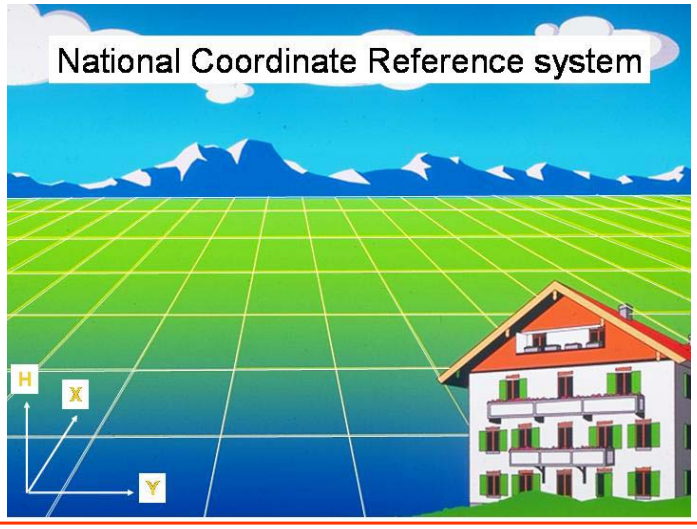
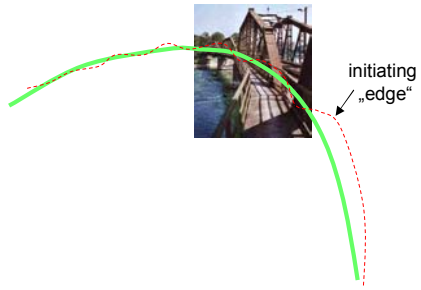
Coordinate based object referencing



Reference point for the track survey

Absolute / relative (red) track geometry

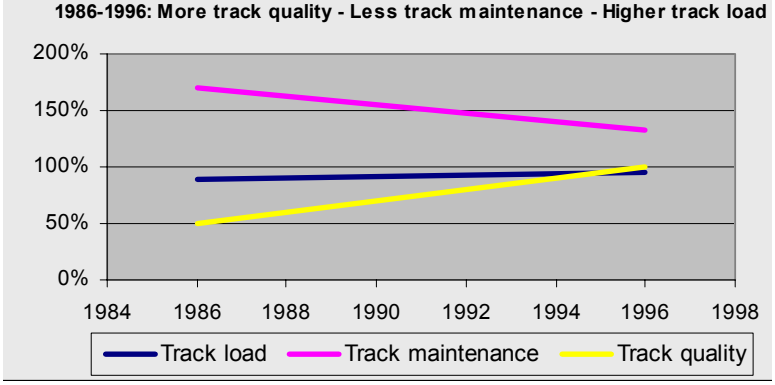
Long wave track deformation



Red: Ancient, relative working method
Green: New, absolute coordinate based working method

