

ORR System Operation workshop

Initial discussion on concepts, issues and opportunities

Friday 2 October 2015



Introduction to workshop

Joanna Whittington

Introduction to today's workshop

Time	Agenda item	Speaker			
10.00 – 10.30	Registration Tea / coffee	All			
10.30-10.40 (10 minutes)	Introduction	Joanna Whittington, ORR			
	System operation functions and activities				
10.40-11.00 (20 minutes)	ORR discussion on system operation	Chris Hemsley, ORR			
11.00-11.45 (45 minutes)	Cross industry perspective about what system operation is and what the challenges and opportunities are	 Lindsay Durham, Freightliner Maggie Simpson, Rail Freight Group Graeme Hampshire, Stagecoach Rail Garry White, Network Rail 			
11.45-12.30 (45 minutes)	Break-out discussion	All (in room 2, 5, 6,7, 8, and 9)			
12.30-13.10 (40 minutes)	Lunch	All			
13.10-13.20 (10 minutes)	Summary of break-out discussion	Alex Bobocica and Siobhán Carty, ORR			
System operation of	dashboard				
13.20-13.25 (5 minutes)	ORR introduction to a system operation dashboard	Chris Hemsley, ORR			
13.25-13.45 (20 minutes)	Network Rail discussion on version 1 of the dashboard and possible other metrics to be included	Peter Northfield and Matthew Lutz, Network Rail			
13.45-14.15 (30 minutes)	Break-out discussion Mixed tables of industry stakeholders, tasked with answering set questions	All			
14.15-14.40 (25 minutes)	Feedback discussion	Group representatives			
Conclusions					
14.40-15.00	Wrap-up etc	Joanna Whittington, ORR			

- Welcome
- House-keeping
- Purpose of today's workshop
- Agenda for the workshop



Introduction to system operation

- Network Rail and other infrastructure managers operate the rail network and how decisions by both Network Rail and others are made about the use of this network and its expansion over time.
 - It relates to activities such as managing performance on a daily basis; timetabling; and longer-term network planning.
 - It is broader than just those activities undertaken by Network Rail.
- Fair treatment, efficient network coordination and transparency are important principles for users and funders of the network.

Cost

Improvements to capacity and performance often require higher expenditure

Capacity

Greater use of the network typically puts pressure on performance and/or requires higher expenditure

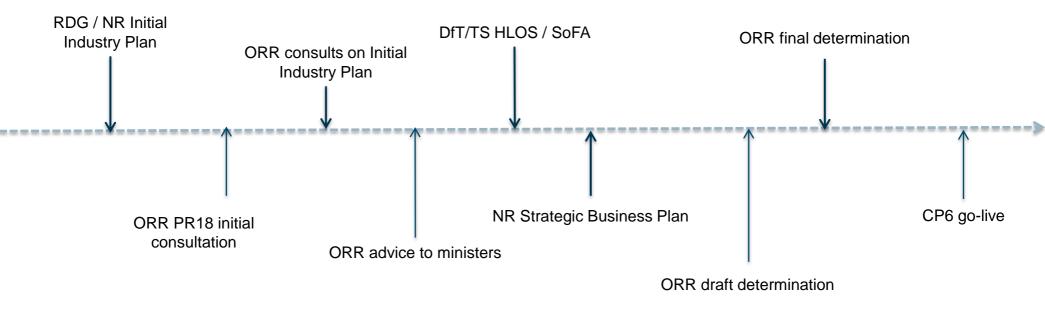
Performance

Punctuality and reliability could be improved by running fewer services and/or by spending more on performance enhancing measures



Context (1)

There appears to be scope for further improvement in how system operation is undertaken (e.g. in promoting better use of capacity, ensuring operational solutions are considered alongside capital projects and in raising performance standards). This was noted in our Final determination for PR13.



- We now want to test this more fully, to understand the scope to improve system operation and how it could be delivered for PR18.
- We are considering this as part of some early preparation for PR18, alongside other elements of the regulatory framework.



Context (2)

■ Wider changes also mean that system operation functions — in getting the best out of the network — is important.

