



AIR 2 Challenges

NR AIR 2 Challenge

Information

Improving the quality and reach of the information we hold and share relating to the dynamic status of the rail network.



Safety

Improving the safety of the rail network for passengers and employees.



Looking to improve

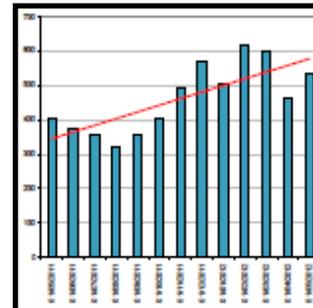
Stations

To improve the experience of people within our stations to raise customer satisfaction and optimise operations.



Capacity

The UK has the fastest growing rail network. This growth is set to continue. We need to improve the capacity of the rail network.



Information

We are always striving to improve the quality and reach of the information we hold and share relating to the **dynamic status of the rail network**.

OUR COMMITMENT A strong example of Network Rail's belief in the power of information is the £300m Orbis programme is set to revolutionise GB rail infrastructure asset information for the benefit of the rail industry:

www.networkrail.co.uk/technology-drives-down-costs.aspx

This investment will transform our capability to manage and develop services around our asset information.

NEED INSPIRATION? We already publish a vast range of data sets as part of our commitment to improving transparency.

www.networkrail.co.uk/transparency

This has already led to the provision of a range of data feeds that have inspired a number of innovative services.

WHAT WE WANT - innovative suggestions on how we can extract better and more actionable information from the data that is available to the rail industry.



Some areas of interest

- Novel analysis methods
- Data mining
- Data fusion (existing & new)
- Visualisation

Stations

We would like to **improve the experience of people within our stations** to raise customer satisfaction and optimise operations.



WHAT WE HAVE: Network Rail owns and manages 17 of Britain's largest and busiest stations.

www.networkrail.co.uk/aspx/765.aspx

We believe there is a significant opportunity to develop new services that optimise how people use these stations and assist people in making best use of the available space and resources,

WHAT WE WANT: innovative ways in which you can assist us to make our stations more satisfying for customers and more efficient to operate.

Some areas of interest

- dynamic monitoring of the flow of people within station spaces
- optimise the loading and unloading of trains
- improving communication between station operators and their customers.

Capacity

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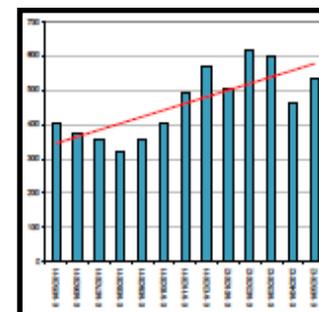
Britain's rail network continues to be the fastest growing in Europe.

<http://www.railtex.co.uk/news-and-features/?n=new-uk-rail-report-2012-available-now>

The UK is investing in the rail infrastructure to cope with this increase in demand. To maximise the value from this investment we are seeking innovative ways to grow the capacity we obtain from this investment.

Capacity can be achieved in a number of ways including reducing maintenance times, varying the demand over time or increasing the number of trains.

We are seeking new and innovative approaches to increasing capacity on the UK rail network.



Some areas of interest

- analysis of data to inform the planning process
- resilience to change and disruption

Safety

We are always looking for new ways to improve the safety of the rail network for passengers and employees.

Network Rail aims to run a safe, reliable and efficient railway. Safety is at the heart of what we do. More information about our safety approach and initiatives can be found here:

www.networkrail.co.uk/industry-Safety.aspx

safety.networkrail.co.uk

We believe that there is significant scope for innovative digital services that will improve the safety of the rail network.



Some areas of interest

- level crossings
- mechanism to allow customers to inform us of potential problems
- improving the safety of dispatching trains from stations