

# netwiss

## Improved Ecological Footprint through Customer-Orientated Vehicle Layout

Vehicle layouts that meet the needs of travellers are not only much more comfortable and popular, they also significantly improve the ecological footprint. How is this possible?

If, under the mistaken assumption, an attempt is made to increase capacity and thus profits by having as many seats as possible on the train, the opposite of the desired result usually occurs. 20 years of research and development by netwiss in co-operation with the Vienna University of Technology clearly show that the luggage accommodation in these layouts is undersized and at the same time does not meet customer requirements. As a result, a lot of luggage is stored in such a way that it obstructs seats and aisles, thereby reducing the actual capacity and significantly increasing the dwell time in the station. As a result of the extended dwell time, the travelling speed often has to be increased to the maximum permitted in order to keep the timetable, which results in an increased energy requirement of up to 20%!

Optimised vehicle layouts clearly help to save energy and therefore money, thereby also significantly reducing the ecological footprint! On top of this, the capacity in the wagon can be increased and customer satisfaction significantly improved.

For many years, we have been helping operators and manufacturers to significantly improve their vehicles by taking a few very simple steps. We offer the following services:

1) We advise manufacturers, operators, planners or purchasers and others from the very first planning step and help to optimise all designs in terms of efficiency from the beginning. We also analyse existing vehicle

concepts and help to increase efficiency, e.g. with regard to redesign.

2) We offer the special software tool TrainOptimizer®, which is very easy to use and with whose help you can assess and thus optimise vehicle layouts yourself with regard to their efficiency.

With very little additional effort in the planning phase, very high costs can be saved during operation and the operating quality can also be significantly improved. Our customers include DB, SBB, ÖBB and many more, with projects such as the Railjet, ICE3, ICE4 and ICE-L, SBB double-decker trains and many more.

Click [here](#) to watch our TrainOptimizer® video.

Are you curious about the possibilities of improving your vehicles? Then visit us at [www.TrainOptimizer.com](http://www.TrainOptimizer.com). Here you will find valuable information and videos on how to get the best out of your vehicles in just a few steps, or simply contact us at: [info@TrainOptimizer.com](mailto:info@TrainOptimizer.com)



TrainOptimizer  
by netwiss

# TrainOptimizer

**Optimize passenger vehicles  
and increase efficiency with  
just a few clicks!**

- Inter-City Trains
- Night trains
- High-Speed Trains
- Local Trains
- Light Trains
- Metros
- Busses

**You are a**

- \_\_\_\_\_ rail vehicle manufacturer
- \_\_\_\_\_ design or engineering company
- \_\_\_\_\_ railway operator
- \_\_\_\_\_ purchaser of transport services
- \_\_\_\_\_ educational institution
- \_\_\_\_\_ other institution

**and you want efficient vehicles with**

- \_\_\_\_\_ short dwell time
- \_\_\_\_\_ high occupancy rate
- \_\_\_\_\_ best possible baggage stowing
- \_\_\_\_\_ high passenger comfort

**then TrainOptimizer® helps you  
to optimize your vehicles  
with just a few clicks!**

With TrainOptimizer® you can very easily and quickly check any vehicle layout with regard to its efficiency and thus achieve significantly shorter dwell time and higher seat occupancy with increased passenger satisfaction at the same time through targeted optimization measures.



Let us show you TrainOptimizer®  
without obligation!

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[www.TrainOptimizer.com](http://www.TrainOptimizer.com)