

# Eurailspeed

## Parallel Session D.3

- *Chairman*
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- Safety and Quality System Trenitalia



Under the  
patronage of



Organisers



Partners



Folienersteller



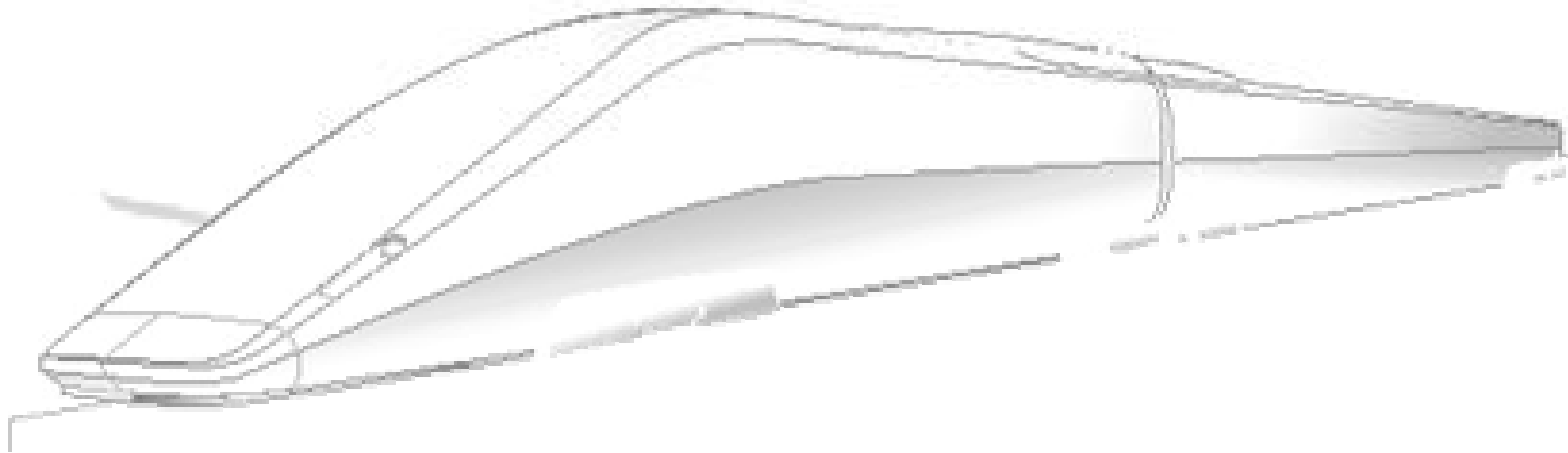
Media partner



# High Speed Train Europe

## Results and experience of the project

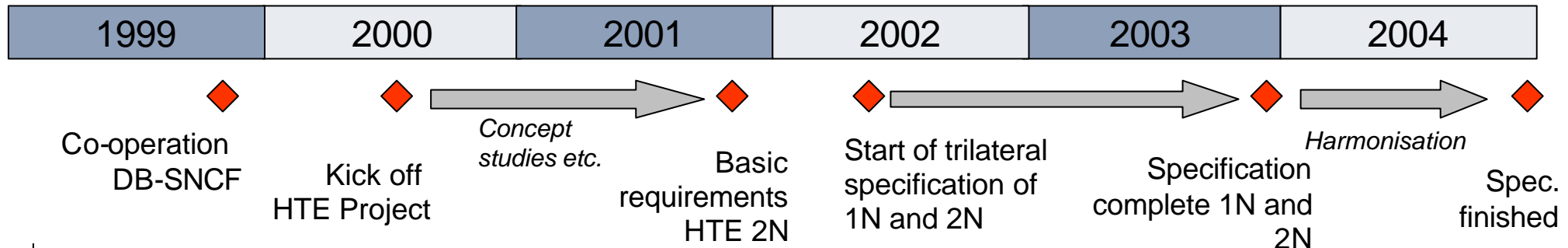
Eurailspeed  
Milano 2005



# Objectives and History of the Project

## European co-operation

- Fruitful exchange of experience
- Precondition for development of a TSI- compatible train suitable for cross- border European operation



