

Main Line for Europe / Trains for Europe



MAIN LINE FOR EUROPE
MAGISTRALE POUR L'EUROPE
MAGISTRALE FÜR EUROPA
MAGISTRÁLA PRE EURÓPU
MAGISTRALE EURÓPÁNAK

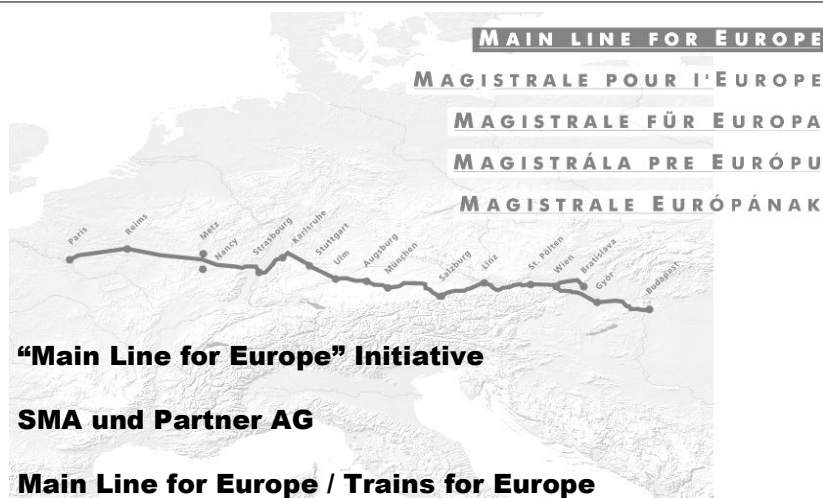
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"Main Line for Europe" Initiative

SMA und Partner AG

Main Line for Europe / Trains for Europe



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Members of the Initiative

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15 Cities

Nancy, Strasbourg, Karlsruhe, Stuttgart, Ulm, Neu-Ulm, Augsburg, Munich, Städtebund Inn-Salzach, Salzburg, St. Pölten, Vienna, Bratislava, Győr, Budapest.

9 Regions

Regionalverband Südlicher Oberrhein, Regionalverband Mittlerer Oberrhein, Verband Region Stuttgart, Regionalverband Donau-Ilser, Regionaler Planungsverband Augsburg, Regionaler Planungsverband München, Initiative „Airport-Bahn Südostbayern“, Inn-Salzach Euregio, EuRegio Salzburg-Berchtesgadener Land-Traunstein.

9 Chambers of Commerce

IHK Freiburg, IHK Karlsruhe, IHK Region Stuttgart, IHK Ulm, IHK Augsburg und Schwaben, IHK für München und Oberbayern, Wirtschaftskammer Salzburg, Wirtschaftskammer Österreich, Slowakische Handels- und Industriekammer – Region Bratislava.

Close Cooperation

« Association TGV Est-Européen », Federal States in Germany and Austria.



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Aim of the Initiative

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Initial point

Starting from the idea of improving the infrastructure the aim of the Initiative today has widened.

The aim of the "Main Line for Europe" Initiative today is to achieve

- a continuous high-performance rail line for passenger and freight transport
- the optimum linkage to local and regional public transport along the entire corridor Paris – Bratislava/Budapest



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Activities of the Initiative

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- Ongoing exchange of information
- Formulation of independent argumentation patterns (e.g. by studies)
- Continuous lobbying activities at European, national and regional level
- Pre-Financing / Financing
- Improvement of the stations and the local and regional public transport networks
- Elaboration of urban/regional development strategies in line with the “Main Line for Europe”.

Starting position for the study

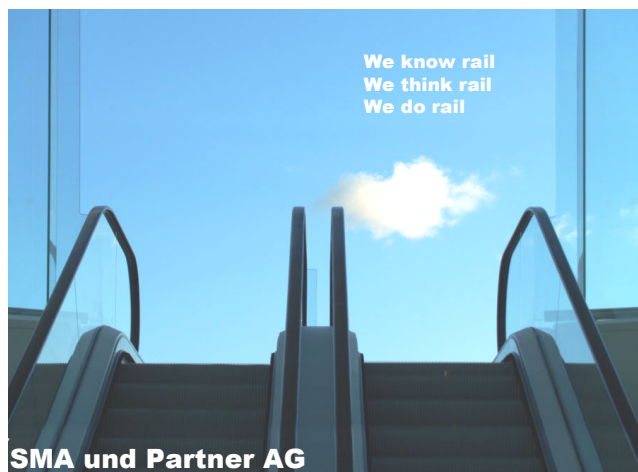
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- | | |
|--|---|
| Step-by-step upgrading of the line | ⇒ changes in timetables
⇒ Actual gains in accessibility? |
| TGV Est Paris – Stuttgart (– Munich) put into service (2007) | ⇒ improvements AND deteriorations of connections |
| Timetable conflicts between long-distance traffic and light rail traffic | |

