote Control System



### SAFE DATA COMMUNICATION SIL4

Approval for railway operations

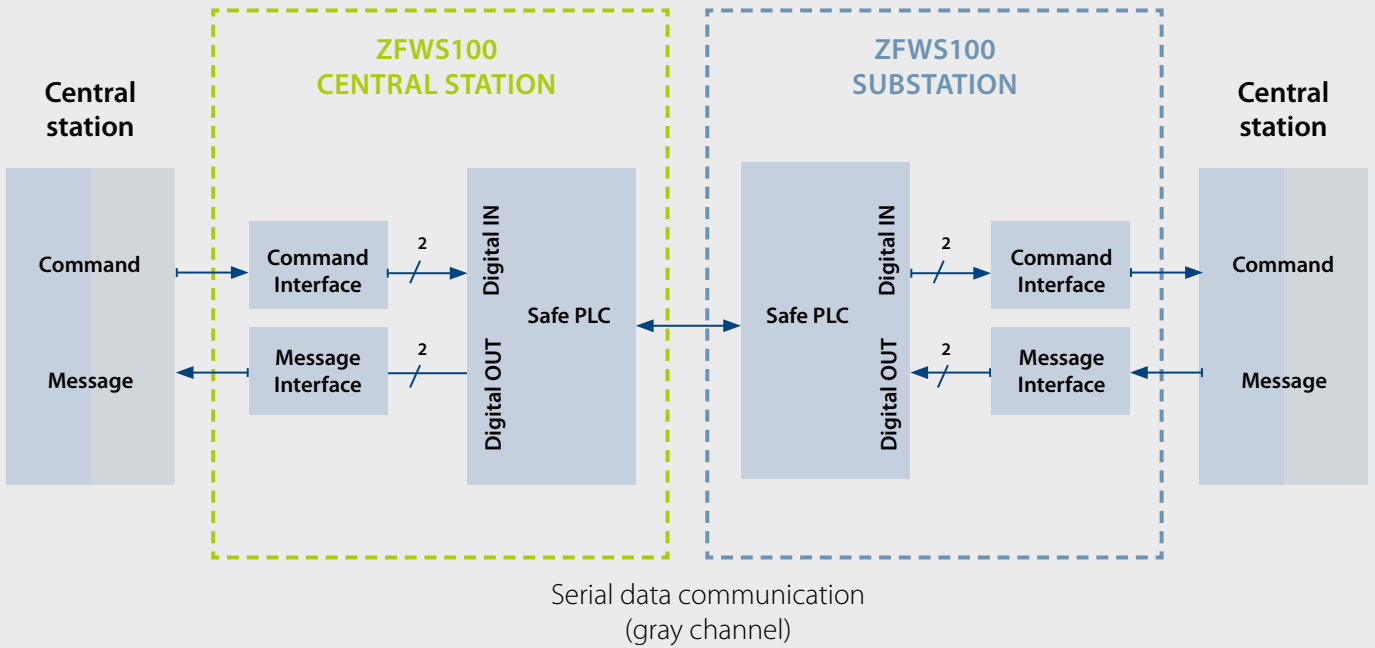
#### SIL4: FEATURES

- Safe data transmission according to CENELEC EN50129 - SIL4
- Any number of participants
- Transmission medium fiber optic cable or copper cable
- Approvals for ÖBB, Raaberbahn and Neusiedlerseebahn
- One common network
- Transmission of "normal state", "active state" and "valence state"

#### ZFWS100 CENTRAL/SUBSTATION

- One control center is able to control 6 substations
- Based on safe PLC, certified according to CEN SIL4 50126/28/29
- Interface modules for all types of interlocking
- Constant monitoring of communication!

ZELSKO

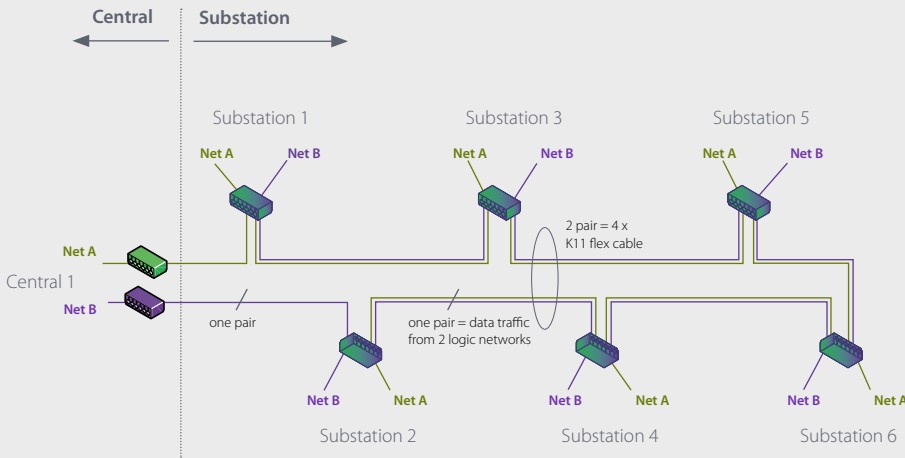


**ZFWS100 VARIANTS**

Currently two configuration variants are used – depending on the QoS (Quality of Service) of the connection:

- Fiber optic cable – safety time 0.2 s
- DSL – safety time 1.6 s

**ZFWS100 NETWORK STRUCTURE**



- Safe ethernet is based on UDP, no special network structure or network requirements (gray channel).
- Possible redundancy by two logically separated connections, control panel with 2 repeaters (redundancy) – 4 wires are needed

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