



PR18: Schedule 4 – Final impact assessment on amending notification factors

May 2018

This document has been published alongside a decision letter on Schedule 4 notification factors. The assessment of the options contained in this document has been informed by research into passengers’ awareness of planned disruption undertaken by AECOM in 2017.

Policy	Incentives – Schedule 4
Policy area	Schedule 4 – notification factors
Background	<p>Schedule 4 of the franchised passenger operator track access contract compensates train operators for the impact of planned service disruption (which principally occurs as a result of engineering possessions). Compensation is intended to cover farebox revenue losses and certain costs, such as those associated with running replacement buses.</p> <p>Network Rail is incentivised to plan possessions early as the Schedule 4 revenue compensation it pays to franchised passenger operators is reduced for early notification of restriction of network use. The amount of compensation paid varies because of the assumed passenger awareness for particular market segments. The variation is reflected through notification factors.</p> <p>Notification factors are based on assumed levels of passenger awareness about planned disruption prior to travelling. The Passenger Demand Forecasting Handbook (PDFH) methodology is the basis for the Schedule 4 formulaic revenue compensation. It does this with reference to the revenue losses for unplanned disruption (the ‘marginal revenue effect’ or MRE), which are set out in Schedule 8.</p> <p>Notification factors are applied to the MRE to reflect the proportion of passengers that are assumed to be aware of the disruption prior to travel (this varies according to the period of notice given); and that passengers aware of the disruption are less</p>

inconvenienced. Notification factors are expressed as the proportion of the maximum amount of revenue loss compensation Network Rail has to pay (i.e. the discounted amount). A high notification factor (closer to 100%) will mean that Network Rail needs to pay more to operators. A notification of factor of 100% would mean revenue compensation equivalent to that in Schedule 8.

Notification factors vary according to three levels of notice known as notification thresholds. These reflect different levels of passenger awareness associated with the length of notice given. The three thresholds are the early threshold (D-26), the informed traveller threshold (T-22), and the late threshold (before the applicable timetable, set at 10:00 pm on the day before the possession).

Table 1 summarises the notification factors applied at each notification threshold as used in track access contracts during the current control period, CP5.

Table 1: CP5 notification thresholds and average notification factors used in track access contracts

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
The early threshold (D-26)	45%	55%	45%	55%	40%
Informed traveller threshold (T-22)	65%	70%	65%	70%	63%
The late threshold	85%	85%	85%	85%	85%

PR18 outcomes and objectives to assess each option against

Outcome: The network is available

Description of outcome:

- Taking effective decisions around possessions, mitigating the overall impact on end users.
- The impact of delay on operators, passengers and freight customers is minimised.

Outcome: The network is efficient

	<p>Description of outcome:</p> <ul style="list-style-type: none"> The network is being operated, maintained and renewed at the lowest cost, given the level of use and performance.
<p>Problem under consideration with the current charge/incentive</p>	
<p>In November 2015 we wrote to stakeholders seeking views on the effectiveness of Schedule 4, including aspects that are working well, the scale of any potential problem, and what the priority areas for improvements should be. Respondents tended to support the regime but set out some specific areas for possible improvement. These included incentives created by notification factors as part of the Schedule 4 regime. Stakeholders expressed concern that notification factors as set currently may not accurately reflect customer needs and may not incentivise good possession planning. Some stakeholders were concerned that the regime encouraged early booking of possessions that were subsequently cancelled and did not provide appropriate compensation for cancelled possessions.</p> <p>In addition, as part of its review of charges, RDG developed an option for reforming notification factors. In the option assessment, the RDG’s consultants noted that “the viability of the option critically rests on how much difference early notifications make in reducing the disruptive impact of possessions and whether reducing discounts will alter Network Rail’s possessions planning processes”.</p>	
<p>Options to be considered</p>	
<p>Option 0: ‘Do nothing’</p>	<ul style="list-style-type: none"> the notification factors would only be updated to ensure consistency with any changes to Schedule 8, but would otherwise not be changed.
<p>Option 1: update notification factors retaining the existing notification thresholds</p>	<ul style="list-style-type: none"> the notification factors would be updated to reflect changes in assumptions regarding passenger awareness of the planned disruption, consistent the findings from the AECOM research. This would better align compensation with passenger behaviour.
<p>Option 2: update notification factors and add another notification threshold at 14 weeks</p>	<ul style="list-style-type: none"> we would introduce a new notification threshold at 14 weeks before the timetable week of the possession (T-14). In other respects, it would be the same as option 1 (i.e. the notification factors would also be updated).

