HaCon
Traffic • Software • Service

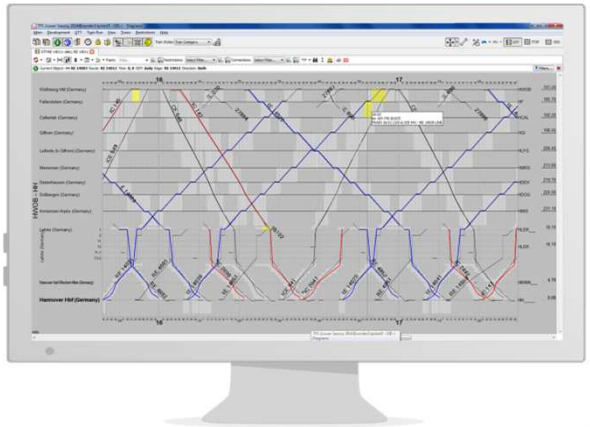
Efficient Timetable Planning with TPS

HaCon – A Siemens Company

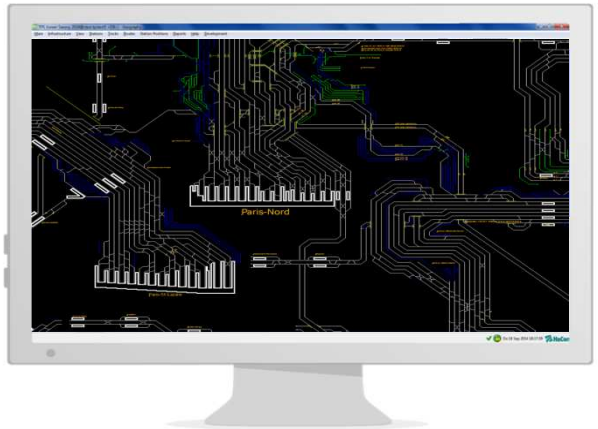
Alexander Hubert

Train Planning System TPS

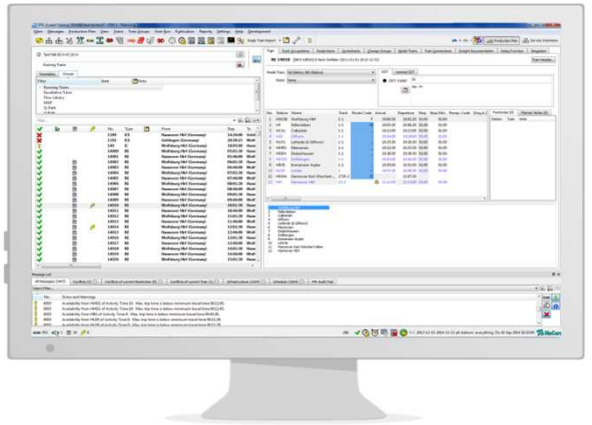
Train Graphs



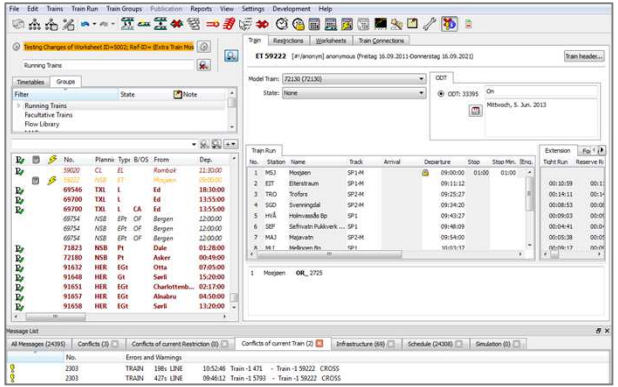
Network Topology

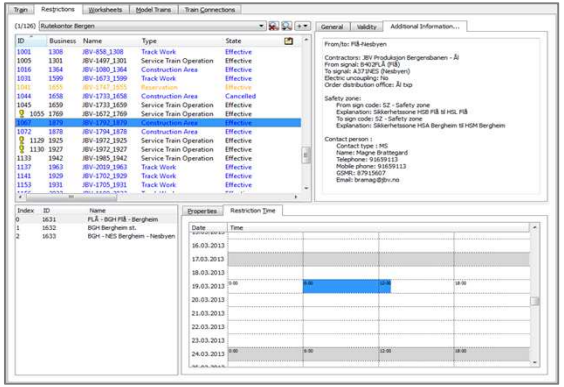