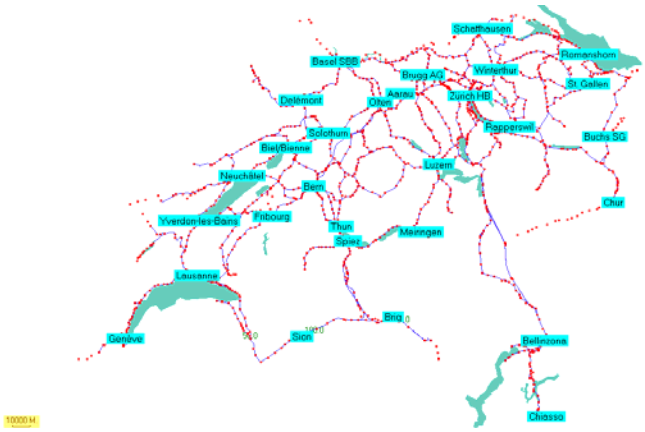
Cost effectiveness of the new method

Tracks 1986-1996: Cost↓,Load->Quality↑



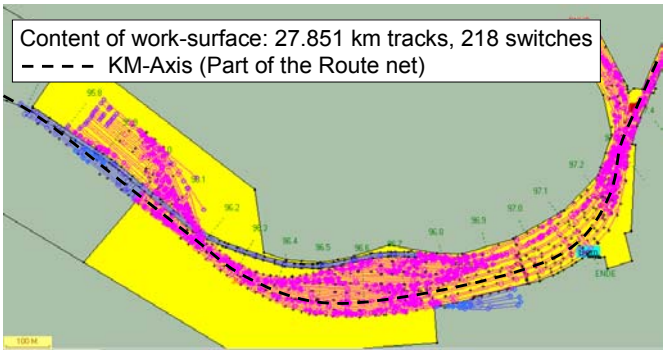
Route net of the Swiss Rail

Route Net with Nodes and Edges



Work surface constructed on the route net

Automatic Summation with work surfaces



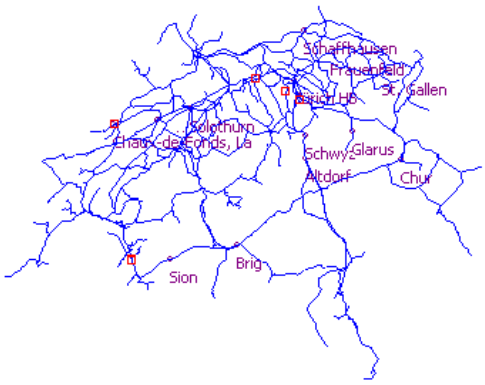
List representation of railway facilities

Linie	Km	Km bis	Standort
100	50.642	51.142	Paluds, Les : St-Maurice Tunnel / Tunnel / Galleria
100	51.718	52.294	St-Maurice Gebäude / Bâtiment / Fabbricato
224	29.27	29.773	Chaux-de-Fonds, La Gleisfeld / Faisceaux de voies / Campi binar
650	31.844	32.35	Lenzburg Gleisfeld / Faisceaux de voies / Campi binari
660	18.258	19.345	Horgen Oberdorf : Sihlbrugg Tunnel / Tunnel / Galleria
660	18.258	19.345	Horgen Oberdorf : Sihlbrugg Tunnel / Tunnel / Galleria
711	20.095	21.632	Bonstetten-Wettswil : Hedingen Gleisfeld / Faisceaux de voies /

