



## **PR18 consultation on amending Schedule 4 notification factors**

December 2017

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## Executive summary

1. The Schedule 4 regime compensates train operators for the financial impact of planned disruption ('possessions')<sup>1</sup>, usually where operators cannot run trains as planned because Network Rail is carrying out engineering work. This compensation is lower if Network Rail provides sufficient advanced notification of possessions. For the franchised passenger operator contract, the size of notification factors determines the level of discount given.
2. Schedule 4 payments and notification factors encourage Network Rail and train operators to work together in the best interests of passengers and customers by minimising disruption and/or providing appropriate notice to passengers so they can adjust their travel plans around the disruption. The rationale for notification factors is to incentivise Network Rail to ensure passengers are informed in advance, but also to make sensible trade-offs against the need to plan possessions efficiently. Part of this is to ensure that the arrangements work well alongside the timetabling process
3. There are currently three notification thresholds that result in different discounts:
  - the early threshold (which can be up to a year in advance), attracting the highest discounts;
  - the informed traveller threshold used to inform the earliest publically available timetable so allowing passengers to know of the disruption in advance; and
  - the late threshold at 10pm on the day before the day of travel, which has the lowest discount.
4. We are reviewing notification factors following concerns about how they functioned, identified in both responses to our November 2015 stakeholder letter and in the Rail Delivery Group's 2015 review of charges. A particular concern was that the notification factors incentivised Network Rail to book possessions too early, prior to the point that it had planned the possessions in sufficient detail. This resulted in planned possessions being cancelled at a later date and work rescheduled, disrupting both operators and passengers.
5. In response, we commissioned consultants AECOM to conduct research into passengers' awareness of disruption. The research findings included that on average respondents planned their journeys four or five days in advance and that a third of respondents found out about planned disruption when planning their journey. We used that research to develop a proposed methodology for updating the notification factors. We are consulting on two options:

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<sup>1</sup> The compensation is for additional costs and / or lost revenue incurred by the operator, and is a separate arrangement to from passenger compensation for disruption.

- Option 1: update notification factors and leave existing thresholds unchanged; and
  - Option 2: update notification thresholds and introduce a new notification threshold at 14 weeks before the timetable week of the planned possession.
6. Option 1 reflects the new evidence of how passengers plan their journeys and book tickets. This suggests that notification factors for the early and informed traveller thresholds should not be materially different from each other. Under option 1, compensation for the early threshold would be broadly similar to current (CP5) levels, whereas compensation for the informed traveller threshold would be considerably lower than current levels. Compensation for late possessions would be slightly higher than in CP5.
  7. Updating the notification factors based on this evidence should increase the accuracy of Network Rail's incentives to plan possessions in accordance with passengers' needs. This would tend to reduce the incentive on Network Rail to book possessions prematurely (to meet the early threshold), while increasing the incentive to plan the possessions on time (to meet the informed traveller threshold).
  8. This is likely to benefit passengers by improving the information available to them at the time of planning their journey. Operators could also benefit, to the extent that they have fewer late and cancelled possessions to manage.
  9. The updated values should reduce operators' exposure to risk of variations in levels of planned disruption, by better align compensation with revenue loss. Each operator's net expected financial impact would be zero under financial adjustment arrangements in their franchise.
  10. Under option 2, the new notification threshold at 14 weeks would further align incentives of the industry with passengers, with similar but greater benefits to those set out in option 1. In particular, where it is not practical to give 22 weeks' notice, option 2 will incentivise Network Rail to notify operators earlier and give them more time to notify passengers.
  11. However, the compensation for possessions notified between 14 weeks and 22 weeks would be significantly less than current levels (as the late notice threshold currently applies to these possessions). An unintended consequence may be, therefore, that operators may dispute such late possessions more than they do currently.
  12. We would like to understand better the likely impacts of the two options for reform to the Schedule 4 notification factors, and are inviting all interested parties to respond to this consultation.

# 1. Introduction

## Purpose of consultation

- 1.1 The purpose of this document is to consult on our proposals for reviewing notification factors in Schedule 4 of the franchised passenger operator contract<sup>2</sup>. It forms part of our periodic review of Network Rail (PR18).
- 1.2 The Schedule 4 regime compensates train operators for the financial impact of planned disruption ('possessions')<sup>3</sup>, usually where operators cannot access the network because Network Rail is carrying out engineering work.
- 1.3 This compensation is lower if Network Rail provides sufficient advanced notification of possessions. For franchised passenger operators, the calculation of payments is based on a set of notification factors, which reduce the amount of compensation paid depending on the level of notice Network Rail gives to the operators.
- 1.4 Schedule 4 payments and notification factors encourage Network Rail and train operators to work together in the best interests of passengers and customers by minimising disruption and / or providing appropriate notice to passengers so they can adjust their travel plans. The rationale for notification factors is to incentivise Network Rail to ensure passengers are informed in advance, but also to make sensible trade-offs against the need to plan possessions efficiently. Part of this is to ensure that the arrangements work well alongside the timetabling process.
- 1.5 We have been prompted to review notification factors following concerns about how they functioned, identified in both responses to our November 2015 stakeholder letter and in the Rail Delivery Group's (RDG) 2015 review of charges. In addition, the ways in which passengers access information on rail services has changed substantially in recent years, so the parameters used are likely to be out of date.
- 1.6 We commissioned consultants AECOM to undertake passenger research to provide information on passenger awareness that would be the basis for proposing any adjustments to the notification factors.
- 1.7 In conducting this review, we are seeking to support the PR18 aim of "a safer, more efficient and better used railway, delivering value for passengers, freight customers and taxpayers in control period 6 and beyond". Policy on notification factors, in particular the extent of planned disruption and information on disruption, affects

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<sup>2</sup> This may be accessed at <http://orr.gov.uk/rail/access-to-the-network/track-access/forms-model-contracts-and-general-approvals>.

<sup>3</sup> The compensation is for additional costs and / or lost revenue incurred by the operator, and is a separate arrangement from passenger compensation for disruption.

passengers directly. In addition, Schedule 4 influences Network Rail's access planning and hence potentially Network Rail's costs and efficiency.

