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Propositions
pertaining to the dissertation
Optimising Performance of Automatic Train Operation on Railway Networks
Ziyulong Wang

1. The ERTMS/ATO system architecture provides the only effective configuration to interface ATO trackside and onboard subsystems under ETCS supervision. (Chapter 2)
2. Train path envelopes ensure an optimised interaction between traffic management and ATO. (Chapter 3)
3. Algorithms for automating railway planning and operations shall undergo sensitivity analysis before validation and implementation. (Chapter 4)
4. Including flexibility in timetable (re)scheduling can reduce dispatcher workload and improve automated train operations. (Chapter 5)
5. Automation enhances adaptability in daily life and requires it in train operations.
6. Public transport challenges are best addressed when academic research targets practical implementation.
7. Engineering research that never lands in practice has failed its purpose.
8. Good role models inspire growth more deeply than formal instruction.
9. The cost of failure is lighter than the burden of regret.
10. Synergy and coffee fuel a positive office.

These propositions are regarded as opposable and defensible, and have been approved as such by the promotor Prof. dr. R.M.P. Goverde and the copromotor Dr. ing. E. Quaglietta.