Option 1: update notification factors retaining the existing notification thresholds

Under this option, the notification factors would be updated to reflect changes in assumptions regarding passenger awareness of the planned disruption, consistent the findings from the AECOM research. This would better align compensation with passenger behaviour.

There would be no changes to notification thresholds and, as with all options, notification factors would remain consistent with Schedule 8.

Few passengers plan rail journeys more than 12 weeks out. This suggests that notification by the early threshold (D26) compared to the informed traveller timetable should make little difference to TOCs’ revenue. Because of this, we aligned the notification factors for these notification thresholds. However, we did not remove one of these thresholds as it may have an unintended effect on the timetabling process.

Table 2 summarises the new notification factors based on the updated passenger awareness data collected by AECOM.

Table 2: Implied updated notification factors

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
Recalibrated on basis of AECOM research					
Early threshold (D-26)	37%	59%	36%	60%	31%
Informed traveller timetable (T-22)	37%	59%	36%	60%	31%
Late threshold (Applicable Timetable)	91%	86%	93%	88%	90%

Assessment of Option 1: update notification factors retaining the existing notification thresholds

Outcome: The network is efficient

Objective: The network is being operated, maintained and renewed at the lowest cost, given the level of use and performance.

More accurate notification factors are expected to result in more efficient planning of possessions. This should mean that disruption on the network is being properly accounted for when making decisions resulting in a more efficient network.

Outcome: The network is available

Objective: Provide Network Rail with effective incentives

The increased discount for notification by the informed traveller timetable and the reduced discount for the late threshold compared with the baseline should increase the incentive for Network Rail to notify operators early. This should increase the effectiveness of Network Rail's incentives to notify operators about planned possessions by T-22.

Outcome: The network is available

Objective: Provide Network Rail with accurate incentives

More accurate notification factors are likely to better incentivise Network Rail to act in accordance with passengers' needs when planning possessions.

We would expect the number of possessions notified at D-26 (around 75% in 2016-17) might fall, as Network Rail moved to notifying at T-22 instead. As a consequence, we would expect the number of late cancelled possessions to reduce, with benefits to operators and passengers.

Outcome: The network is available

Objective: Reduce operators' exposure to financial risks associated with possessions

More accurate notification factors are likely to result in less financial risk for operators as revenue loss is estimated more accurately.

Although, all else being equal, operators would receive less compensation (and pay less ACS), these expected total changes would be borne by franchising authorities.

Outcome: The network is available

Objective: Ensure operators and end users are given appropriate notification

The notification thresholds are the same in the baseline as in option 1.

The changes to align the new working and informed traveller timetable discounts may weaken Network Rail's incentive to notify franchised passenger operators as early as possible compared with the baseline. As Network Rail can now wait until 22 weeks before the timetable week to notify operators while still receiving the maximum discount, it may have less of an incentive to plan possessions and notify operators before 22 weeks. This may have consequences for operators' ability to replan services. However, effectively pushing back the notification deadline may help reduce the number of late cancelled possessions by Network Rail, to the benefit of operators. It is unlikely to affect end users as Network Rail is required to notify operators before 22 weeks.