1.8 We will publish our conclusion to this consultation in spring 2018 to inform industry's recalibration of Schedule 4.

## Our PR18 review of charges and incentives

1.9 As with our PR18 work more generally, our review of charges and incentives has benefited from extensive stakeholder engagement. In December 2016 we consulted on a series of proposals to improve the charges and incentives regime. For the majority of charges and incentives, we concluded this consultation in June 2017. However, we said we would set out our position later this year on issues relating to the Schedule 4 regime, including:

- notification factors, as set out in this consultation;
- the access charge supplement (ACS), which is the payment made by franchised train operators for certain Schedule 4 compensation arrangements; and
- bespoke compensation, based on actual costs and / or revenue losses, which all operators are entitled to in the event that they experience prolonged or sustained planned disruption.

1.10 Having considered the responses to the December 2016 consultation on these issues, and through our work with the industry Schedules 4 and 8 working group, we do not see a strong case for changing the policy with respect to the calculation of ACS and the process for claiming bespoke compensation at this time. Annexes B and C respectively set out our conclusions on these policies.

1.11 Separately, work to recalibrate the cost compensation elements of passenger Schedule 4 and the freight Schedule 4 regimes is being carried out by RDG Schedules 4 and 8 Working Group. We expect specific proposals from RDG in early 2018. Our conclusions on the recalibration exercise will feed into PR18 implementation.

## Structure of this consultation

1.12 The consultation is structured as follows:

- chapter 2 explains the notification factors within Schedule 4, describes AECOM's new research into passenger awareness, and proposes a methodology for updating notification factors;

- chapter 3 sets out options for recalibrating the notification factors and assesses these options;
- Annex A provides additional background information on Schedule 4 and how notification discount factors are calculated from passenger awareness data;
- Annexes B and C are conclusions papers setting out why we are not pursuing changes to the access charge supplement or bespoke compensation respectively in PR18.

1.13 This consultation document is accompanied by:

- **Research into passenger awareness of planned disruption** – a research report we commissioned from AECOM;
- **A spreadsheet setting out our proposed methodology** for updating the notification factors presented as options in chapter 4; and
- **Draft impact assessments of options.**

## Responding to this consultation

1.14 This **consultation closes on 12 February 2018**. Please submit your responses, in electronic form, to our PR18 Schedules 4 and 8 inbox, [PR18.Schedules4and8@orr.gsi.gov.uk](mailto:PR18.Schedules4and8@orr.gsi.gov.uk). We welcome your thoughts on any of the issues discussed in this consultation, and specifically on the consultation questions set out below:

1. Do you have comments on our proposed methodology for using the passenger research to update notification factors?
2. Do you have comments on option 1, which would update the notification factors? You might want to consider how, if at all, this may affect the timing of possessions and incidence of late cancelled possessions; and the consequences of this for operators and passengers.
3. Do you have further comments with respect to option 2, which would, in addition to updating the notification factors, introduce a new 14-week notification threshold?



## Publishing consultation responses

1.15 We plan to publish all responses to this consultation on our website. Accordingly, when sending documents to us, we would prefer that you send your correspondence to us in Microsoft Word format or Open Document Format. This allows us to apply web standards to content on our website. If you do email us a PDF document, where possible please:

- create it from an electronic word processed file rather than sending us a scanned copy of your response; and
- ensure that the PDF's security method is set to "no security" in the document properties.

1.16 Should you wish any information that you provide, including personal data, to be treated as confidential, please be aware that this may be subject to publication, or release to other parties or to disclosure, in accordance with the access to information regimes. These regimes are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004). Under the FOIA, there is a statutory code of practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

1.17 In view of this, if you are seeking confidentiality for information you are providing, please explain why. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on ORR.

1.18 If you are seeking to make a response in confidence, we would also be grateful if you would annex any confidential information, or provide a non-confidential summary, so that we can publish the non-confidential aspects of your response.

## 2. Passengers' awareness of planned disruption

### Introduction

2.1 This chapter is structured as follows:

- we summarise the basis for estimating revenue loss compensation for franchised operators of planned disruption in Schedule 4;
- we set out industry's views on notification factors;
- we explain the research undertaken into awareness of disruption; and
- we propose a methodology for updating notification factors on the basis of the research

### Estimating revenue impacts of planned disruption

2.2 In this section we set out how the level of passenger awareness of planned disruption and notification factors feed into the way Schedule 4 revenue loss compensation is calculated. A more detailed explanation is set out at Annex A.

2.3 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 notification factors are used to estimate these. In addition, the compensation covers certain costs, but that is not considered as part of this consultation<sup>4</sup>.

### Modelling the impact of planned disruption on passengers

2.4 The rail industry ('PDFH') methodology<sup>5</sup> for modelling the inconvenience to passengers from planned disruption is as follows:

- For the proportion of passengers that were aware of the disruption prior to travel, the 'inconvenience' is estimated by comparing the journey taken without disruption to that which would be made with the disruption, which might include for example a replacement bus service or a longer journey time. This is estimated using standard PDFH methodology.

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<sup>4</sup> Guide on the Schedule 4 regime. This may be accessed at [http://orr.gov.uk/\\_data/assets/pdf\\_file/0004/17617/track-access-guidance-possession-regime.pdf](http://orr.gov.uk/_data/assets/pdf_file/0004/17617/track-access-guidance-possession-regime.pdf).

<sup>5</sup> Passenger Demand Forecasting Handbook (PDFH). PDFH is a handbook which identifies all of the known drivers of rail demand and provides information on the values of the elasticities of these influences on demand.

- For the proportion of passengers that are not aware of the disruption prior to travel, the inconvenience is estimated on the same basis, but is increased by a 'late time multiplier' (again from PDFH) to reflect the additional inconvenience of the disruption being unexpected.