Increasing fiscal constraints

Devolution and the regions

New capacity and changing capability

Growing passenger numbers

PR18

Bowe, Hendy and Shaw Reviews





System operation functions and activities

ORR's initial views

Chris Hemsley

Approach to the System Operation work

Defining system operation

Identifying issues / opportunities

Assessing materiality of issues / opportunities

Identifying options

Assessing options (considering possible wider changes)

Implement changes, where necessary

- To ensure there is consistent understanding of what we mean by system operation, the August consultation document sets out our initial view on what we mean by system operation (including the functions and activities). We want stakeholders' views on this understanding to ensure there is a broadly consistent view.
- We are also beginning to think about the issues and opportunities with the way system operation is undertaken. We also want stakeholders' views on this.

What is system operation in rail?

- The railway network brings together a number of functions delivered by different organisations (e.g. provision and operation of physical infrastructure, provision of rolling stock and running of train services) to deliver rail services for passengers and freight users.
- System operation is the set of functions that can ensure efficient delivery of the network and helps realise the benefits of its use, including to the wider economy and society.
- This is distinct, for example, from responsibility for delivering investment projects or of maintenance of assets. Reflecting this, system operation typically relates to functions where coordination and/or the fair treatment of customers are particularly important.
- A number of organisations perform functions that we see as being part of system operation.







Functions and activities within the scope of system operation (1)

- When describing system operation in rail, we can do this with reference to the long term, the medium term and the short term:
 - in the long term it is about identifying future requirements and planning for related network expansion and enhancement;
 - in the medium term it is about capacity identification and allocation (e.g. timetabling and franchise specification); and
 - in the short term it includes day to day operation of the network, for example through the signalling activity delivered by Network Rail and managing the impact of disruptions to the network.

Coordinate long-term decisions on size and shape of the rail network

Network System Operation (long term)

Develop proposals for changes to the network

Choose projects for changes to the network

Deliver changes to the network

Maintain capability and condition of the network

Infrastructure management

Network System Operation (medium and short term)

Determine capacity from physical network

Allocate capacity (including to possessions) and performance

Operate the system enabling services to run (including at route level*)

^{*} This includes activities such as investigating incidents, operating the timetable and/or signalling which are currently delivered at the route level, but which fall under system operation functions.

Functions and activities within the scope of system operation (2)

This diagram expands on the previous one by outlining the various activities that currently deliver the key system operation functions

Long-term network system Short and medium-term operation network system operation **Network System Operation** Functions Coordinate Operate the long-term Develop Choose Maintain Determine Deliver Allocate capacity (including to system enabling decisions on proposals for projects for capability and capacity from changes to the possessions) and services to run size and shape changes to changes to the condition of physical network performance (including at route of the rail the network the network network network level*) network DfT/TS: Services specified in NR, HS1 etc.: Does not fall franchises Gov'ts and Operate signalling Does not fall within the DfT/ Transport operators: **DfT/TS:** Performance targets within the scope of SO system; Incident Scotland (TS): specify and scope of SO response: **ORR:** Access decisions: High level Infrastructure procure rolling Customer service NR: Long access guidance outputs NR: stock **Projects** manager (e.g. term

NR. HS1. the

Spur) delivers

maintenance

and renewals

Heathrow

Timetable

rules (TPR)

planning

NR: Access planning and sale

NR: Identify options for better

NR: Identify spare capacity

NR: Manage performance data

of access rights

NR: Timetabling

utilisation of capacity

NR: Manage

?: managing

interfaces with

other transport providers

daily basis

performance on a

Infrastructure management

delivered by

infrastructure

manager or

third parties

specifications

NR: Strategic

Business Plan

(HLOSs)

