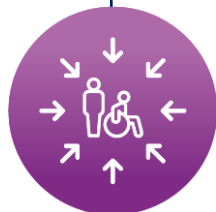




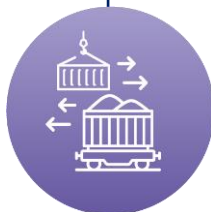
## FUNCTIONAL PRIORITIES

The five functional priorities are industry agreed focus areas where new technical solutions are critical. For each priority, routemaps sets out key goals, stepping stones needed in the next five to eight years and a 2040 vision.



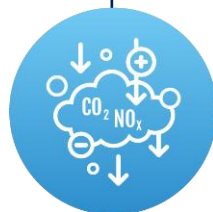
### EASY TO USE FOR ALL

Empower customers to travel with confidence through reliable real-time information, intuitive payment systems, and accessible design.



### FREIGHT FRIENDLY

Freight growth on the rail network will be enabled through better use of existing and new capabilities of freight assets, and improved whole system thinking with freight at its heart.



### LOW EMISSIONS

Carbon and air emissions will be minimised by cheaper and less disruptive electrification, zero-carbon diesel replacement, greater efficiency and removing emissions at source.



### OPTIMISED TRAIN OPERATIONS

Train services will be reliable and the capacity of the network improved by real-time management, better train planning and simulation, and shorter headways, together with new solutions at nodes.



### EFFICIENT AND RELIABLE ASSETS

Reliability and availability of assets will be maximised by design, remote and automatic inspection, and targeted interventions, while whole-life cost is reduced.

## CRITICAL ENABLERS

The success of the railway requires more than technical solutions. These three critical enablers underpin and facilitate technical progress.



### DATA DRIVEN

Good understanding and exploitation of the railways' data asset underpins progression towards all functional priorities of the RTS.



### EFFECTIVE INNOVATION CULTURE

The railway continues to need people from a vast array of technical backgrounds to succeed, and success involves different technical disciplines having sound whole-system understanding. The fast-paced developments of digital technologies pose a further attraction, retention and upskilling challenge.



### TECHNICALLY TALENTED WORKFORCE

Timely and successful deployment of novel solutions is made possible by collaborative research and innovation, aligned to capital investment decisions and timescales, and supported by the right culture to drive and de-risk change.



## DESIRED OUTCOMES

The five desired outcomes set out what success looks like for the strategy. It is a live, evolving strategy, designed to reflect the changing landscape.

1

Support rapid progress towards industry's strategic aims

2

Steer research funding and initiatives to prioritise advances in agreed areas

3

Inform long-term investment planning for replacements and renewals

4

Empower supply chain to deliver the technical solutions required by industry

5

Foster collaboration and provide a conduit for sharing successes and challenges