



# Route requirements and scorecards: draft impact assessments

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#### 1. Introduction

- 1.1 This annex to our consultation 'Route requirements and scorecards' supports our consultation on 'The overall framework for regulating Network Rail'.
- 1.2 We have completed a draft impact assessment (IA) for instances where we are proposing to specify a measure, where we also propose to specify a target or where our policy proposal materially differs from our approach in PR13. We welcome comments on these assessments.
- 1.3 Each IA contains a 'do nothing' approach, and one or more subsequent options which we assess against the 'do nothing' option.
- 1.4 Each IA option is assessed against the PR18 outcomes as specified in our PR18 initial consultation:

PR18 outcome	Description
MORE EFFICIENT	Taking cost – effective decisions on operating, maintaining and renewing the network.
BETTER USED	Finding ways of improving performance and accommodating more services on the current network.
EXPANDED EFFECTIVELY	Informing decisions on enhancements and delivering agreed projects in a safe, timely and cost-effective way.
SAFER	Maintaining, and finding ways to improve, safety standards on the current network and as it is enhanced.
AVAILABLE	Taking effective decisions around possessions, mitigating the overall impact of these on end users.
RELIABLE	Taking effective decisions to limit delays and cancellations, and their impact on end users.

### 2. Network sustainability

PR18 Scorecard		
Measure	Network sustainability	
Which of the PR18 outcomes does this deliver against?	<ul> <li>The network is more efficient:</li> <li>Provide transparency about whether Network Rail is storing up future costs in its approach to renewals</li> <li>The network is safer:</li> <li>Maintaining and improving the safety of the network relies upon Network Rail delivering sufficient renewals</li> <li>The network is more reliable:</li> <li>Ensuring that Network Rail delivers sufficient renewals to sustain the network assets during CP6, which will help ensure that the reliability of the network is maintained and improved in the future</li> </ul>	
The problem under	·	
Maintaining and renewing the network in the short, medium and long term is one of Network Rail's key obligations, as set out in its Network Licence (LC1).  As Network Rail sets and then subsequently adapts its maintenance and renewals plans for a control period (for example the deferral of renewals in CP5 in response to financial pressures) there may be long-term impacts on the sustainability of the network.		
Options considered:		
Option 0: Do nothing	We continue to monitor asset residual life or asset condition score, which is reported annually in the annual return.	
Option 1: Specify a network sustainability measure	We require a measure to be included on Network Rail's scorecards to reflect how well each route is managing the sustainability of the network.	
Assessment of options	(options assessed relative to do nothing)	

Option 1: Specify a network sustainability measure

The purpose of adopting a sustainability measure is in recognition that it is a key output of Network Rail's activity, and to provide a clearer mechanism for communicating concerns, including potential enforcement action, should there be a material shortfall in delivering planned maintenance and renewals work during CP6.

#### Identifying a measure

There are two alternative approaches:

- a) a measure based on the value of the residual life or asset condition score for each principal asset group (including stations) and for each route.
- This would provide a practicable approach that would give us the option of taking enforcement action if required.
- This measure should be included in the route scorecard as a toplevel measure to enable route comparison. However the data is slow moving and only updated annually
- We would need to refer to the detailed data which supports this toplevel measure as there is limited space on Network Rail's scorecard
- We are liaising with Network Rail to develop the details of a practicable measure based on the proposed approach.
- We note that this issue is less directly of interest to Network Rail's customers and funders
- b) a scorecard measure based on the overall cost of delivering any shortfall in the planned renewals, in effect the future liability.
- This is easier to communicate to stakeholders, but it is not a direct measure of sustainability, and it does not take into account that actual residual life can differ from forecast because the rate of degradation could turn out to be greater or less than expected.

#### Setting a target:

There are also two options here:

- i) Not set any targets in relation to this measure
- We could not set a target and just monitor trends
- ii) Set a regulatory minimum floor

• We propose setting the floor by reference to Network Rail's forecast of residual life or asset condition score in its SBP, providing we are satisfied with its asset management plans, and that they will achieve the forecast condition if delivered. We envisage that the floor will be set so that it would have effect only if there is a material shortfall, and recognising that determining residual life or asset condition score is not a precise calculation.