## Calculation of Schedule 4 revenue loss payments

- 2.5 Schedule 4 formulaic revenue compensation is estimated using the PDFH methodology. It does this with reference to the predicted train operator revenue losses arising from unplanned disruption (the 'marginal revenue effect' or MRE) set out in Schedule 8, the contractual regime that compensates for unplanned disruption.
- 2.6 Notification factors are applied to the MRE. They reflect the proportion of passengers that are assumed to be aware of the disruption prior to travel, which varies according to the period of notice given, and an assumption that passengers aware of the disruption are less inconvenienced (which, for computational simplicity, is dealt with by dividing that proportion by the late time multiplier).
- 2.7 Notification factors are expressed as the proportion of the maximum amount of revenue loss compensation Network Rail has to pay (i.e. the undiscounted amount, the MRE). A high notification factor (closer to 100%) will mean that Network Rail pays more to operators. A notification of factor of 100% would mean revenue compensation equivalent to that in Schedule 8.

## Notification thresholds

- 2.8 Under Schedule 4, Network Rail receives a greater discount on the Schedule 8 payments, the earlier it notifies franchised passenger operators of possessions. This is set out according to notification thresholds, which are aligned with the industry's timetable planning process to support the orderly production of the revised timetable. Currently there are three notification thresholds:
- **D-26:** which we refer to in this document as '**the early threshold**'. This is set at 26 weeks before the new working timetable comes into effect. The new working timetables apply from a date in May and in December each year. Thus, for example, to meet the early threshold, if a possession were scheduled for February, it would appear in the working timetable 26 weeks before its start in December, which would be at a specific point in June the preceding year;
  - **T-22:** which we refer to in this document as '**the informed traveller threshold**'. This is set at 22 weeks before the possession, and is the last point that Network Rail can inform operators of a possession before the notification is deemed to be late (and therefore more readily disputed by operators). Any rescheduling of services that result from these possessions would ordinarily appear in the 'informed traveller timetable', which is the timetable that is

published – and therefore accessible to passengers – twelve weeks before the services operate; and

- **The applicable timetable:** which we refer to in this document as ‘**the late threshold**’. The applicable timetable is notified to train operators by 10:00 pm on the day before the possession

## CP5 notification factors

2.9 Table 2.1 summarises the notification factors applied at each notification threshold as used in track access contracts during Network Rail’s current control period, CP5.

2.10 Notification factors are calculated on the basis of assumptions concerning passenger awareness and how different market segments respond to delay. In particular, on average the percentage of passengers assumed to be aware of the disruption prior to travel is:

- 75% if the early threshold is met;
- 50% if the informed traveller threshold is met; and
- 20% if the late threshold is met.

**Table 2.1: CP5 notification thresholds and average notification factors used in track access contracts<sup>6</sup>**

	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%

<sup>6</sup> Based on Table 20.13 Passenger Schedule 4 CP5 revised notification factors for service groups, by late time multiplier. Periodic Review 2013: Final Determination of Network Rail’s outputs and funding for 2014-19, ORR Oct 2013. This may be accessed at [http://orr.gov.uk/data/assets/pdf\\_file/0011/452/pr13-final-determination.pdf](http://orr.gov.uk/data/assets/pdf_file/0011/452/pr13-final-determination.pdf).

## Industry views on notification factors

- 2.11 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 should be the priority areas for improvements<sup>7</sup>.
- 2.12 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 current notification factors 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. They considered the compensation for cancelled possessions insufficient.
- 2.13 As part of its review of charges, RDG developed an option for reforming notification factors. In the option assessment<sup>8</sup>, 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".
- 2.14 While conducting the passenger research and developing the options set out in this consultation we have been engaging with RDG's PR18 working group on charges and incentives.

## Research into passenger awareness of planned disruption

### Previous research

- 2.15 We think it is important to test whether passenger awareness has changed given a number of other changes in passenger behaviour, specifically:
- the ways in which, and when, passengers source travel information, notably through the increasing use of the internet (including via smartphones); and
  - the significant increase in the use of advance purchase and dedicated tickets.
- 2.16 The current (CP5) notification factors date from the 2008 periodic review (PR08), with two key sources. In 2006 SDG undertook a major study into planned disruption. It

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<sup>7</sup>This may be accessed at [http://orr.gov.uk/\\_data/assets/pdf\\_file/0003/19776/pr18-reviews-of-schedules-4-and-8-of-track-access-contracts-2015-11-13.pdf](http://orr.gov.uk/_data/assets/pdf_file/0003/19776/pr18-reviews-of-schedules-4-and-8-of-track-access-contracts-2015-11-13.pdf).

<sup>8</sup> RDG (November 2015) "Detailed option assessment report", prepared by CEPA. This may be accessed at [http://www.railedeliverygroup.com/files/Publications/2015-11\\_rdg\\_roc\\_detailed\\_options\\_assessment.pdf](http://www.railedeliverygroup.com/files/Publications/2015-11_rdg_roc_detailed_options_assessment.pdf).

estimated that 53% of passengers were aware of possessions before travelling, and another study by NERA for ORR that estimated 75% awareness. Based on the SDG report, PDFH recommends an average assumption that 53% of passengers are aware of planned disruption in advance of travel.

- 2.17 The Institute for Transport Studies (ITS), University of Leeds, completed a major study for PDFH in 2016 about how passengers respond to possessions. It used a variety of survey methods. One of the many aspects it examined were levels of awareness of disruption prior to travel. It found that awareness varied significantly by type of possession and survey approach. The ITS study did not examine how and when passengers become aware of possessions.
- 2.18 Transport Focus has carried out two recent studies of passengers' experience during planned disruptions, the 'Rail passengers' experiences and priorities during engineering works', (2012) and 'Planned rail engineering work - the passenger perspective' (2015). It did not specifically estimate awareness levels.

## **AECOM research into passenger awareness**

2.19 We commissioned AECOM to:

- update our understanding of passenger awareness of planned service disruption; and
- find out how and when passengers become aware of possessions.

2.20 AECOM carried out two surveys of passengers in early 2017. A disrupted traveller survey (the 'DT survey') and an online panel survey (the 'panel survey').

2.21 The DT survey captured information on the awareness of disruption for people who continued to travel when services were disrupted. AECOM surveyed passengers at stations where rail services were rescheduled or rail replacement buses were due to be operating. There were around 1,400 responses to the survey.

2.22 The panel survey used an existing online panel survey group and focussed on rail users who had experienced planned disruption when travelling by train in the last five years. The survey focused on respondents' most recent experience of planned disruption. There were around 5,100 responses to this survey.