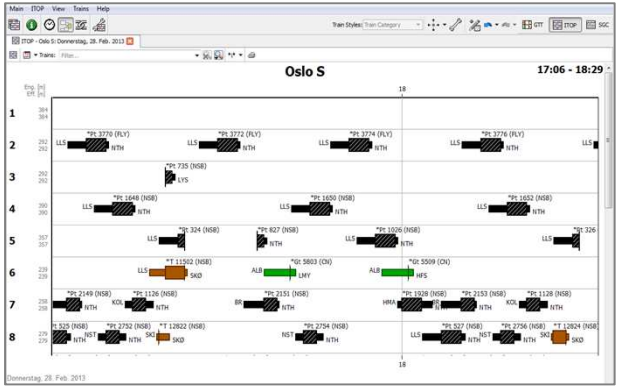
Tabular Editors



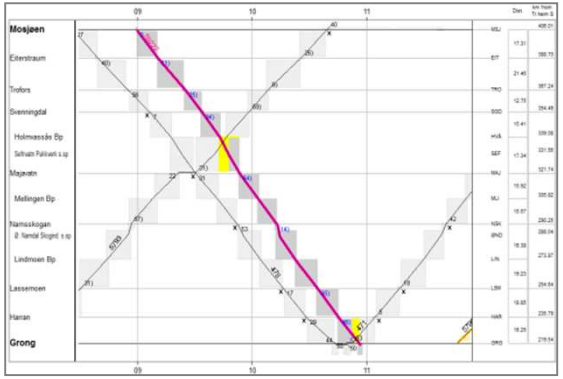
TPS Functional Areas

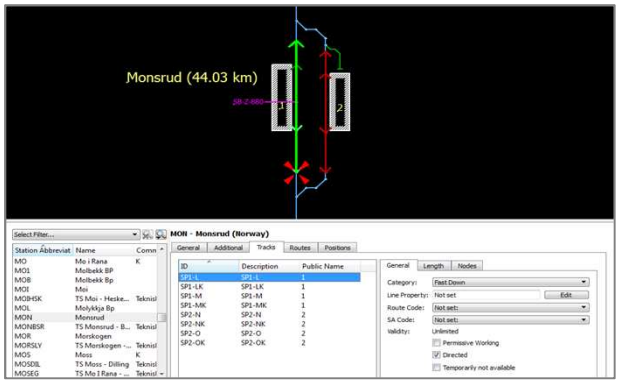






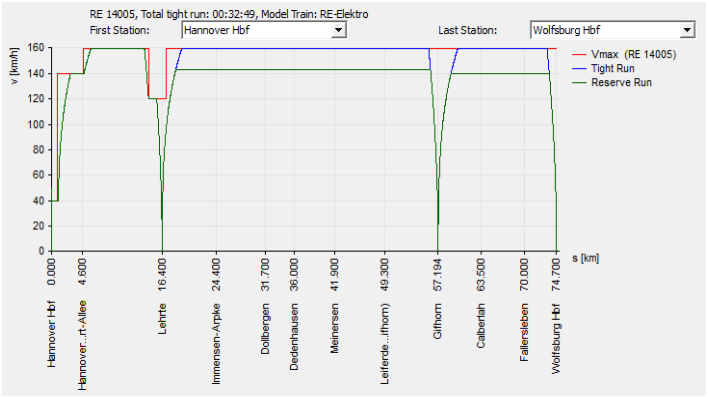
- Runtime Calculation
- Conflict detection and -resolution
- Planning parameters
- Simulation
- Tabular and graphic editing
- Reports and Analysis

