Efficient Timetable Planning with TPS

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TPS Functional Areas

- Runtime Calculation
- Conflict detection and resolution
- Planning parameters
- Simulation
- Tabular and graphic editing
- Reports and Analysis
Microscopic operational level model of the railway network and traffic

- Production plan planning level
- Exact
  - routing on interlocking level
  - runtime calculation
  - conflict detection
- Distribution of reserves, smooth speed distributions
Continuous timetable planning during all process steps

- Strategic Planning (> 5 years)
- Framework Agreements (2 – 5 years)
- Long Term Planning, LTP (1 – 2 years)
- Short Term Planning, STP (1 day – 12 months)
- Traffic Management, VSTP (0 – 24 hours)
- Historised Train Operation (< 0)
Support the incremental planning methodology and business process in relation to it

**Delivery Commitment (DC)**

**Production Plan (PP)**

Capability to…
- manage integrated DC/PP, LTP/STP and pre-arranged capacity; and
- provide information on agreement, planning and operational level views

… at the same time, in one and the same system!
The planning process

- Plan and request capacity
- Manage information of changes in capacity
- Establish and communicate requirements for services
- Optimise for Operations

Coordinate and allocate capacity
Modern architectures for integration with external and internal customers
What else…

TPS provides further modules for an efficient timetabling and operations

TPS Portal: Web based capacity application portal for train path and infrastructure restrictions

TPS Online: Realtime Traffic Management System

TPS Simulation: Stochastic simulation of rail traffic operations
Conclusion

TPS provides key building blocks for efficient timetable planning system

- Precision… Microscopic operational level model of the railway network and traffic
- Consistency… Incremental timetable planning continuously during all process steps
- Accessibility… Modern architectures for integration with external and internal customers
Thank you for your attention!

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