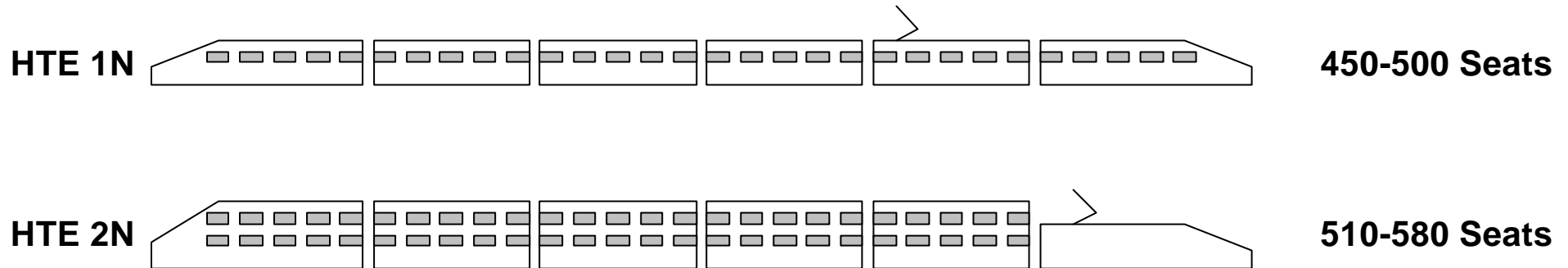
## Objectives

- Reduction of purchase and life-cycle costs of the rolling stock
  - Standardisation, economies of scale, optimisation of floor space, reduction of stock keeping costs...
  - Uniform operation and training, interoperability (application of TSI), ...
- Creation of open standards through standardisation and modularisation
- Enabling each Consortium Member to offer better and more competitive services in a liberalised market

## Milestone

- Functional technical specification for a modular and fully STI compliant high speed train family (1N and 2N train)

# HTE concept: 1N and 2N trains on a common basis



- **Length** 200m
- **Max. speed** 320 km/h
- **Power systems** “capable for Europe”
- **Interoperable and individual domestic versions**
- **TSI\* Compliance: HTE is the first TSI compliant High Speed Train**
- **Optimised concerning RAMS\*\* and LCC**
- **Maximum of synergies between both train types (1N / 2N)**

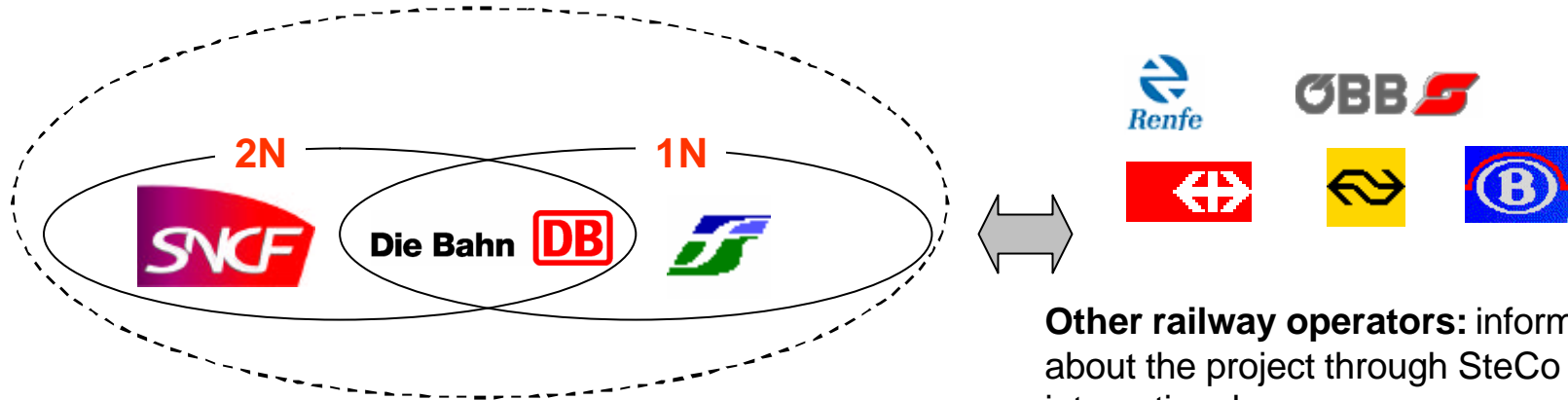
\* Technical Specification for Interoperability