The increased discount for notification by the informed traveller timetable and the reduced discount for the late threshold compared with the baseline should increase the

incentive for Network Rail to notify operators early. This will encourage Network Rail to ensure operators and consequently passengers are given appropriate notification.

Outcome: The network is available

Objective: Provide operators and Network Rail with accurate and effective incentives to minimise the impact of possessions on end-users on the day

Compared with the baseline, this option provides operators and Network Rail with more accurate incentives to minimise the impact of possessions on passengers. Updating notification factors to reflect more recent data on the proportion of passengers that could be made aware of planned possessions means that the Schedule 4 payments more accurately reflect the effect of possessions on end-users.

This option also provides operators and Network Rail with more effective incentives to minimise the impact of possessions on passengers compared with the baseline. The increased discount for possessions notified by T-22 and the smaller discount for possessions notified after 22 weeks means that Network Rail's incentives to notify operators about the possessions early is stronger than in the baseline. As operators can face costs stemming from reduced passenger demand from passengers being unaware of planned disruption, and have some franchise obligations in this area, they are incentivised to minimise the impact of possessions on passengers. Therefore, the stronger incentive for Network Rail to notify operators of possessions should result in prompt notification of passengers which limits the impact of planned disruption on end-users on the day.

General objectives

Passenger benefits

Relative to the baseline, this option is expected to benefit passengers through encouraging Network Rail to notify operators about possessions early. As discussed, updating the notification factors to reflect recent passenger behaviour will result in more accurate and effective incentives for Network Rail to minimise the impact of possessions on passengers.

Transitional costs and implementation difficulties for Network Rail

There are expected to be minimal costs to Network Rail resulting from these changes. A change in notification factors will need to be reflected in Network Rail's Schedule 4 ACS calculation and the change will require a system update to ensure that the Schedule 4 compensation paid aligns to ORR's policy for the regime.

Transitional costs on franchised authorities

The change to notification factors, as with many of the changes to charges and incentives in a periodic review, will impose some implementation costs on franchising authorities as they hold franchises financially neutral to the changes. As the changes are to these parameters, rather than structure of Schedule 4, and as there are good data on possessions compensation and the notification factors used, we assess these costs to be small.

Option 2: update notification factors and add another notification threshold at 14 weeks

Under this option, we would introduce a new notification threshold at 14 weeks before the timetable week of the possession (T-14). In other respects, it would be the same as option 1 (i.e. the notification factors would also be updated).

The purpose of this option would be to better align notification factors with passenger behaviour. It would address the feature that the current regime treats possessions notified 21 weeks in advance in the same way as those notified one day in advance, despite significant differences in potential impact on passengers.

Under Part D of the Network Code, Network Rail is required to notify operators of possessions at T-22. The new threshold under option 2 would therefore only apply to late possessions.

We chose T-14 because there is significant interaction between Network Rail and operators between T-22 and T-12: over this period, Network Rail advises operators about capacity and upcoming possessions, and operators may bid for services. At T-14, Network Rail offers operators services that can be run before it publishes its timetable at T-12. At this point, operators generally open bookings and start selling tickets.

Recognising that the option needs to take account of industry processes and train operations as well as passenger research, we have taken a conservative approach and assumed that this would result in information on the disruption being available to passengers from two weeks before travel.

Table 3 outlines the proposed notification thresholds for the new threshold.

Table 3: Implied notification factors with the new notification threshold at T-14

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
Recalibrated on basis of AECOM research					
Early threshold (D-26)	37%	59%	36%	60%	31%
Informed traveller threshold (T-22)	37%	59%	36%	60%	31%
TW14 (option 2 new threshold)	56%	63%	55%	66%	54%
Late threshold (Applicable Timetable)	91%	86%	93%	88%	90%