2.23 Both surveys were designed to ascertain passengers' behaviours around planned disruption to rail services and focussed on:

- how far in advance passengers plan journeys, buy tickets and find out about planned disruption;
- how passengers find out about planned disruption;

- what respondents did when they found out about planned disruption (for the online panel survey); and
- their experience and satisfaction levels with respect to the disruption.

## AECOM's research findings

2.24 We have published AECOM's full report alongside this consultation<sup>9</sup>.

2.25 Figure 2.1 shows by market segment when respondents planned and booked their journey as well as when they became aware of planned disruption. Although it shows that passengers on average purchase rail tickets and become aware of disruption at similar times in advance of travel, there was considerable variation for individual respondents.

**Figure 2.1 Timing in advance of travel that respondents planned and booked their journey and became aware of disruption**



Source: AECOM, *Research into Passengers' Awareness of Planned Disruption*, August 2017.

Note: data is from the online panel survey. Planned data excludes commuters, purchased data excludes commuters and season ticket holders.

2.26 Key results are summarised in Table 2.2

<sup>9</sup> This may be accessed at [http://www.orr.gov.uk/\\_data/assets/pdf\\_file/0006/26097/aecom-report-research-into-passengers-awareness-of-planned-disruption.pdf](http://www.orr.gov.uk/_data/assets/pdf_file/0006/26097/aecom-report-research-into-passengers-awareness-of-planned-disruption.pdf).

**Table 2.2: Summary of survey results<sup>10</sup>**

DT survey	Panel survey
<b><i>How far in advance did respondents plan their journey?</i></b>	
On average 5 days in advance	<ul style="list-style-type: none"> <li>• 51% of journeys planned more than 4 days in advance</li> <li>• 23% planned more than 2 weeks in advance</li> <li>• 5% planned more than 8 weeks in advance</li> </ul>
<b><i>How far in advance did respondents book their tickets?</i></b>	
On average respondents bought tickets one day in advance	<ul style="list-style-type: none"> <li>• 54% bought tickets at least 1 day in advance</li> <li>• 41% bought tickets at the same time as planning their journey</li> </ul>
<b><i>How far in advance did respondents find out about planned disruption?</i></b>	
33% found out when planning their journey	<ul style="list-style-type: none"> <li>• Half found out at least a day in advance</li> <li>• 32% found out when planning their journey</li> </ul>
<b><i>How did respondents find out about planned disruption?</i></b>	
42% found out by digital means	<ul style="list-style-type: none"> <li>• 33% found out via information displayed at the station</li> <li>• 42% found out by digital means</li> </ul>
<b><i>What did respondents do after finding out about planned disruption?</i></b>	
This survey only captured respondents who continued to travel	<ul style="list-style-type: none"> <li>• 54% continued to travel by rail as planned</li> <li>• 24% used alternative transport</li> <li>• 16% chose not to travel</li> <li>• 6% changed the timing of their journey</li> </ul>

2.27 We can compare this research with that conducted previously. AECOM's research, based on the DT survey, estimates the proportion of passengers aware of possessions before arriving at the station as 75%. This may be an underestimate given that some passengers aware of the disruption and who chose not to travel would not have been surveyed. The equivalent figure for the panel survey is 76%. Previous research by SDG and NERA estimated the proportion of passengers aware of possessions before travelling as 53% and 75% respectively. AECOM's results are closer to NERA's but significantly higher than SDG's estimate.

<sup>10</sup> In this table and subsequently, the question about timing of ticket purchase excludes season ticket holders, and the question about timing of planning the journey excludes commuters, because the questions are not meaningful for those groups.



2.28 How awareness varies according to notification threshold is the additional information that is needed in order to recalibrate notification factors. Our approach to this is set out in the next section.

## **Proposed methodology for estimating awareness**

### **Approach to using the research findings**

2.29 As set out above, both AECOM's surveys revealed when respondents found out about planned disruption. However, as we do not know when information was available to passengers in each case, this does not necessarily help us derive appropriate assumptions about passenger awareness at the three existing notification factor thresholds.

2.30 To do this, our key assumption is that for passengers to be able to plan their journey around the disruption (that they are 'aware' of the disruption), they need to have information on the disruption prior to or at the point of planning the journey and / or buying their ticket. We propose to use the average time in advance that passengers plan their journey and they book their ticket to calculate the proportion of passengers that are aware of the disruption prior to travel.

2.31 Our research suggests that a significant proportion of passengers do not plan or buy a ticket for their journey until immediately before travel. We assume that such passengers (again, taken as an average) are unaware of planned disruptions before undertaking their journey.

2.32 Both the panel survey and DT survey give valuable insight into passenger behaviour. Inevitably, the surveys' results were different, though the differences with respect to the timing of planning and purchasing decisions were broadly consistent. The degree of consistency provides some comfort that the research provides useful estimates of passenger behaviour. Reflecting this, we calculate awareness on the basis of the average of the two surveys.

2.33 The approach we set out in the remainder of this section excludes commuters, for which we do not have suitable data. There are relatively small numbers of commuters travelling for the relevant possessions (which typically occur at weekends, public holidays or overnight – the longer possessions that affect peak times are eligible for bespoke compensation), and therefore taking them into account would have little impact on the notification factors. Being frequent travellers, we note that ordinarily commuters would be aware of planned disruption prior to making their journey. The exception would be for late notification, of which they might not be aware. This would tend to further reduce the notification factors, except for late notification for which the notification factor would increase.

## Early and informed traveller notification thresholds

2.34 Our research suggests that very few passengers plan or book rail journeys more than 12 weeks in advance. Therefore, from the perspective of measuring operators' revenue losses, it makes little if any difference whether they are notified by the early threshold (D-26) or the informed traveller timetable (T-22).

2.35 Hence we have assumed that passengers notified at or before both D-26 and T-22 results in passengers being aware of the disruption, provided that they plan or book their journey less than 12 weeks in advance of the date of travel. The exception to this is passengers who travel spontaneously. Under our methodology, we have assumed that passengers who neither book nor plan their journey in advance are not aware of planned disruption.

## Late notification threshold

2.36 Our research suggests that a significant proportion of passengers do not plan or book their journey until the day of travel. Some, however, plan and / or purchase tickets earlier on the day of travel. We have assumed that such passengers, but only those passengers, would be aware of possessions notified for the late threshold.

