



Deliverable 8.2  
Executive Summary

*The Cost benefit analysis  
including KPI definition  
and measurement*

## Executive summary

The present deliverable aims at providing a consistent assessment of the potential of a list of selected measures supporting the reach of the targets set by the Spider Plus Project in order to match the ambitious objective of creating a European society overwhelmingly served by rail by 2050 accordingly to the ECs white paper challenges in terms of modal shift in favour of rail.

Spider Plus 2050 vision implies the undertaking of a big amount of investments and the implementation of "co-modal" solutions enabling the meeting of the main target - developing a society based on rail - and specific modal shift targets.

Investments foreseen are expected to bring potential benefits, both for rail transport users and for the society.

An exercise based on Cost Benefit Analysis (CBA) approach has been run in order to evaluate scenarios characterised by a set of innovative solutions applied to the railway sector both concerning freight and passengers, estimating the economic benefits of the identified solutions. In principle, since the CBA uses the "public" point of view comparing only differential costs and benefits that are borne or taken by the community, all impacts should be assessed: financial, economic, social, environmental, etc.

Solutions assessed are: a) for freight, railports and private sidings dedicated to wagon load service, intermodal terminals, Automatic Centre Buffer Coupler (ACBC) for wagons, and hybrid locomotives; b) for passengers, the development of both HSR and conventional networks, HS and conventional equipment (trainsets), ETCS system.

Comprehensive Cost Benefit Analyses have been developed both for passengers as well as for freight, based on the detailed estimations elaborated for each of the solutions listed above. This allow to provide a consistent picture of the impact which envisaged investments according to the solutions might have in terms of generated benefits while contributing to reach the 2050 modal shift objectives and Spider Plus 2050 targets.