Gov'ts: balance

provision across

transport modes

Gov'ts: integrate

rail with other modes

planning

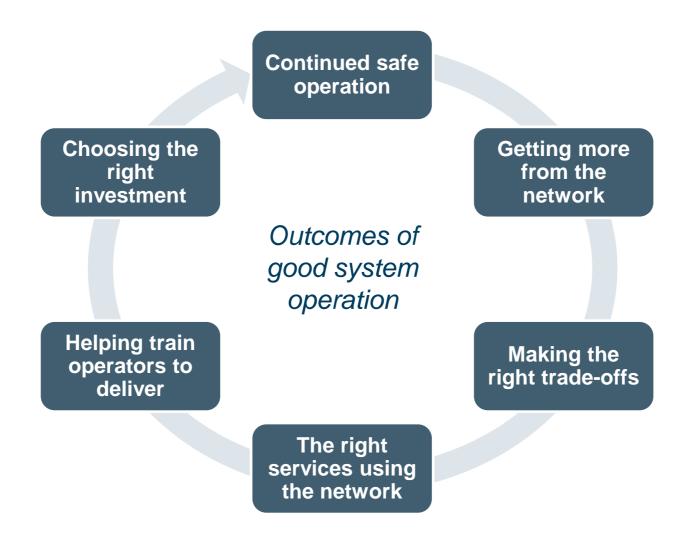
process

(LTPP)

^{*} This includes activities such as investigating incidents, operating the timetable and/or signalling which are currently delivered at the route level, but which fall under system operation functions.

Delivering good system operation

In our consultation we argued that good system operation could ensure a number of important outcomes are secured from the rail system





Coordinate long-term decisions on size and shape of the rail network

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Network System Operation (medium and short term)

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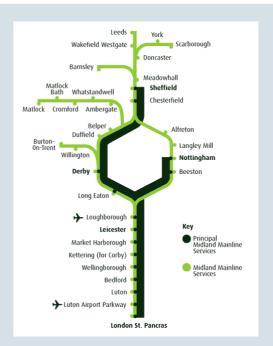
Allocate capacity (including to possessions) and performance

Operate the system enabling services to run (including at route level*)

OFFICE OF RAIL AND ROAL



Market studies and Route Studies



Congestion declaration on Midland Mainline

Coordinate long-term decisions on size and shape of the

rail network

Network System Operation (long term)

Develop proposals for changes to the network

Choose projects for changes to the network Deliver changes to the network

Maintain capability and condition of the network

Infrastructure management

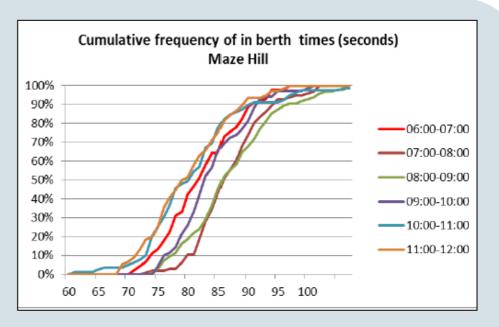
Network System Operation (medium and short term)

Determine capacity from physical network

Allocate capacity (including to possessions) and performance

Operate the system enabling services to run (including at route level*)





Timetable Planning Rules (TPR)

Dwell time assumptions in timetable



Coordinate long-term decisions on size and shape of the rail network

Network System Operation (long term)

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Network System Operation (medium and short term)

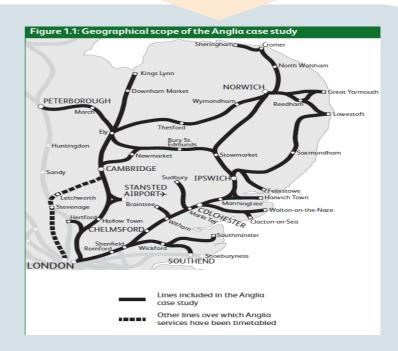
Determine capacity from physical network

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London Midland 110 project



Improving connectivity study



Coordinate long-term

decisions on

size and

shape of the

rail network

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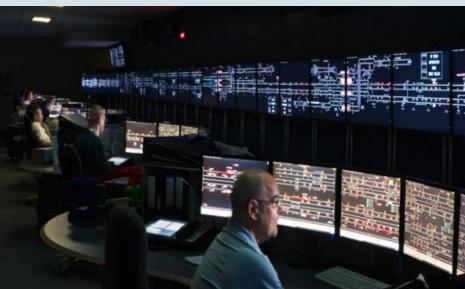
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Signalling





Stakeholders' views

11.00 - 11.45

Questions for discussion (11.45-12.30)

- 1. What do you consider is missing, or needs to be removed, to our definition of system operation?
- 2. What issues and/or opportunities have you faced in the way the system is currently operated?
- 3. How do these relate to the different functions we have characterised?