## Calculations of passengers' level of awareness

2.37 Table 2.3 summaries our assumptions regarding levels of passenger awareness, as set out above. In addition, it sets out the awareness for passengers if the information became available to passengers from two weeks prior to travel, which is described in chapter 3 as part of option 2.

**Table 2.3: Our assumptions concerning whether passengers are aware of the disruption, according to its notification**

Timing before journey that passengers plan the journey or purchase ticket (average)	Network Rail notification threshold			
	Early (D-26)	Informed traveler (T-22)	New, option 2 (T-14)	Late (applicable timetable)
More than 12 weeks	no	no	no	no
Between 2 and 12 weeks	yes	yes	no	no
Between one day and 2 weeks	yes	yes	yes	no
Earlier that day	yes	yes	yes	yes
Spontaneous	no	no	no	no

2.38 Table 2.4 shows estimates of passenger awareness based on our proposed methodology. The table shows awareness levels for the existing notification

thresholds, as well as if the information became available to passengers from two weeks prior to travel, which is described in chapter 3 as part of option 2.

2.39 The table shows lower levels of awareness for short distance travellers for all but the late threshold. This is because large numbers of short distance travellers purchase their tickets immediately before travel, and we have assumed that they are not therefore aware of the planned disruption.

**Table 2.4: Proportion of passengers modelled as being aware of possessions, excluding commuters and season ticket holders**

Time the possession is notified		London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
to operators (threshold)	to passengers					
<b>D-26 (early)</b>	12 weeks	85%	73%	86%	71%	83%
<b>T-22 (informed traveller)</b>	12 weeks	85%	73%	86%	71%	83%
<b>Applicable timetable (late)</b>	same day	12%	25%	9%	21%	13%
<b>T-14, under option 2</b>	2 weeks	59%	65%	61%	61%	55%

## 3. Proposed options and assessment

### Introduction

3.1 In this chapter we set out two options for amending the notification factors and thresholds used for CP6 and assess these options.

3.2 After this section, the chapter is structured as follows:

- the options;
- recalibrating notification factors; and
- assessment of options.

### The options

3.3 In addition to a do-minimum option of not recalibrating the notification factors, the options we present are:

- option 1: update notification factors retaining the existing notification thresholds; and
- option 2: update notification factors and add another notification threshold at 14 weeks.

3.4 For both options presented, the calculation of notification factors would remain linked to Schedule 8 parameters. If certain changes were made to Schedule 8, this would mean that the notification factors changed also<sup>11</sup>.

3.5 For the purpose of presenting the analysis in this report we have assumed that Schedule 8 parameters do not change.

### Do-minimum option

3.6 Under this option, the notification factors would only be updated to ensure consistency with any changes to Schedule 8, but would otherwise not be changed. In particular, the passenger awareness assumptions used to calculate the notification factors would not change. For the purpose of presenting analysis in this report, we assume that notification factors under this option remain at CP5 levels.

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<sup>11</sup> 'Late time multipliers' are parameters from PDFH used both in the calculation of Schedule 8 compensation and in the calculation of notification factors. If their assumed values were to change as part of the PR18 Schedule 8 recalibration, under for all options we have assumed that they would change in the calculation of notification factors. To do otherwise would cause anomalous compensation levels.

## Option 1: updating notification factors

- 3.7 Under this option, the notification factors would be updated to reflect changes in assumptions regarding passenger awareness of the planned disruption, consistent with the findings from the AECOM research. This would better align compensation with passenger behaviour.
- 3.8 There would be no changes to notification thresholds and, as with all options, notification factors would remain consistent with Schedule 8.

## Option 2: introducing a new notification threshold, with updated notification factors

- 3.9 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, so that the notification factors would also be updated.
- 3.10 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 before travel in the same way as those notified one day in advance, despite significant differences in the potential impact on operators and passengers.
- 3.11 Under Part D of the Network Code, Network Rail is required to notify operators of possessions at T-22 (unless not reasonably practicable to do so). The new threshold under option 2 would therefore only apply to late possessions.
- 3.12 We have chosen T-14 because there is significant interaction between Network Rail and operators between T-22 and T-12, i.e. between 22 and 12 weeks before the timetable week in question. 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.
- 3.13 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.

## Calculation of notification factors under each option

- 3.14 Table 3.1 sets out our calculation of the average notification factors for each market segment excluding commuters for illustrative purposes.

**Table 3.1: Implied average notification factors under proposed options**

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
<b>Recalibrated on basis of AECOM research</b>					
Early threshold (D-26)	37%	59%	36%	60%	31%
Informed traveller threshold (T-22)	37%	59%	36%	60%	31%
T-14 (option 2 new threshold)	56%	63%	55%	66%	54%
Late threshold (applicable timetable)	91%	86%	93%	88%	90%
<b>CP5 notification factors – for comparison</b>					
Early threshold (D-26)	45%	55%	45%	55%	40%
Informed traveller timetable (T-22)	65%	70%	65%	70%	63%
Late threshold (applicable timetable)	85%	85%	85%	85%	85%

3.15 The estimates shown in table 3.1 exclude commuters and season ticket holders. There are relatively small numbers of commuters travelling for the relevant possessions (which typically occur at weekends, public holidays or overnight), and therefore taking them into account would have little impact on the notification factors. There are more season ticket holders for short distance journeys. Taking such passengers into account would reduce the notification factors for all but the late threshold, because, being frequent travellers, they would tend to be aware of the disruption prior to travel.

## Assessment of options

3.16 To inform our assessment of options, we analysed data for relevant Network Rail Schedule 4 compensation paid for 2016-17, recognising that this may be an atypical year. In particular, this was compensation paid to franchised operators for revenue losses using notification factors (so excluding bespoke compensation).

- around 75% of compensation is for possessions that have been notified early (i.e. D-26).
- around 12% of compensation is for possessions that have been notified late (for the applicable timetable).

3.17 Relative to CP5 levels, Network Rail would pay:

- for early notification (D-26), slightly higher compensation for short distance passengers, and slightly lower compensation for long distance and airport passengers;
- for notification by the informed traveller threshold (T-22), lower compensation in all cases;
- for late notification (up to 10pm the night before), higher in all cases.

