

How RSG and Industry are supporting research, development and innovation - introducing UKRRIN

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UKRRIN is co-funded by leading industrial Partners and Research England

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The importance of research, development and innovation

R&D

The power (and value) of
knowledge and technology

Innovation

Introducing new ideas,
products, processes, solutions

Outcomes = Growth, productivity, efficiency, market share,
business value, profitability, product lifecycle, reliability...

The 2016 Rail Supply Group Strategy

Objective: transform the supply industry making the UK a global leader in rail

4 priority work areas:

- Creating the market conditions for growth;
- People and skills;
- Technology and innovation;
- Export growth.

Innovation explicitly stated as a key target:
helping UK companies develop, demonstrate and commercialise new technologies



Delivering the RSG Strategy

The relevant initiatives from the Strategy (p.48):

- *RSG will prioritise innovation in its five key technology areas across the UK by developing a network of new Centres of Excellence in collaboration with government, universities and business growth incubators.*

[customer experience, energy management, advanced control, whole life asset optimisation and through life management, high value rolling stock systems]

- *RSG will develop options to transform UK testing facilities by the end of 2017.*



Rail Supply Group

IN PARTNERSHIP WITH **Rail Delivery Group**

Engaging with Government

- **RSG and Academia in collaboration:**
 - Partnership formed in 2016 between industry and 8 universities to develop a world class network of Centres of Excellence in Rail R&D
 - £92m bid to HEFCE submitted in December 2016 (1/3 Government funding with 2/3 industry match funding committed)
 - 16 industrial partners committed to support
 - Summer 2017 – successful bid confirmed by Department for BEIS

Industry Support

SIEMENS

BOMBARDIER

THALES



HITACHI
Inspire the Next



UNIPART
RAIL



Railway Industry Association

AECOM

ATKINS

Progress Rail
A Caterpillar Company



Introducing the UK Rail Research and Innovation Network

- Centre of Excellence in Digital Systems
 - University of Birmingham
- Centre of Excellence in Infrastructure
 - University of Southampton + Sheffield, Nottingham, Heriot Watt, Loughborough
- Centre of Excellence in Rolling Stock
 - University of Huddersfield + Newcastle, Loughborough
- Centre of Excellence for Testing
 - Network Rail RIDCs + Transport for London, Quinton RTC

What is UKRRIN?

The UK Rail Research and Innovation Network is designed to create powerful collaboration between academia and industry, aiming to provide a step-change in innovation in the sector and accelerate new technologies and products from research into market applications globally.

Parliamentary Launch: 20 Feb 2018



What can UKRRIN do for YOU?

- UKRRIN offers industry access to purpose built world-leading facilities and skills in a range of areas to support research, development and innovation for new technologies and products.
- The centres are supported by industrial partners to deliver world-leading research from inception to market application for both the UK and global markets.
- The Centres of Excellence provide the ability to deliver new products and technology to market faster, using advanced purpose-built simulation and testing facilities.
- The centres will also help the UK maintain its position as a technology leader in rail on the world stage.

Our 4 Objectives



Support and build UK rail sector capacity and capability to develop, deliver and deploy new technologies



Deliver a step change investment in rail innovation through a world-leading network of UK- based research and testing centres



Radically increase UK rail productivity and performance by delivering transformational innovations and accelerating its uptake



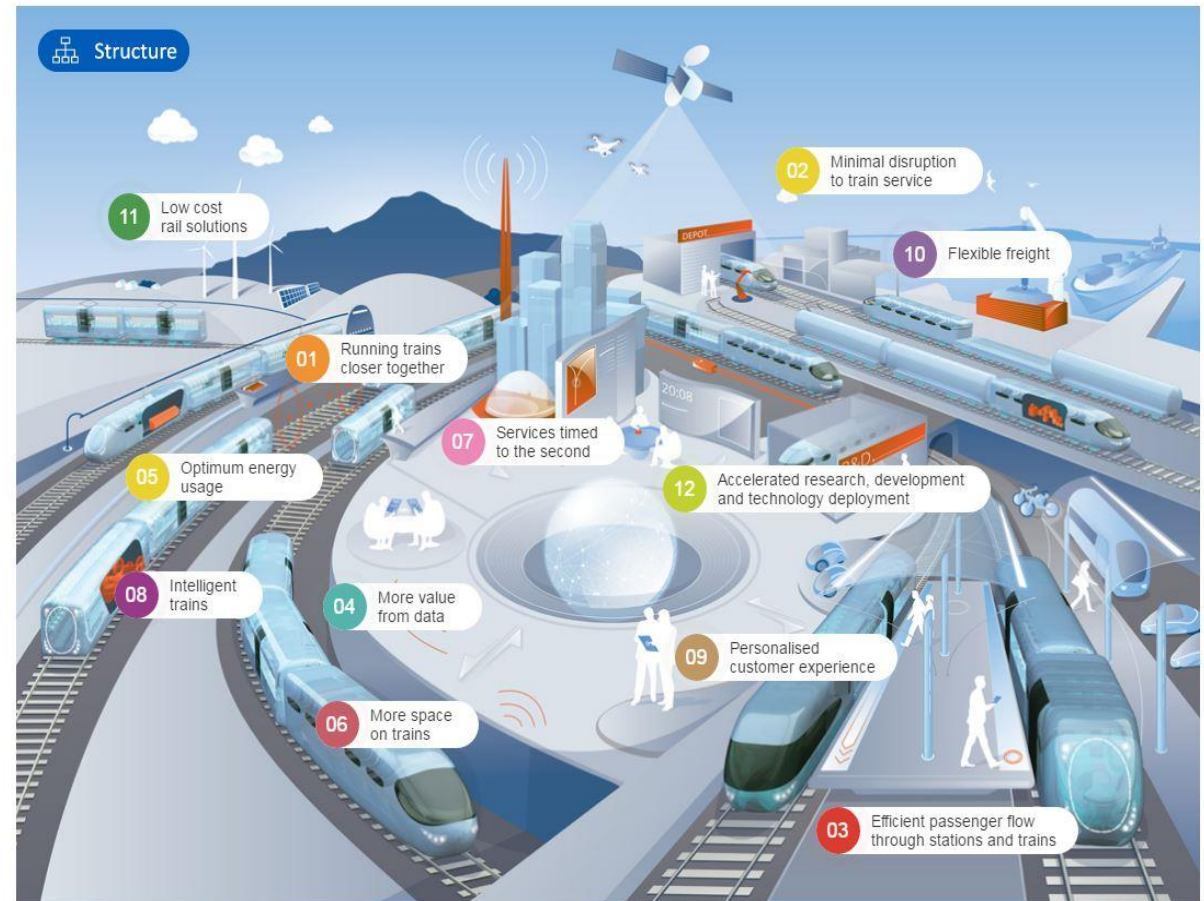
Develop new strategic relationships with the small – medium sized enterprise supply chain, rail industry and wider transport sector

Strong links to industry landscape

- Rail Technical Strategy
Capability Delivery Plan
- Network Rail Control Period 6
- Industrial Strategy (+ Rail
Sector Deal)



Capability Delivery Plan



Roadmap for UKRRIN

- New facilities
 - Centre of Excellence in Digital Systems building opens in 2020
 - New equipment coming to the Centre of Excellence in Rolling Stock
 - Part of the new National Infrastructure Lab
- New partnerships between industry and academic
- More and better R&D – collaborative; stronger knowledge-base
- Greater opportunities for innovation
- Attracting talent and investment into UK rail industry

Thank You

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