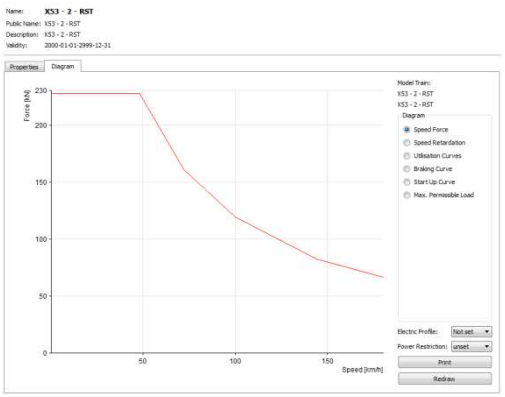


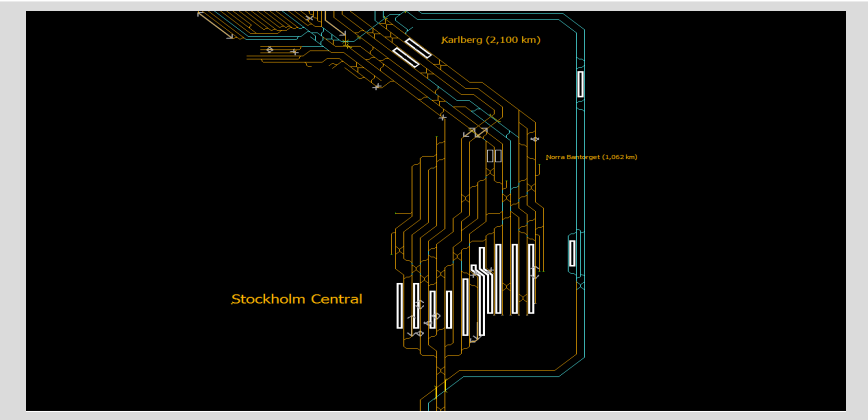


Microscopic operational level model of the railway network and traffic

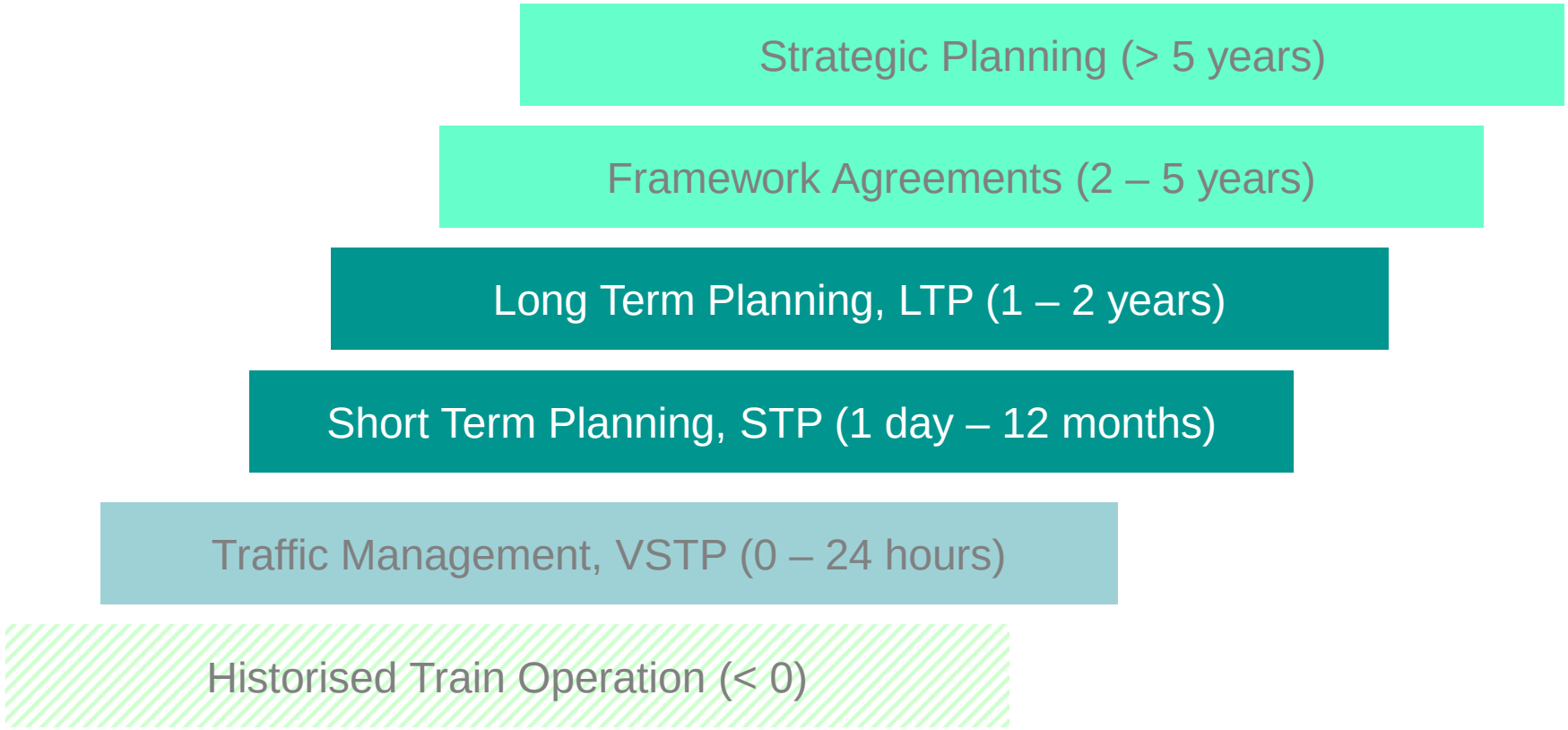
- Production plan planning level
- Exact
  - routing on interlocking level
  - runtime calculation
  - conflict detection
- Distribution of reserves, smooth speed distributions