3.18 We estimate that revenue compensation would reduce by around £12m a year. The Schedule 4 access charge supplement (ACS) that franchised operators would pay Network Rail would also fall<sup>12</sup>.

3.19 Each operator's net expected financial impact would be zero under financial adjustment arrangements in their franchise.

3.20 Under option 2, the insertion of a new T-14 threshold would mean lower compensation for relevant possessions. We do not have data on the incidence of such notifications.

3.21 We set out the impacts of options 1 and 2 in Table 3.3. We do not have a preferred option and welcome stakeholders views on both options presented.

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<sup>12</sup> The ACS funds maintenance and renewals compensation, but not enhancement compensation.

**Table 3.3: Assessment of options**

	Options	
	Option 1 compared to do-minimum	Option 2 compared to option 1
<p><b>Outcome:</b> The network is available</p> <p><b>Objective:</b> Provide Network Rail with effective incentives</p>	<p>More accurate notification factors are likely to better incentivise Network Rail to act in accordance with passengers’ needs when planning possessions.</p> <p>This would tend to reduce the incentive on Network Rail to book possessions prematurely (to meet the early threshold), while increasing the incentive to plan the possessions on time (to meet the informed traveller threshold).</p> <p>This is likely to benefit passengers by improving the information available to them at the time of planning their journey. Operators could also benefit, to the extent that they have fewer late and cancelled possessions to manage.</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>It could also incentivise Network Rail, relative to option 1, to book more ‘late’ possessions in time for the T-14 threshold. This may be beneficial, if it was not reasonably practicable to plan them before that point. But it could have the unintended consequence of more possessions notified after T-22.</p>
<p><b>Outcome:</b> The network is available</p> <p><b>Objective:</b> Reduce operators’ exposure to financial risks associated with possessions</p>	<p>More accurate notification factors are likely to result in less financial risk for operators as revenue loss is estimated more accurately.</p> <p>Although, all else being equal, operators would receive less compensation (and pay less ACS), the net effect of changes would be borne by franchising authorities.</p>	<p>This effect is stronger in option 2.</p> <p>Operators may be more likely to dispute late notified T-14 possessions because their compensation would be less.<sup>13</sup></p>
<p><b>Outcome:</b> The network is efficient</p> <p><b>Objective:</b> The network is being operated, maintained and renewed at the lowest cost, given the level of use and performance</p>	<p>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.</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>

<sup>13</sup> Network Rail is only permitted to make late notification of possessions, i.e. notification after T-22, when earlier notification is not reasonably practicable. In practice, were an operator to dispute a late possession, our understanding is that they would generally expect to win the dispute.



# Annex A: Background information on Schedule 4

## Introduction

1. In this annex we provide a detailed explanation of the relationship between passenger awareness and notification factors. We explain how this impacts on the amount of farebox revenue ('revenue') loss compensation Network Rail pays, and how this is used to incentivise Network Rail to notify operators about possessions early. Finally, we set out how the notification factor system operates in practice and how it aligns with industry processes, in particular Network Rail's timetabling process.

## Schedule 4

2. Schedule 4 of the franchised passenger operator track access contract<sup>14</sup> compensates train operators for the impact of planned service disruption (which principally occurs as a result of engineering possessions). Compensation is intended to cover fare revenue losses and certain costs, such as those associated with running replacement buses<sup>15</sup>.
3. Both passengers and freight customers care about disruption to their services. It is important that Network Rail and train operators are incentivised to work in the best interests of passengers and customers by minimising disruption, or providing appropriate notice to passengers so that they can adequately plan around the disruption.

## Modelling the impact of planned disruption on passengers

4. Passengers are inconvenienced when their trains do not run as planned. Planned disruption has less of a negative effect on passengers than unplanned disruption. When passengers are aware of disruption, they are able to plan accordingly and are typically less inconvenienced as a result. This lower level of inconvenience reduces the overall negative impact on both passengers and on passenger train operators. However, not all passengers are aware of planned disruption prior to travelling.

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<sup>14</sup> Passenger model contract may be accessed at <http://orr.gov.uk/what-and-how-we-regulate/track-access/applications-decisions-appeals-and-agreements/how-to-apply-for-track-access/access-for-passenger-operators>.

<sup>15</sup> Our guide on the Schedule 4 regime may be accessed at [http://orr.gov.uk/\\_data/assets/pdf\\_file/0004/17617/track-access-guidance-possession-regime.pdf](http://orr.gov.uk/_data/assets/pdf_file/0004/17617/track-access-guidance-possession-regime.pdf).

5. This is why the rail industry models the inconvenience to passengers of planned disruption as follows<sup>16</sup>:
  - For the proportion of passengers that were aware of the disruption prior to travel, the ‘inconvenience’ is estimated by comparing the journey taken without disruption to that which would be made with the disruption, which might include for example a replacement bus service or a longer journey time. This is estimated using standard PDFH methodology.
  - For the proportion of passengers that are not aware of the disruption prior to travel, the inconvenience is estimated on the same basis, but is increased by a ‘late time multiplier’ (again from PDFH) to reflect the additional inconvenience of the disruption being unexpected.

## Notification factors

6. Schedule 4 formulaic revenue compensation is estimated using the PDFH methodology. It does this with reference to the predicted train operator revenue losses arising from unplanned disruption (the ‘marginal revenue effect’ or MRE) set out in Schedule 8, the contractual regime that compensates for unplanned disruption.
7. The Schedule 4 formulaic revenue compensation is the product of the MRE and the relevant notification factor, which discounts the compensation due on the basis that more passengers are informed of the disruption prior to travel, and therefore are less inconvenienced.
8. The notification factors are calculated with reference to the proportion of passengers that are assumed to be aware of the disruption prior to travel. This varies according to category of passenger and the period of notice given. The assumption that passengers aware of the disruption are less inconvenienced is approximated, for computational simplicity, by dividing that proportion by the late time multiplier.
9. Notification factors calculated using the following formula, where  $p$  is the proportion of passengers that are aware of disruption prior to travel:

$$\text{Notification factor} = p * \frac{1}{\text{late time multiplier}} + (1 - p)$$

10. Network Rail receives a greater discount on the amount of MRE payable the earlier it plans possessions and notifies franchised passenger operators. Hence different values of notification factors apply at different pre-determined thresholds reflecting the amount of notice Network Rail gives to operators prior to a possession. The next

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<sup>16</sup> As set out in the Passenger Demand Forecasting Handbook (PDFH). PDFH is a handbook which identifies all of the known drivers of rail demand and provides information on the values of the elasticities of these influences on demand

section describes how notification factors and thresholds work together with Network Rail's timetable planning process.