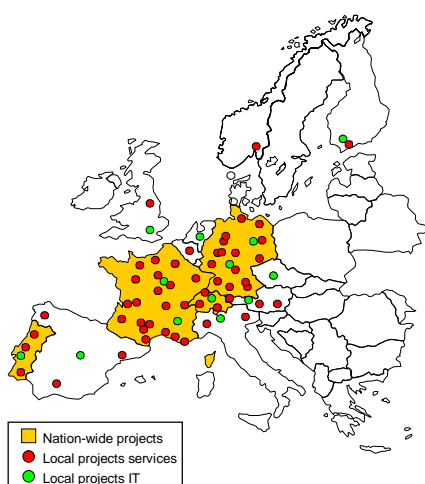
New innovative approach:
Examine infrastructure and timetables belongings together



Study "Main Line for Europe / Trains for Europe"



Services



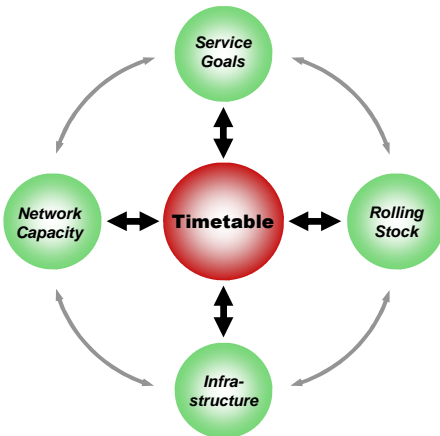
For over 20 years, we have been designing tomorrow's rail systems with passion, competence and commitment.

We rely on our unique international experience to provide both innovative and feasible short term solutions and optimised long term strategic planning.

Be it Switzerland, Germany, France, Portugal, Belgium, Finland or Italy – where SMA is active, rail is moving forward.

Philosophy

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New approach:
Seeing the railway as an integrated system.

The timetable is the key element in the coordinated and iterative process to achieve the highest outcome out of the investments.

Successfully applied in many projects

First time used on a TEN-T axis

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Introduction

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Main Line
for Europe



Infrastructure

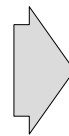
The development follows the scope of
national realisation and financing
programmes.

Trains
for Europe



Service to
the customers

The full benefit of the investments takes
effect only if the running time reductions
can be efficiently implemented in the
timetable.



**How can this
be achieved?**

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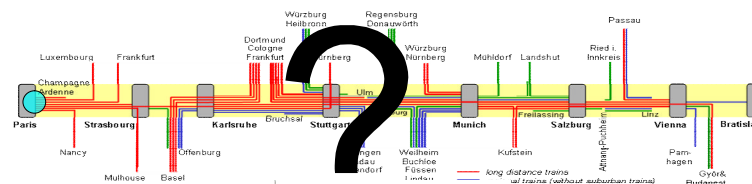
Commercial and technical jungle

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We want to run an
example train from
Paris to Bratislava.



We have to get
through the
**"commercial
jungle"**.



We have to get
through the
**"technical
jungle"**.



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Main Line for Europe Work packages

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Wp 1 Analysis of the **existing timetable** service

Wp 2 Group of the planned **infrastructure** projects

Wp 3 Interaction between **timetable and infrastructure**

Wp 4 Improvement of the **planning procedure**

Work package 1 Analysis of the existing timetable

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Goal: Show the timetable development along the Main Line for Europe

Approach:

- Comparison of the timetables 1994 and 2008
- Analysis of approx. 350 connections
- Analysis by three parameters

Conclusion:

- High density of connections and high degree of fixed-interval timetables within the national states
- Low service density on the international connections
- Reduction of trip times between 1994 and 2008, additional trains and connections

But: Many connections do not benefit from new infrastructure due to operational conflicts between trains.

Work package 3 Timetable and infrastructure

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- Goal
 - Show the technical dependency between the timetable and the infrastructure
- Approach
 - Adoption of the infrastructure scenarios from work package 2
 - Estimation of the shortened running time along the Main line
 - Definition of a Main Line example train Paris – Bratislava
 - Identification and classification of the resulting timetable conflicts

Work package 3 Conclusion

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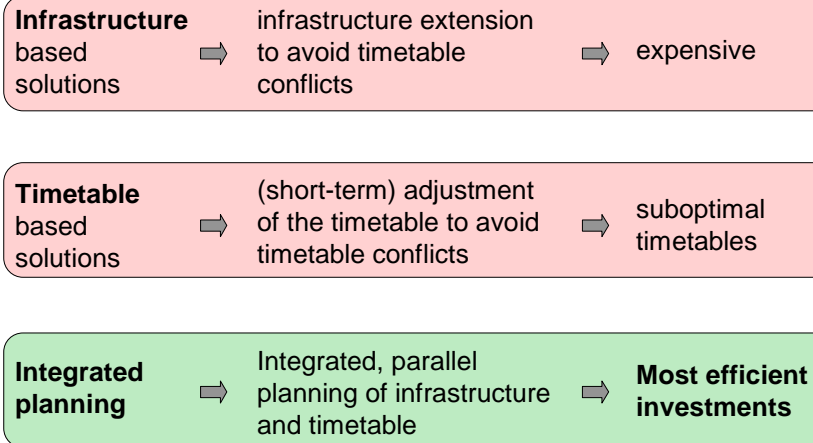
- Main Line example train Paris – Bratislava causes many timetable conflicts
- Shortest running time Paris – Bratislava can not be realised for the example train due to these conflicts
- Many conflicts remain unsolved even after the opening of all assumed infrastructure projects

