

# Working Groups

WG1 To ensure timely and qualitative performance of the project (technical management) and to provide timely and efficient administration and financial coordination. Identify all the relevant and impacting information and knowledge inevitable to be transferred from the project to the interested parties. Transfer and consolidate the exploitable knowledge, information and other results of the project. Provide and consolidate the feed-back information to the project, especially with regard to the aspects of involving the key actors in evaluating the vital aspects of using the project results and their implementation.

WG2 To review the current design practices and the conclusions of previous projects relevant to passive safety of train interiors, appraise the compatibility with other relevant regulations, carry out an analysis of existing accident data and to select the crash pulses required to analyse the rail vehicle interiors isolated from the structures and structural devices for energy management during the crash

WG3 Identification of the relevant injury criteria for different body parts of the rail vehicle occupant taking into account the selected crash scenarios and the interior layout of rail vehicles, identify measuring devices to quantify injury for the body parts relevant to rail occupant analysis and to define relevant test procedures that can be used during the interior design and during interior passive safety validation of solutions.

WG4 Identification operational and commercial requirements. Define the most relevant interior features and define requirements for the interior layouts including seats, bulkheads and other relevant interior equipment. Identification of potential for use of emerging technologies and new materials. To develop out new design solutions, manufacture test layers to be tested and validated.

WG5 Development, manufacturing, testing and validation of 4-5 different scenarios selected from bay seating, row seating, lateral seating, longitudinal seating, standing passengers, wheel chair restraint, driver new component designs to the enhancement of occupant interior passive safety levels. Other objectives are to assess the suitability of the new component design requirements, to appraise the use new test methods, measuring devices and injury criteria.

WG6 Compilation of the main results and overall conclusions. Critical appraisal of followed methodology, injury criteria, measuring and testing. Assessment of new design requirements and suitability for implementation. Technical support the production of the European norm and a relevant TSI chapter to be issued as complement to the structural crashworthiness norm. Provide the technical background for new feasible passive safety interior solutions and recommendations on occupation protection.

# Partners



# SAFEINTERIORS Train Interior Passive Safety for Europe

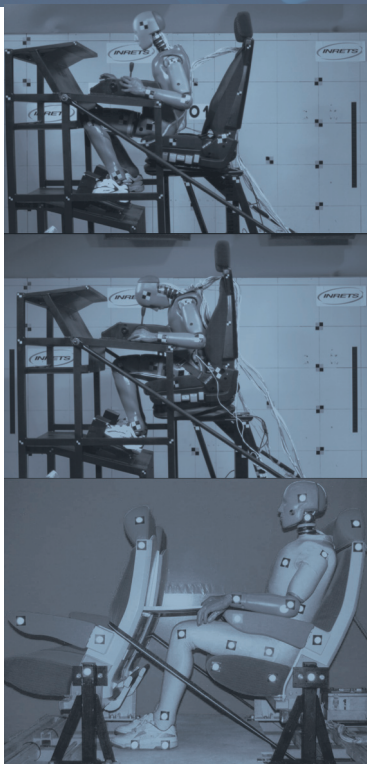
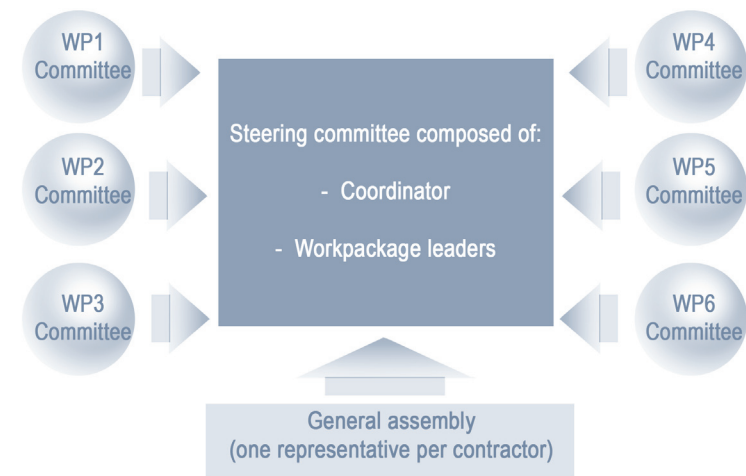