#### Recommendation

- A measure should be included in a route scorecard as a top-level measure to enable route comparison. However the data is slow moving and only updated annually.
- We are liaising with Network Rail to develop the details of a practicable measure based on the proposed approach.
- We note that this issue is less directly of interest to Network Rail's customers and funders.
- We anticipate setting a regulatory minimum floor for this measure.

### 3. Route performance – passenger market

PR18 Scorecard	Impact Assessment
Measure	Consistent route passenger performance measure
Which of the PR18 outcomes does this	PR18 Outcome: Better used and reliable
deliver against?	Network Rail is able to provide confidence that it is doing everything reasonably practicable to deliver acceptable train performance to its train operator customers, and in turn to end users and taxpayers.

#### The problem under consideration

Route scorecards in particular reflect the interests of Network Rail's train and freight operating customers, through inclusion of a number of customer requested measures. These customer-agreed measures include high-level measures of train performance (e.g. Public Performance Measure (PPM) or On Time Performance) as well as more detailed measures (e.g. on time arrivals/departures at key stations).

Currently Network Rail compares the performance of each route on its national corporate scorecard by assessing how well each route has delivered against the targets it has set with its customers, and against locally agreed measures. This approach supports the customer focus for each route, and enables Network Rail to understand how well it is delivering the requirements highlighted by its customers, but this does not enable us to make an objective assessment of how well each route is performing relative to others. Network Rail is currently seeking to increase the extent to which its scorecards can be tailored to reflect local requirements.

We currently assess Network Rail's performance relative to two consistent measures in CP5 (PPM and CaSL). Network Rail's customers may choose different measures for each of their scorecards in order to reflect their different businesses. This will mean it is difficult to objectively compare the relative levels of performance on each route. A single consistent measure will help enable these judgements to be made and the measure will also enable route comparison.

It will also enable consistent measurement during the entire control period.

:

option)

Option 0: Do nothing	There would be no comparable measure for route performance for passengers on the scorecards.
Option 1: Require a delay minutes based measure (preferred	There would be a comparable measure for route performance for passengers using one of the options set out in section 5 of this document. This will include at least the first two bullets below, and we

consider it should include the third also:

- primary delay minutes experienced on route from Network Rail caused incidents on the same route;
- direct reactionary delay minutes experienced on route from both Network Rail and TOC caused incidents on the same route; and
- indirect reactionary delay minutes experienced on route from both Network Rail and TOC caused incidents on a different route.

It will use train kilometres as a simple normalisation factor to enable comparison between routes.

A variation on this approach is that the first two factors are included only (normalised by train kilometres).

### Assessment of options

(options assessed relative to do nothing)

#### Option 1

The benefits of including a route consistent measure are set out in section 5. Broadly, this would support our policy approach to managing performance in CP6 in a way which reflects Network Rail's customers' individual priorities, but which supports our requirements and enables us to take action where necessary. Including a consistent route measure will enable transparent and consistent assessment of Network Rail's route contributions to performance. It supports our approach of encouraging route competition in this key area.

We are interested in consultees' views on whether or not to include indirect reactionary delay minutes.

There are some risks with the proposed approach:

### Network Rail focuses on the ORR determined measure and not on its customer measures:

This may be mitigated by the fact that Network Rail routes will focus on those measures which are linked to annual performance related remuneration, which it sets itself. Also if performance improves under other measures, this should translate into an improvement in delay minutes and vice versa – i.e. we do not consider that the measures work against each other.

#### Normalisation:

There is a risk that the normalisation factor will not be fit for purpose meaning that the credibility of the measure could be undermined.

As the characteristics of each route can vary significantly, some form of normalisation is necessary to enable direct comparisons to be made.

There is a trade-off between simplicity and comparability when normalising for differences between routes:

- a simple normalisation factor, such as train kilometres will not account for all the differences between routes, and therefore may not be fully representative of route performance. However, it would be easier to understand what management activity would be needed to improve performance;
- a more complicated normalisation factor, such as service intensity, may be more representative. However, there is a risk that the industry may not engage with the measure as it may be harder to understand.

The preferred option is to use train kilometres as a simple normalisation factor. Whilst this may not account for all differences between the routes, it benefits from being a more straightforward measure.

#### Cancellations:

No allowance for cancellations has been included in this measure. There is a risk that Network Rail may cancel trains to reduce the number of delay minutes on the network. However, as Network Rail remains subject to section one of the Network Rail Licence (i.e. the need to be a best practice operator), ORR could intervene if evidence demonstrated that Network Rail was cancelling services specifically to reduce delay minutes.