Continuous timetable planning during all process steps



Incremental planning of capacity allocation

Support the incremental planning methodology and business process in relation to it

Delivery Commitment (DC)

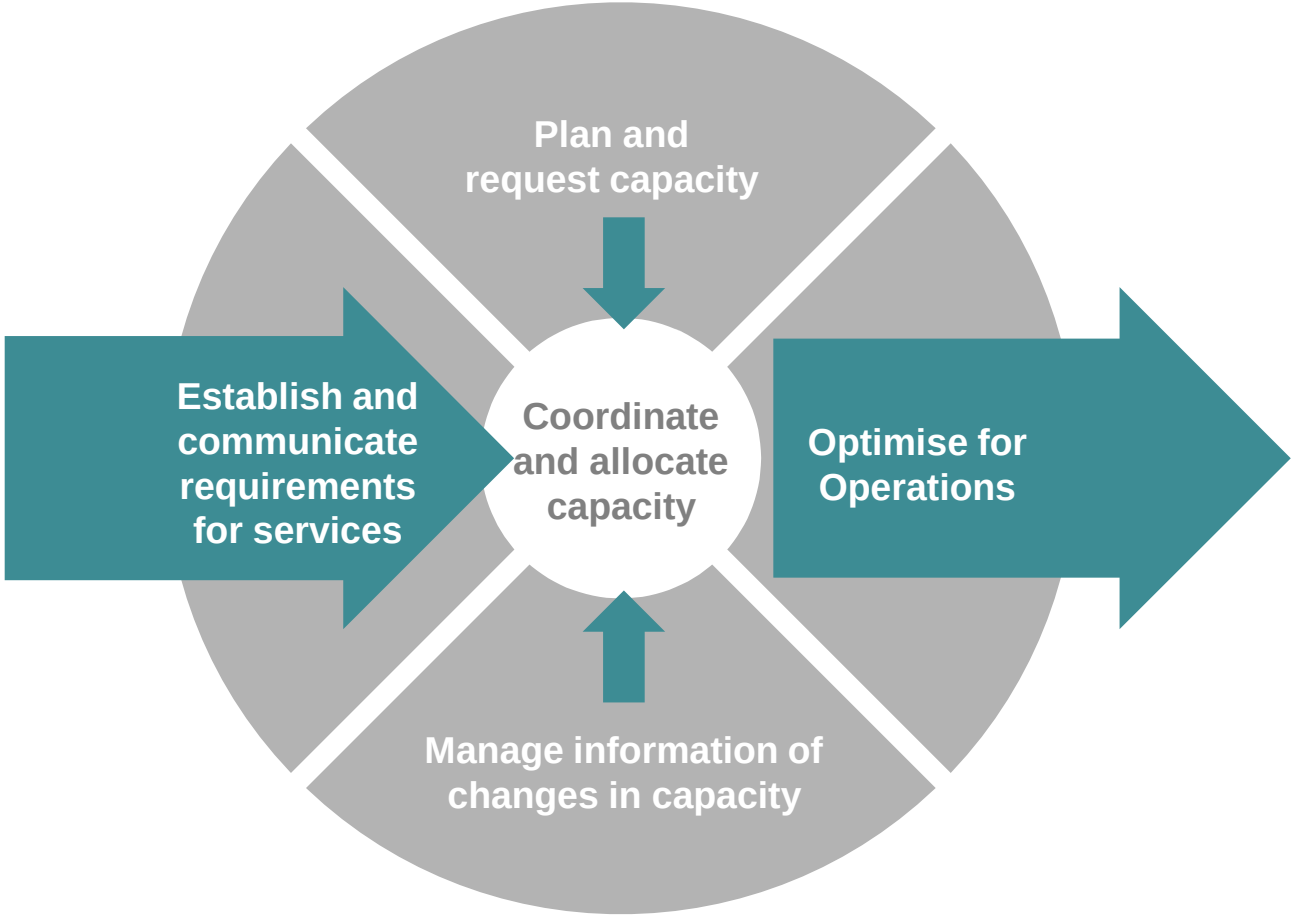
Production Plan (PP)

