# YOUR INNOVATIVE JOURNEY WITH SHIFT2RAIL

BOOTH MAP

WCRR 2019 TOKYO
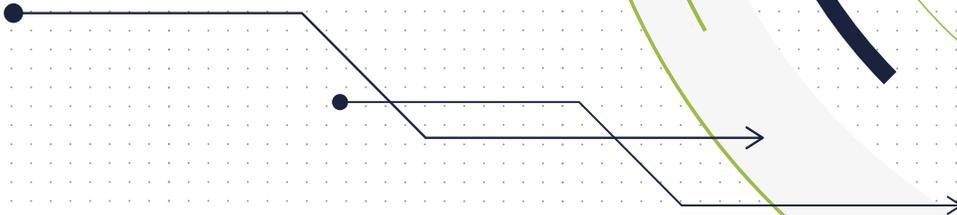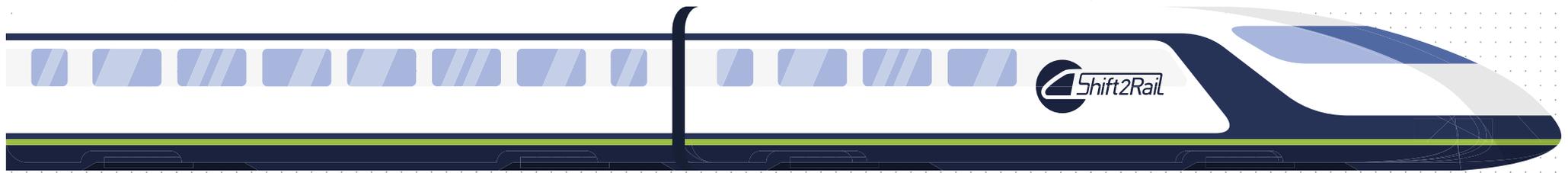
MULTIMODAL TRANSPORT

To change the way passengers use transport, Shift2Rail's IP4 is building a digital ecosystem to offer them the best combination to get from A to B, based on real-time traffic data tailored to their preferences. With a single click passengers will be able to book and pay for multimodal trips across Europe, bypassing the 'behind-the-scene' complexity of the many systems involved.

DIGITAL BRAKE TEST

The digital break test is the first step towards a fully digital freight train. The solution provides the driver with a remote status of each wagon's brake devices improving the safety of this previously arduous task, while also saving time.

NOISE ABATEMENT TECHNOLOGIES

This demo enables the inclusion of human perception in the assessment of different noise scenarios. It shows the auralisation and visualisation of exterior train noise. The prototype developed in the S2R projects is used to demonstrate trains passing by under different conditions with and without various noise mitigation measures.

ASSET MANAGEMENT

Two prototypes are being developed within IP3 to improve the operational efficiency of railways assets by reducing the number of false alarms maintenance teams must investigate. The developed algorithms deal with two scenarios – the first where maintenance works triggers an alarm in a neighbouring asset and the second where weather, especially precipitation, impacts Track Circuits.

ADAPTABLE COMMUNICATION SYSTEM

The aim of the Adaptable Communication System is to deliver an adaptable train-to-ground communications system usable for train control applications in all market segments (e.g. European Train Control System - ETCS), using any kind of IP technologies (LTE, 5G, Satellite communication, Wi-Fi, etc.), making it future proof.

VIRTUAL COUPLING

The virtual coupling solution of Shift2Rail is demonstrated on 2 trams, showing how innovations in the field of computing and communications impact the railways. Virtual coupling maximises the capacity of railway lines and saves train composition time, leading to reduced costs in the transport system.

IP4 IP3 IP5 IP2 CCA IP1 GO

Shift2Rail