#### Recommendation

A consistent route measure based on delay minutes should be included in a route scorecard as a top-level measure to enable route comparison. ORR would like to hear consultees views on the proposed combination of delay minutes included in the measure. In particular:

- the inclusion or otherwise of indirect reactionary delay minutes
- The use of train kilometres as a simple normalisation factor
- The exclusion of cancellations from the measure

#### **Published report:**

Route Performance Measurement report (by Steer Davis Gleave) (see <u>here</u>)

### 4. Route performance – freight market

PR18 Scorecard	Impact Assessment
Measure	Consistent route freight performance
Which of the PR18 outcomes does	PR18 Outcome: Better used and reliable
this deliver against?	Network Rail provide confidence that they are doing everything reasonably practicable to deliver freight train performance to their freight train operator customers

#### The problem under consideration

Network Rail has introduced a Freight and National Passenger Operator (FNPO) route to manage the relationship with freight operators. In CP5, the route scorecards include measures for freight. This may not be the case in CP6.

While freight travels across the whole country, the geographic routes make a large contribution to the performance level achieved for those services. We want to be able to make an assessment across the scorecards of how well each Network Rail route is delivering across a balanced set of measures.

#### **Options considered:**

route only focus

Option 0: Do nothing	Not require a freight measure on any scorecard, and leave FOCs to negotiate with Network Rail
Option 1: FNPO only focus	ORR to require FDM on the FNPO scorecard. We could set a target for the measure in order to support freight performance (likely a minimum floor in line with our approach to passenger performance)
Option 2: FNPO + geographic route measure	ORR to require FDM on the FNPO scorecard, but also require a consistent freight measure to be included on Network Rail's geographic scorecards. We could set a target for one or both measures.
Option 3: Geographic	ORR would require a measure on the geographic route level

minimum floor).

scorecards only. We could set a target (again, likely to be a

### Assessment of options:

(options assessed relative to do nothing)

### Option 1: FNPO only focus

There is broad support among freight operators for continuation with FDM, as demonstrated via responses to our Outputs Working Paper and discussions at the RDG working group.

- We could require FDM to be included on the FNPO scorecard and set a minimum floor in relation to the national level of performance to be achieved, meaning: there would be a clear point at which we would take action; but
- freight operators could still negotiate more focused freight targets (including in relation to Strategic Freight Corridors) relative to each business under their customer sections of the scorecard.

The main risk here is that by not requiring a measure on the geographic route scorecards, those routes may not include a freight measure, and be more focused on passenger performance and not on freight performance. The FNPO would need to have strong governance arrangements with the geographic routes to prevent a loss of focus and potential deterioration of freight performance. This approach risks undue discrimination.

## Option 2: FNPO + geographic route measure

We could take the same approach as outlined in option 1 above but in addition require a consistently calculated freight measure to be included on the geographic route scorecards.

This would have the same benefits as above, but would mean that geographic routes' contribution to freight performance would be more visible and enable comparison of route contributions to freight performance.

It would remain for Network Rail to determine whether or not to include these measures in its route bonus arrangements.

The measures could be:

- FDM-R as currently; or
- Route freight delay minutes

The first would align with FDM, but has weaknesses as it does not capture all route caused issues that impact freight. The latter would need to be defined further by Network Rail and the freight industry.

Option 3: Geographic route only focus	Under this option we would only set a route level target. This would have the benefit of supporting ORR's objectives for route comparison but is unlikely to adequately support the national and strategic freight route focus required by the freight industry.
Recommendation	We consider either option 2 or option 3 are the only appropriate approaches here, and we welcome views.

### 5. Use of the network – passengers

PR18 Scorecard	Impact Assessment
Measure	Use of the network – passenger
Which of the PR18 outcomes does this deliver against?	PR18 outcome: Better used and reliable  Improving how the experience of passengers is reflected in output measures and monitoring, and; better utilisation of existing network capacity.
	ORR also has an ongoing, long-term objective to increase the transparency of the rail passenger experience

#### The problem under consideration

The CP5 scorecards enable Network Rail's customers to request tailored measures which focus on their priorities, including for their passengers. However this results in a variety of measures being included on scorecards. This means it is difficult to assess how well each route is delivering the interests of passengers.