For more information [www.eurailsafe.net](http://www.eurailsafe.net)



## Project Overview

Safeinteriors - Train Interior Passive Safety for Europe - is an integrated research project partly funded by the European Commission under the 6th Framework Programme. Safeinteriors is aimed developing integrated safety systems which are reliable and fault tolerant (preventive, active and passive) taking into account human-machine interface concepts focusing on system implementation. This three and a half year research project started on 11 July 2006 and has a budget of around 3.7 million Euros.

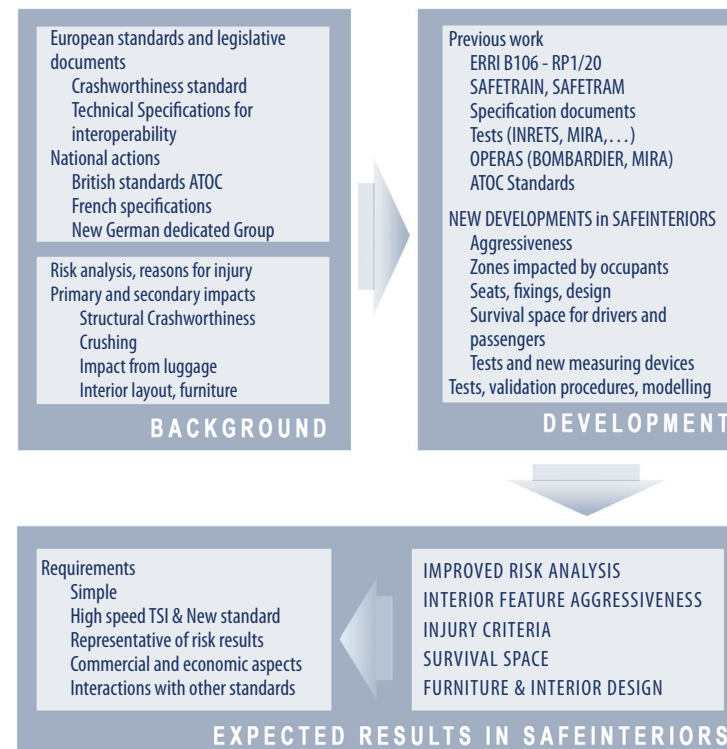


## Background

Some national or even regional based specifications emerged in Europe, lacking in harmonisation as a result of some individual initiatives of Manufacturers, Operators Research Institutions and Universities.

Preliminary efforts already done by the SAFETRAM and the SAFETRAN projects must be taken as the investigation basis. These projects recognising interior safety as a major research topic highlighted the need to pursue new investigations in interior safety, tailored to railway industry, including detailed risk analysis, crash pulses and associated biomechanic issues.

The specification of a European standard for rail vehicle interiors needs a multidisciplinary and international approach. SAFEINTERIORS involves all the stakeholders in rail transportation, from the manufacturers to the network operators.



## Objectives

SAFEINTERIORS presents the European railway industry with a key step towards achieving full interoperability by providing the structure to implement a full methodology to design, test and in validating improved interior solutions, thus reducing the levels of fatalities and injuries in rail accidents.

The purpose of the interior passive safety developments is to provide the different railway stakeholders with a (currently missing) framework capable of assessing interoperability of all present and future interior rail vehicle layouts. Moreover, the proposed framework is designed to assess new interior solutions following advanced requirements covering, in a systematic manner, representative layouts, a range of suitable crash pulses and new test and validation procedures suitable to the rail industry.

The SAFEINTERIORS will design, build and test novel vehicle interiors for train drivers and passengers. It will incorporate advanced ergonomics, new safety features that will provide occupants with the best possible working and travelling conditions. More importantly, these designs and the corresponding specifications will be adopted across Europe, so that future rail vehicle interiors will all have harmonised safety levels and will function across national borders.