## Timetabling and notification thresholds

11. The current notification thresholds are linked to Network Rail's timetabling process so as to ensure that the incentive for Network Rail to inform operators about possessions as early as possible aligns with industry processes for the timely delivery of a revised timetable. The earlier the notification the earlier operators can plan their management of possessions and inform passengers. We outline timetable terms that relate to each of the thresholds and notification factors below.

### Timetable terms

- The 'Bi-annual Timetable' is either the 'winter timetable' or 'summer timetable'. The winter timetable commences the second weekend in December (known as the Principal Change Date) and runs until the start of the 'summer timetable', which commences on the third weekend in May, (known as the Subsidiary Change Date).
  - The 'working timetable': There are two versions of each timetable.
    - The public timetable (Great Britain Timetable or GBTT) is that seen by passengers and included in journey planners and printed literature. It shows the stations each service calls at and associated arrival and departure times.
    - An internal industry version of this (called the Working Timetable or WTT) is a more detailed timetable and additionally includes further detail – for example timings of empty trains to and from depots, of trains; freight services; the times services pass stations not called at; and times at key locations. Both reflect the relevant 'bi-annual timetable' above. For the rest of this document, other than for the applicable timetable, we refer to the working timetable.
  - The 'informed traveller timetable'. The informed traveller timetable is a version of the public timetable and is published twelve weeks before the services operate. As such, it represents the first opportunity for most passengers to become aware of changes to services due to planned disruption.
  - The 'applicable timetable' is the timetable that Network Rail must produce for train operators by 10pm on the day before the services operate. Any disruption to services that are not included in the applicable timetable are treated as unplanned disruption, under Schedule 8.
12. Under Part D of the Network Code, Network Rail is required to notify operators of possessions at T-22, i.e. 22 weeks before the timetable week, unless not reasonably

practicable to do so. This is so that the possessions can be reflected in the services set out in the informed traveller timetable. In particular, under this process, operators may bid for services on the basis of the T-22 information, and 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. Operators may dispute possessions, and can ordinarily expect to win where possessions are notified after T-22.

## Notification factors and thresholds

13. Notification factors reduce the amount that Network Rail needs to pay operators for a given possession. They are expressed as the proportion of the maximum amount of revenue loss compensation Network Rail has to pay operators at each threshold (i.e. the discounted amount). A high notification factor (closer to 100%) will mean that Network Rail needs to pay more to operators.
14. There are three levels of notice, known as notification thresholds. The amount of discount increases the earlier the notification. This reflects that the level of revenue loss to operators is greater the less notice passengers have about disruption to their journeys.

### Early notification threshold: D-26 (before new working timetable)

15. The notification factor at the early threshold applies where Network Rail provides operators with details of changes to services due to a possession by issuing the new working timetable. It does this 26 weeks before the timetable comes into operation at the timetable change date, which is either the principal or subsidiary timetable change date.

### Informed traveller threshold: T-22 (22 weeks before the possession)

16. This notification factor applies where:
  - Network Rail notifies operators about a possession twenty-two weeks before the week of the possession; and
  - the service changes are uploaded in the train service data base, for the informed traveller timetable, twelve weeks before the possession.
17. This is an important threshold for informing passengers of disruption, and Network Rail is required to notify train operators of all planned disruption by this date, unless it is not reasonably practicable for them to do so.

## Late threshold: before the applicable timetable (10pm on the day before the possession)

18. The notification factor for the late threshold applies where Network Rail:
- notifies operators any time after twenty-two weeks before the possession but before 10pm the day before the possession; or
  - fails to upload the revised services into the timetable data base twelve weeks before the day of the possession.
19. Table A.1 summarises the notification factors applied at each notification threshold currently in use in track access contracts.

**Table A.1: Current notification thresholds by broad market segments<sup>17</sup>**

	London & SE Long Distance	London & SE Short Distance	Not London Long Distance	Not London Short Distance	Airports
<b>CP5 notification factors – for comparison</b>					
New Working Timetable (D-26)	45%	55%	45%	55%	40%
Informed Traveller Timetable (T-22)	65%	70%	65%	70%	63%
Applicable Timetable	85%	85%	85%	85%	85%

<sup>17</sup> Based on Table 20.13 Passenger Schedule 4 CP5 revised notification factors for service groups, by late time multiplier. Periodic Review 2013: Final Determination of Network Rail's outputs and funding for 2014-19, ORR Oct 2013. This may be accessed at [http://orr.gov.uk/\\_data/assets/pdf\\_file/0011/452/pr13-final-determination.pdf](http://orr.gov.uk/_data/assets/pdf_file/0011/452/pr13-final-determination.pdf).

# Annex B: Conclusions on the Access Charge Supplement

## Summary

1. After considering the issues and the responses to our December 2016 consultation carefully, we will not be making any changes to the approach to calculating the Access Charges Supplement (ACS) for the next control period (CP6).

## Background

2. Franchised passenger operators pay an access charge supplement (ACS) and in return receive payments for planned disruption to their services under the liquidated damages regime of Schedule 4 of their track access contract with Network Rail.
3. The amount train operating companies pay in ACS is based on the forecast volumes of maintenance and renewals (M&R). For CP5 this was calculated on the basis of Network Rail's strategic business plan (SBP) and approved in our final determination.
4. Actual levels of M&R are likely to differ from that forecast. All other things being equal, lower M&R activity levels mean that Network Rail pays less in Schedule 4 payments than it is funded. This is appropriate where lower activity is due to efficiency either in possessions planning or in asset management. However, it may not be appropriate if it is because Network Rail is maintaining the condition of its infrastructure to a lower level than for which it has been funded. In the latter circumstance, ACS will have been set based on forecasts of more M&R activity than took place.
5. It became clear early in both CP4 and CP5 that renewals volumes would be significantly below those assumed in our respective determinations. This means that 'all other factors being equal' Network Rail would collect more in ACS during the control period than it would pay out in Schedule 4 payments. However, during CP5, other factors, including the Lamington viaduct works, have largely offset the effect of lower renewals volumes.