Graphic representation of railway facilities

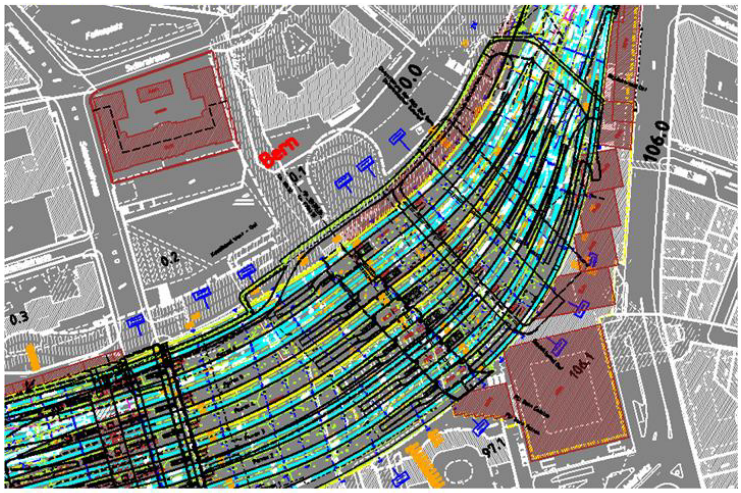
Gleisalarmmeldeanlage

Anzahl: 7
Auswahl: Kartenausschnitt



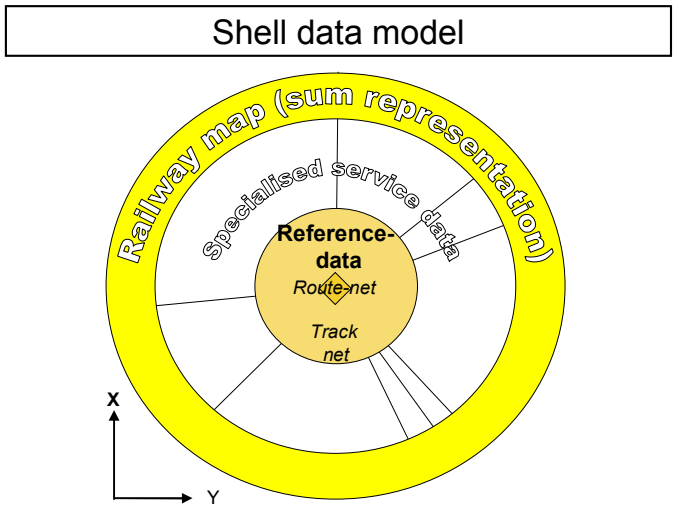
DfA Reports: 08.09.2008

Railway map: global view

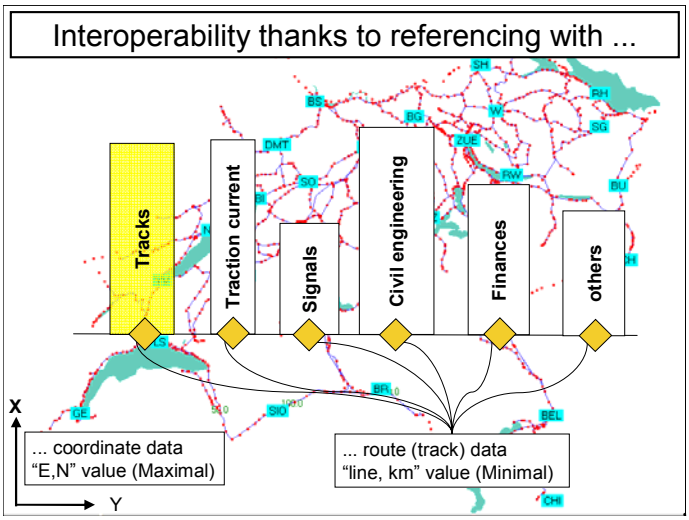


Railway map: platform and buildings

Shell data model

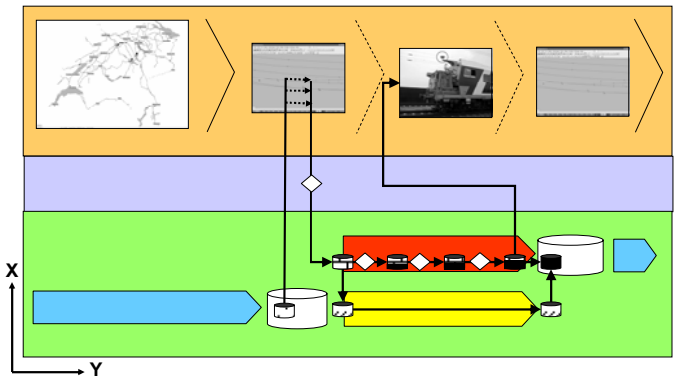


Minimal and maximal data interoperability



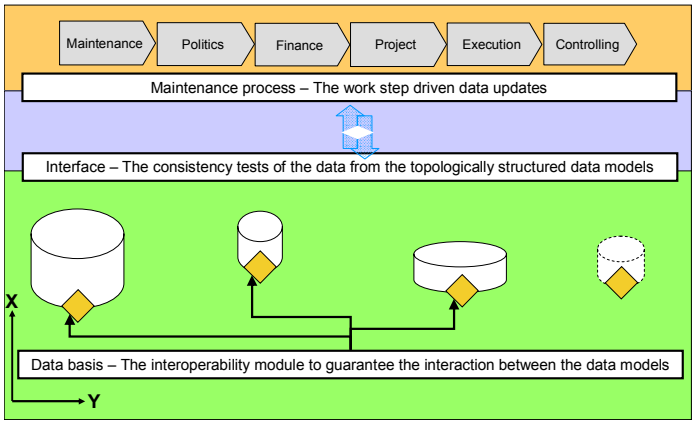
From the track work process …

Coordinate based, process driven, topology structured track data management



… to the Infrastructure Maintenance Process

Coordinate based, maintenance process driven, topology structured infrastructure data management



Invitation to discuss the future organisation

A proposal for consolidating the coordinate based railway reference data