Not all conflicts are solved by the new infrastructure.
Some infrastructure investments even create **new conflicts**.

How can the planning process be improved to get the **highest benefit from the investment**?

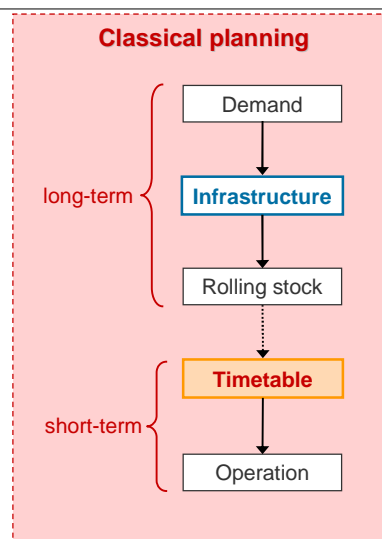
Work package 4 Improvement of the planning procedure

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Classical planning

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The timetable has to adapt to a given infrastructure.

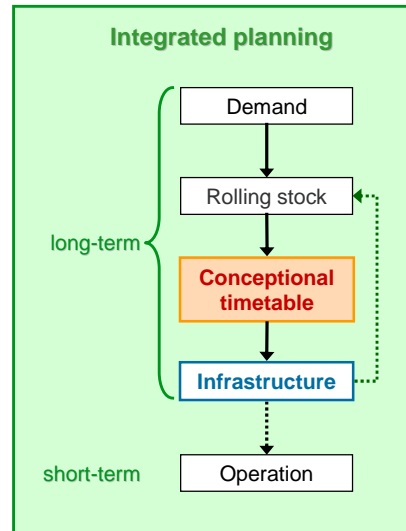
In most cases this happens short-term.

Results

- Suboptimal timetables
- high risk for misinvestments

Integrated planning

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Infrastructure and timetable are planned together.

Dependencies are considered in a long-term perspective.

Results

- **optimised and integrated system**
- **optimised investments**

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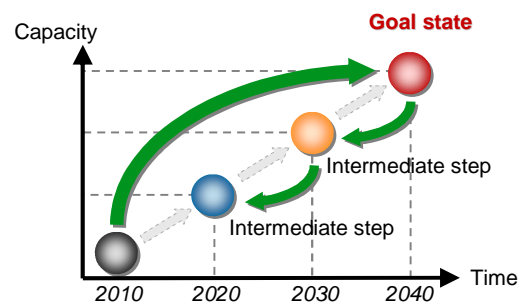
Goal state and intermediate steps

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The integrated planning is implemented by intermediate steps.

The intermediate steps are developed on base of the goal state.

The intermediate steps are stages on the way to the goal state and must be suitable to it.



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European slot allocation Items of a future framework

- Coordination of timetable AND infrastructure are needed on the European level
- The future construction of the European high speed rail lines must consider operational questions.
- International long-distance trains are high value slots. Those high value slots are in danger of getting stuck in timetable conflicts. Therefore they need long-term determination.

Rules are needed that

- ensure attractive international slots
- ensure attractive timetables in the context of the open access

Integrated planning and open access

Open access and integrated planning work together.

In the integrated planning procedure the role of the **infrastructure managers** is:

The infrastructure managers plan their infrastructure development on base of a long-term **conceptional timetable**.

Based on this complete system they design the best possible **international slots**.

This optimised **slots are offered** to the train operating companies for bidding.

*Integrated
planning*

*Open
Access*

Review of Timetable Consequences *proposal for an instrument*

Goal: Review of time reducing infrastructure projects

Approach: – A national infrastructure operator wants to build new infrastructure.

- That infrastructure reduces running times and thus changes the existing slots.
- The Review of Timetable Consequences has to verify
 - the consequences on other trains
 - whether the running time reduction can be implemented in the timetables of the neighbouring countries

Summary

Infrastructure investments without timetable planning lead to misinvestments and loss of money.

To get the highest benefit from investments **infrastructure and timetable** have to be planned together.

Open access in this context means:
The infrastructure managers design **optimised (international) slots**. After this they offer them to the train operating companies for **bidding**.

Thank you for your attention!

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**“Main Line for Europe“
Initiative**

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