\*\* Reliability, Availability, Maintainability, Safety, LCC = Life Cycle Cost



# Co-operation within the project

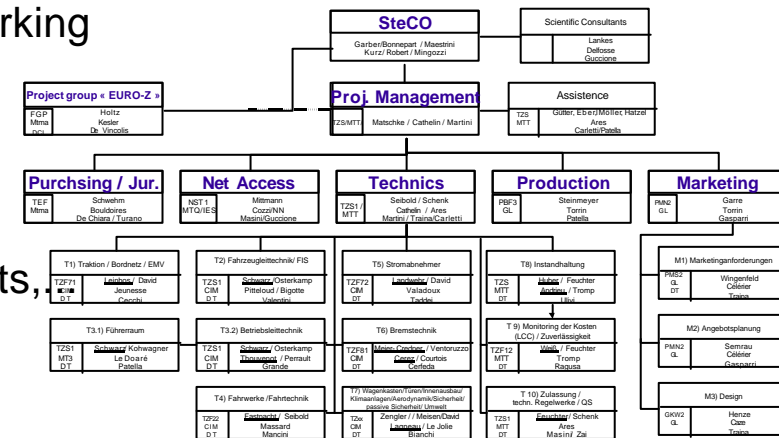
## HTE- Team



**Other railway operators:** information about the project through SteCo international

## Efficient and powerful organisation

- Common project management group and steering committee
- Very efficient project structure, able to manage an international project team of overall 620 experts in 25 working groups with 525 meetings in France, Italy and Germany
- Interdisciplinary, trilateral project teams
  - Engineers, designers, marketing and production specialists, lawyers, purchasers, maintenance experts,...
- Experience with performance of international teams
  - common language, intercultural training,...



# Results and exploitation

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## Main results

- Detailed functional specification (50 chapters, 3200 pages)
  - modular concept taking into account the module structure of the train and it's components
  - including marketing and design, production, maintenance, LCC
  - fully STI compliant
  - 10.000 common functional requirements, 50 of them appeared to be difficult to be agreed and could not be resolved until stop of the project
  
- Basic definitions and preparations for a common European purchase
  - appreciated by the European Commission
  
- Improved understanding of technical and operational aspects of railways in Germany, France and Italy
  - good and simple solutions found for many technical questions (best practise)
  - basis laid for ongoing and future co-operations and exchange

## Current use and exploitation of the results

- Technical specification, principles of purchasing procedures used for current purchasing projects of DB (EMU), SNCF (HST) and Trenitalia (Tilting and HST)
- Technical specification used as the basis of input for the European standardisation project MODTRAIN and national projects (e.g. mofast (DB))
- Input for TSI and European norms and standards

## Resumee and Perspective

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### **The partners consider the project a big success**

- Very useful technical specification, mostly agreed between the major European railways ; fully functional and STI compliant
- Unique exchange of opinions and experience in each field of railway business
- Experience with successful management of big and complex international projects
- Important step towards standardisation via European norms and standards
- HTE is in line with the extension of the European high-speed network in the framework of the TEN-T program
- **HTE was a major step towards European harmonisation**

### **How does it go on?**

- The project was frozen end of 2004, because the schedules of the partners to purchase high speed trains had diverged during the project and because the solution of some technical questions had come to stagnancy
- The partners are keeping contact and are updating the results of the project. The ongoing common efforts in standardisation will solve the remaining technical questions...

.... the basis is ready, so may be in some years HTE will continue ...



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**Thank you for your attention**