These measures provide some transparency around each route's performance in relation to aspects of their service delivery which underpins key passenger outcomes. The ability to compare performance across each route on each of the options a)-c) would also serve to increase competition between routes by encouraging them to focus on improving passenger outcomes.

Options considere	ed: (options assessed relative to do nothing)
Option 0: Do nothing	This option is to have no passenger-related measures. This would be simple, but would not further ORR's objective to increase the transparency of the passenger experience in respect of each route's service delivery.
Option 1: ORR requires a scorecard measure	We have considered three measures:  a) Overall passenger satisfaction with the journey by route  This data is generated from the twice-yearly Transport Focus National Rail Passenger Survey (NRPS). Respondents' performance ratings are attributed to a route based on the passenger's originating station (even if the journey extended beyond a single route).

#### b) Rate of change in off-peak journeys by Route

The classification of 'off-peak' would follow the current ORR convention of using the following ticket types as the basis for off-peak journey analysis: off-peak tickets, super off-peak tickets and advanced tickets. Journey volumes would be allocated to a route based on a journeys' originating station. This data is available from the LENNON (Latest Earnings Network Nationally Over Night) ticketing and revenue database and would be best reported on either annually or quarterly as this would control for natural seasonal trends in passenger journey volumes. For example, reporting on the rate of change in off-peak journeys for a route in Q1 (April, May and June) 2016/17 would be compared against Q1 2015/16 as a percentage point increase or decrease in off-peak passenger volumes. Or it could be reported annually as the percentage point increase or decrease in off-peak journey volumes for a route for 2015/16 compared to 2016/17.

#### c) Passenger satisfaction with the managed station

In 2015/16 almost a quarter (23%) of all passenger journeys originated or terminated in a Network Rail managed station. In this context, if such a large proportion of passengers in GB are routinely using a managed station as part of their journeys it is important there is greater transparency and accountability around their experiences of them.

There is currently at least one managed station within each route (except Wales). We are seeking views on whether each route scorecard, (excluding the Wales route unless it creates a managed station), would report on the satisfaction rating for each managed station within the route, or an aggregated score for all managed stations within the route (where there is more than one). This would enable comparative analysis and benchmarking between individual stations or routes to identify the best and worst performers.

#### **Assessment of options** (options assessed relative to do nothing)

#### Option 1

Including the three measures above in a Route Scorecard would serve ORR's objective to increase the transparency around the passenger experience of each Route's service delivery.

The impact of their inclusion in terms of cost is negligible due to the fact this data is already available from the NRPS and LENNON database.

The strength of these passenger measures is that they allow for clear comparative analysis between routes. This not only enables benchmarking but it also offers opportunities to identify best practice. Over time, the inclusion of these measures can therefore help to incentivise incremental improvements in each route's service delivery. It is also important to note that because options a-c) are generated from existing data there is little additional impact in terms of cost as a result of their inclusion.

ORR has an ongoing, long-term objective to increase the transparency of the rail passenger experience, the inclusion of these measures serves this by reporting on the impact and linkages between each Network Rail route's service delivery and the effect it is having upon passenger outcomes.

There is some risk that, because each route is not entirely responsible for the passenger impacts on each of the measures, it presents potential reputational risks if performance on one or more of these indicators is poor but analysis shows it was caused by factors somewhat beyond a route's control. For example, a scenario where passenger satisfaction on a route declines significantly but analysis shows it was largely being driven by an underperforming TOC. This means there may need to be some consideration given to how best to contextualise the reporting in some circumstances.

Requiring three measures in this area may however take up too much room on the scorecard and it may be more appropriate for one measure to be selected.

### Recommendation

These measures should be included in the route scorecards as they serve to advance the PR18 objective to increase transparency around the passenger experience at individual route level and incentivise better use of existing capacity.

This approach also provides the ability to compare performance on these measures across routes which should incrementally drive up standards of performance over time on all routes.

Published report: N/A

#### 6. Use of the network – TOC/FOC

PR18 Scorecard	Impact Assessment
Measure	Network Usage
Which of the PR18 outcomes does this	PR18 Outcome: More efficient and better used network.
deliver against?	Description of PR18 outcome: Network Rail routes demonstrate efficient management across all routes and a network that is better used by finding ways of accommodating more services on the network.

