# SHIFT<sup>2</sup>RAIL

Innovation Programme 5 – SUSTAINABLE & ATTRACTIVE EUROPEAN FREIGHT TRANSPORT

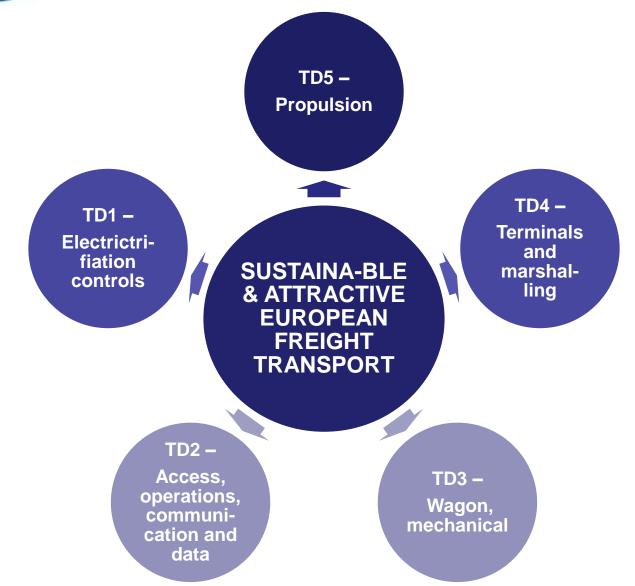
### STAKE AT EU LEVEL:

Overcome the current difficulties in freight transport performance in Europe to foster the shift to rail and increase environmental benefits.

#### CHALLENGE:

Define all technological and process breakthroughs necessary to contribute to the achievement of the 50% of road traffic switching to rail and inland waterways by 2050 as mentioned in the Transport White Paper.

### > 5 TECHNOLOGY DEMONSTRATORS





## FOCUS ON TD3: WAGON

#### **Main objective:**

Provide innovative wagons designs through the use of new materials and optimise their usage in relation to axle load.

#### Main output(s):

More efficient and adapted wagons that will contribute to the attractivity of freight transport.



## **FOCUS ON TD1: Electrification**

#### Main objective:

Provide innovative wagon designs through the use of electrified functions

#### Main output(s):

More efficient wagons using modern technology to improve the productivity of the rail freight.



## **FOCUS ON TD1: Terminals**

#### **Main objective:**

Improve the train related efficiency in terminals and facilitate intermodality

#### Main output(s):

Faster and more efficient turnaround, meaning less downtime. Cost and timereduction for intermodal transports.