<p>Assessment of Option 2: update notification factors and add another notification threshold at 14 weeks</p>
<p>Outcome: The network is efficient</p> <p>Objective: The network is being operated, maintained and renewed at the lowest cost, given the level of use and performance.</p>
<p>See option 1 for the assessment relating to updating the notification factors.</p> <p>The additional threshold will mean Network Rail’s behaviour around possessions will be more reflective of passenger awareness, and therefore result in better planning which may lead to increased efficiencies.</p>
<p>Outcome: The network is available</p> <p>Objective: Provide Network Rail with effective incentives</p>
<p>See option 1 for the assessment relating to updating the notification factors.</p>
<p>Outcome: The network is available</p> <p>Objective: Provide Network Rail with accurate incentives</p>
<p>See option 1 for the assessment relating to updating the notification factors.</p> <p>The additional threshold is likely to better incentivise Network Rail to act in accordance with passengers’ needs when planning possessions.</p> <p>Adding a new threshold could act as an incentive for Network Rail to notify operators before 14 weeks if the 22 week deadline had passed. This would in turn benefit passengers.</p>
<p>Outcome: The network is available</p> <p>Objective: Reduce operators’ exposure to financial risks associated with possessions</p>
<p>Option 1 outlined that more accurate notification factors are likely to reduce financial risk for operators. These effects are likely to be stronger in option 2.</p> <p>In addition, operators may be more likely to dispute late notified T-14 possessions because their compensation would be less (but their compensation would be more for possessions notified after T-14). As these notifications are late, operators would be likely to win the disputes.</p>

Outcome: The network is available

Objective: Ensure operators and end users are given appropriate notification

See option 1 for the assessment relating to updating the notification factors.

The additional threshold between T-22 and the night before gives Network Rail an additional opportunity to notify operators of late possessions and still receive a discount. By notifying operators by T-14, there is the possibility (depending on volume of changes) that the related service changes are incorporated in the timetable released at T-12. This would give operators time to pass on the information to passengers.

Outcome: The network is available

Objective: Provide operators and Network Rail with accurate and effective incentives to minimise the impact of possessions on end-users on the day

See option 1 for the assessment relating to updating the notification factors.

The additional threshold should be an additional incentive for Network Rail to notify operators of planned possessions by at least 14 weeks should it miss the 22 week threshold. In the baseline, there is no difference in discount if Network Rail notifies franchised passenger operators 21 weeks before the possession week or 1 week. The additional threshold should increase the accuracy and effectiveness of Network Rail's incentive to notify operators of late possessions earlier in order to limit the impact of possessions on passengers.

General objectives

Passenger benefits

Relative to the baseline, this option is expected to benefit passengers through encouraging Network Rail to notify operators about possessions early. As discussed, updating the notification factors to reflect recent passenger behaviour will result in more accurate and effective incentives for Network Rail to minimise the impact of possessions on end-users.

In addition, the T-14 notification threshold would give Network Rail an incentive to notify operators about planned disruption by 14 weeks before the possession should it miss the T-22 deadline. This would allow operators to inform passengers of the change at an earlier stage.

Transitional costs and implementation difficulties for Network Rail

The direct costs to Network Rail of this change are not likely to be significant. Network Rail suggested the system change to include a new threshold would take about six months (including development and testing).

The ACS calculation would also need to be amended. The new threshold would affect the overall cost of Schedule 4 to Network Rail which would need to be calculated. Within this, as Network Rail does not consistently record when train operators are notified of possessions (rather only the notification factor the possession falls within), it would need to make assumptions about the interim threshold to calibrate the ACS payment.

Transitional costs on franchised authorities

The change to notification factors, as with many of the changes to charges and incentives in a periodic review, will impose some implementation costs on franchising authorities as they hold franchises financially neutral to the changes.

Option 2 will impose a greater cost of implementation than option 1 because it introduces a new threshold and the main data sources do not currently record possessions with respect to that new threshold. Instead, a broad estimation using other data will be necessary.

We are not presenting a preferred option.

Next Steps

- RDG to submit proposals to us regarding their recommended timing for the intermediate notification threshold—due end of June 2018.



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