



Transport
Asset Standards
Authority

Application of Computer-Based Interlocking equipment specification

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Application logic options

Section 8. Application Logic (extract)

Application logic functions beyond the Boolean logic functions of 'AND', 'OR' and 'NOT' shall be compliant with AS IEC 61131 or meet the following requirements:

- i. be specifically designed for railway signalling interlocking
- ii. be supported by safety case with a human factors error analysis for the production of the application data
- iii. not prevent production of application logic to meet the signalling principles defined in ESG 100
- iv. have a positive life cycle costing to support the change
- v. produce documentation for first line maintenance staff to trace faults back via logical relationships to a potentially faulty input as a root cause to meet the required maintainability performance

Topic: alternative interface arrangements

Section 9. Interface requirements (extract)

The CBI equipment shall interface and function correctly with the existing signalling equipment unless an alternative arrangement is approved by means of a type approval.

Alternative arrangement proposals shall be supported by a life cycle costing in accordance with T MU AM 01001 ST *Life Cycle Costing* that shows a positive benefit for the alternative arrangement.