#### The problem under consideration:

It is not currently clear how well Network Rail responds to its customers' needs to make increased use of the network, in delivering sufficient capacity to meet the operational needs of their customers consistently across all routes and all customers.

The volume incentive is currently in place to incentivise increases in capacity but we want a transparent view of how well each route is impacting on growth.

#### **Options considered:**

Option (	0:	Do
nothing		

No scorecard measure would mean route level performance on network usage is less transparent

# Option 1: Require a measure on the scorecard

Our proposal for one measure for the passenger market and one for the freight market from the list of the existing incentive volume metrics:

- passenger train miles
- passenger revenue
- · freight train miles; and
- · freight gross tonne miles.

This will enable us to compare route performance in providing the level of capacity passenger and freight operators need to meet the needs of their customers.

We propose that the passenger measure is placed on the geographic route scorecard, and that the freight measure is placed on the FNPO scorecard.

### Assessment of options

(options assessed relative to do nothing)

#### Option 1

This approach enables each routes' performance in maximising available capacity for passenger operators to be measured against a consistent benchmark and for this to be transparent. The freight measure could be placed on the FNPO scorecard to support a more strategic approach to the freight market. The risk of not including a freight measure on the geographic route scorecard is less than for an area such as train service performance, because the impact would be less immediate and the FNPO should be more able to work through the geographic routes over time.

The proposed measures are derived from the volume incentive which is already an objective placed on Network Rail. The measure would comprise of one of each of the existing key measures under the volume incentive, which for passengers are passenger train miles and passenger revenue, and for freight train miles and gross tonne miles.

For consistency and because Network Rail is limited in the impact it can have on the other metrics, we propose to use the train miles as the metric for both passenger and freight.

#### Recommendation

- A passenger measure (passenger train miles) should be included in the geographic route scorecards.
- A freight measure (freight train miles) should be included on the FNPO scorecard.

### 7. Network Availability

PR18 Scorecard Policy measure	Impact Assessment Network Availability
Which of the PR18 outcomes does this deliver against?	PR18 Outcome: available network.  Network Rail achieves an efficient balance between the
u <b>g</b> umor.	necessary maintenance, renewal and enhancement of the network and keeping the network open to business.

#### The problem under consideration:

The Possession Disruption Index (PDI) target was set for CP5 as one national, end of control period figure. Network Rail considers that this limits management responsibility for managing the figure. PDI is also reported in arrears, meaning that it does not effectively inform management decisions, which in terms of possession management are also being made far in advance of the day of travel, stretching the lag effect.

The system which produces the PDI number does not cope easily with franchise changes, and this has required costly interventions during CP5. The system does not currently produce a figure at route level, which would be a requirement of CP6. To make the system fit for purpose for CP6 would be likely to incur significant cost. Any such cost would need to be set against the benefits of continuing to report this measure, which the industry does not find to be an informative or helpful one.

However, network availability remains an important outcome.

#### **Options considered:**

Option 0: Do nothing	Do not continue to monitor network availability in any way (other than reliance on Schedule 4 and the network licence).
Option 1: Monitor availability outside scorecards	We could focus on the availability of the network via analysis of indicators (again supported by reliance on Schedule 4 and the network licence).
Option 2: Require a single scorecard measure	We could require a single measure to be developed which would either be a route level, refined version of PDI or a replacement for it.

#### **Assessment of options**

#### Option 1

This approach is likely to incur less cost as it is based on existing measures in the Possession Indicator report plus Network Rail's newly developed 'early warning indicators'. Schedule 4 will be working to incentivise industry decisions and in most cases this will incentivise Network Rail and operators to minimise the impact on end users.

#### Option 2

A similar requirement was set for Network Rail in PR13 but has not been delivered. The industry has sought to identify a replacement measure for PDI but this has not been successful to date.

This approach would be likely to incur significant system redevelopment costs to address the refranchising issues. The data on which PDI is based is at operator level and, as such, this could only be translated to route level with certain assumptions. It is not clear that adapting PDI at a route level would result in a more useful measure for Network Rail and operators or provide us with greater insight in this area.

Development of a new measure would be likely to also incur costs.

**Recommendation** We propose to progress with option 1.

Published report: Availability output measure report (by Europe Economics) (see here)



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