Group	Location	ORR facilitator
Group A	Room 2	Siobhán Carty
Group B	Room 2	Alexandra Bobocica
Group C	Room 9	Joanna Wittington
Group D	Room 5	Chris Hemsley
Group E	Room 6	Lynn Smith
Group F	Room 7	Oscar Plummer
Group G	Room 8	Deren Olgun





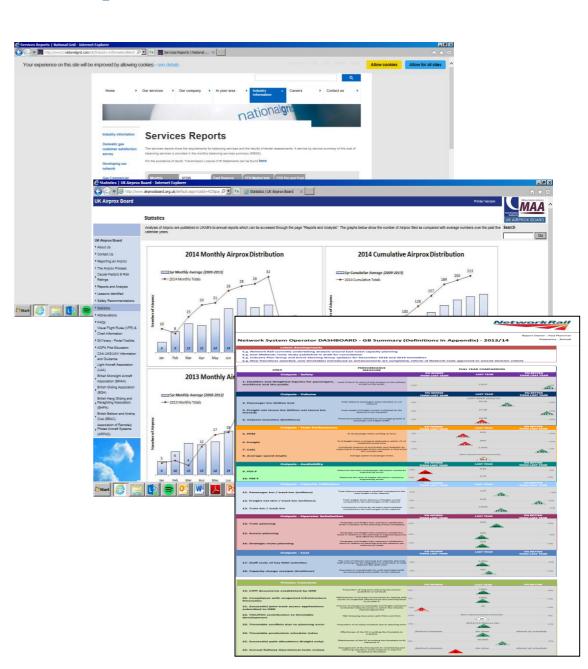
System operation dashboard

ORR introduction

Chris Hemsley

The role of a System Operation dashboard

- The system operation dashboard is intended to provide transparency and assurance to access beneficiaries and to funders, help to promote fairness and facilitate more informed decision making.
- It should not relate only to Network Rail's functions.
- Should we want any additional system operation measures reported against for CP6, early work is required to ensure sufficient and timely data.





Measuring network system operation

Consultation workshop 2 October 2015

Peter Northfield



A network system operation dashboard

- An information tool in development
 - Purpose?
 - Audience?
 - Types of information





Supporting good system operation



- Supporting good system operation
 - What is good?



- Supporting good system operation
 - What is good?
 - What is the purpose of the system?



- Supporting good system operation
 - What is good?
 - What is the purpose of the system?
 - How can the dashboard support this?
 - transparency
 - accountability



Audience?

- Transparency availability of useful information to inform decisions made by system participants
 - Who? Funders / investors; train operators; terminal operators; supply chain; end users?
- Accountability delivery of system operation activities
 - Who? Regulators; funders; end users; media; public?



Types of information?

- Outputs of the railway system
- Processes that support delivery of the outputs
- Transformation programmes to improve processes
 - Intermediate measures within the system separate category?
- Top level data usefulness?
 - Masks local variations
- Disaggregated data constraints
 - e.g. train services v. infrastructure geography
- Time series fit for the future?



Breakout discussion

7 groups, each to discuss:

- Purpose
- Audience
- Types of information

Highlight and briefly report back on top two observations from your group

Nominate contacts for follow up discussions

Group	Location	Facilitator
Group A	Room 2	Peter Northfield (NR)
Group B	Room 2	Rachel Gilliland (NR)
Group C	Room 2 (change from morning session)	Joanna Whittington (ORR)
Group D	Room 5	Matthew Lutz (NR)
Group E	Room 6	Scott Meadows (NR)
Group F	Room 7	Oscar Plummer (ORR)
Group G	Room 8	Garry White (NR)



Next steps

- Feedback
- Follow up with nominees from each group (starting next week)
- Set up cross-industry working groups where relevant

Wrap-up

- Concluding remarks
- Next steps
- If you would like to discuss system operation with ORR, please get in touch (ORRSystemOperation@orr.gsi.gov.uk).
- If you would like to discuss the system operation dashboard with Network Rail, please get in touch (nso.consultation@networkrail.co.uk).