Capability to…

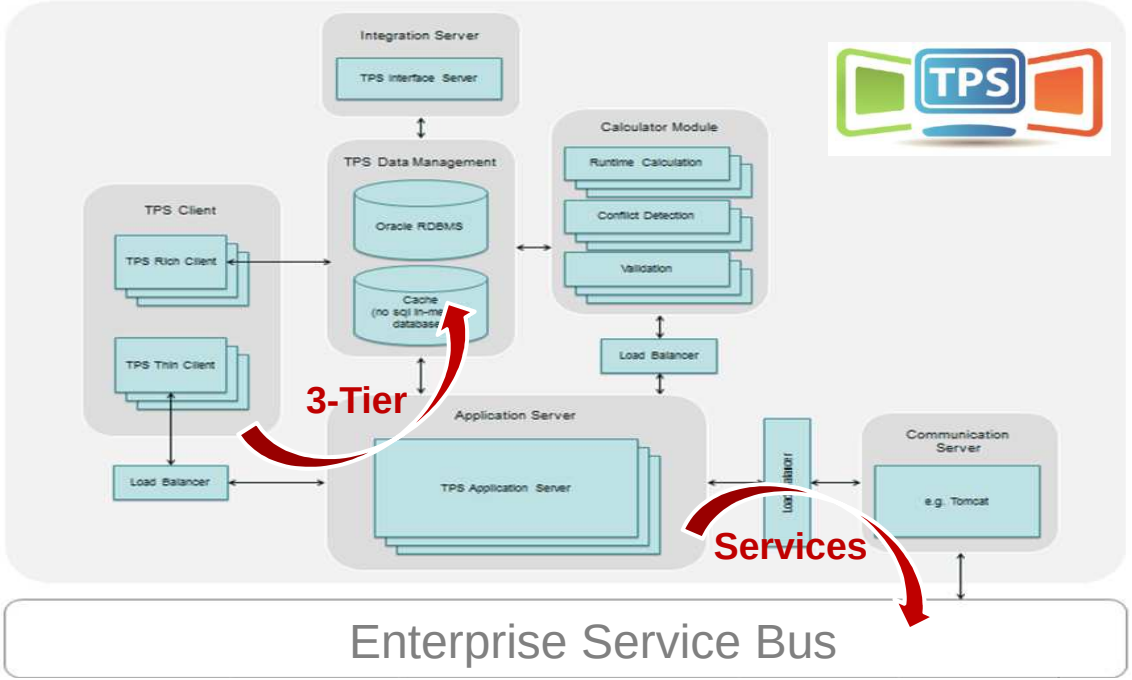
- manage integrated DC/PP, LTP/STP and pre-arranged capacity; and
- provide information on agreement, planning and operational level views

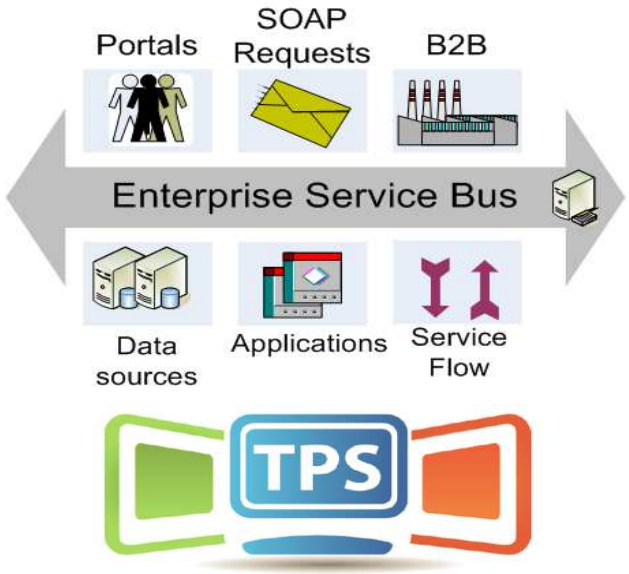
… at the same time, in one and the same system!

The planning process



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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