## Our December 2016 consultation

6. In our December 2016 consultation<sup>18</sup>, we proposed to look further at the issue of how ACS is calculated. We did not have a firm recommendation but set out the following options for consideration:
  - estimate ACS on the basis of Network Rail's delivery plan produced immediately prior to the start of the control period, rather than the SBP and our determination;
  - more frequent (probably annual) recalculations to adjust the baseline Schedule 4 cost based on the most recent business plan (or potentially for ex post variations in the volume of M&R activity) during the control period<sup>19</sup>; and
  - retain the existing methodology but make a high-level adjustment to the total ACS needed, for example on the basis of historical over-recovery.
7. Although we recognised that there are issues with the way ACS is currently calculated, we noted that it is important that any solution is proportionate.
8. Estimating ACS on the basis of the delivery plan would likely improve the accuracy of the calculation. However, there is still a risk that the delivery plan may not be a reasonable forecast of likely possessions.
9. Annual recalculations of ACS would increase its accuracy by reducing the discrepancy between Schedule 4 payments and ACS. However, industry transaction costs associated with developing and applying the mechanistic assessment could be disproportionate to the scale of the problem.
10. Making a high-level adjustment to the ACS calculation would be a simpler approach to reduce the likelihood of recovery mismatch between ACS collected and compensation paid. The adjustment could be based on historical levels of mismatch in CP5 and CP4. However, there is no reason to suppose that this historical adjustment would be appropriate for CP6.

## Consultation responses

11. Many respondents to the December 2016 consultation did not comment on ACS. Of those that commented, some expressed concern that the current arrangements were

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<sup>18</sup> This may be accessed at [http://orr.gov.uk/\\_data/assets/pdf\\_file/0018/23454/pr18\\_schedule\\_4\\_initial\\_thinking\\_on\\_the\\_approach\\_to\\_calculating\\_the\\_access\\_charge\\_supplement.pdf](http://orr.gov.uk/_data/assets/pdf_file/0018/23454/pr18_schedule_4_initial_thinking_on_the_approach_to_calculating_the_access_charge_supplement.pdf).

<sup>19</sup> This was identified by RDG in its recent charging review.

not particularly transparent. In addition, they were concerned about Network Rail 'over-recovering' the costs associated with Schedule 4.

12. Therefore, there was some support (from train operating companies (TOCs)) for amending ACS arrangements through one of the options. Specifically two TOCs supported making a high-level adjustment to ACS and one supported a wash-up process.
13. Network Rail expressed concern about the options presented. In particular, its concerns related to:
  - proportionality: Network Rail noted that while the value of the current Schedule 4 ACS may be considered quite high at around £400m for the first 2 years of CP5, over this same timeframe Network Rail paid out in excess of £600m in Schedule 4 payments to operators<sup>20</sup>;
  - consistency: Network Rail suggested that changing the Schedule 4 ACS within a control period would be inconsistent with the assumed level of M&R volumes for CP6 set out in our final determination. Network Rail was concerned that these three approaches may put pressure on the funding settlement when delivering its M&R volumes. Network Rail also suggested that calculating ACS annually would be similar to reopening part of the settlement. This would be inconsistent with the approach taken elsewhere (such as Schedule 8); and
  - double counting: Network Rail noted that we already take account of deferrals of work in our annual assessment of its financial performance. It does not think that we should also address this potential issue through adjusting the funding provided through the Schedule 4 ACS before the start of the control period. Network Rail is concerned that this could prejudice the appropriateness of potential deferrals in CP6 and account for the issue twice.

## Our assessment of the issue

### Impact on TOCs

14. ACS is based on the level of M&R activity forecast in our final determination, for the entire control period.
15. TOCs are held neutral to changes in ACS during the period of their franchise. Any reduction (or increase) in the level of planned possessions will (relative to ACS paid) have two effects:

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<sup>20</sup> This figure includes Schedule 4 payments for enhancement projects, for which Network Rail is funded separately.



- (a) lower (or increase) the amount of disruption faced by the TOC; and
  - (b) lower (or increase) the amount of compensation the TOC receives through Schedule 4.
16. As the amount of compensation paid through Schedule 4 is designed to reflect the cost of disruption the TOC faces, on average the net effect of deviations from planned levels of disruption on operators should be zero. This means that TOCs are protected from changes in the level of planned disruption and are not disadvantaged by any initial inaccuracies in the calculation of ACS.

## Impact on Network Rail

17. Many factors can influence the decision on when to carry out planned M&R work on the railway. Network Rail must have the flexibility to amend its plans so it can efficiently manage this activity. It is also important that Network Rail is properly incentivised to carry out this work efficiently.
18. Schedule 4 is intended both to compensate operators for the costs associated with possessions and to incentivise Network Rail to take account of the effect of possessions on operators. Network Rail should not be penalised for efficient reductions in the number or length of possessions needed (for example by using a more innovative way of working) or rewarded for unduly delaying M&R activity.
19. The current approach for calculating ACS (based on the SBP underlying the Final Determination) ensures there is a link between Schedule 4 and the M&R activity funded by the regulatory settlement. We agree with Network Rail that this link should be preserved. There are also practical reasons why calculating ACS on the delivery plan could be problematic. As the delivery plan is produced close to the start of the control period, this may mean ACS levels would not be known until later in the process. This would result in increased uncertainty for TOCs and potential lack of alignment with implementation of PR18 in the track access contracts.
20. Revising the ACS calculation each year would be a time-consuming process and may not result in more accurate estimates, given the need to always keep future plans under review. More frequent calculation would also increase uncertainty for TOCs as ACS rates would change more frequently.
21. Under the current regulatory and funding arrangements, if Network Rail's M&R activity is reduced from the level forecast in our determination, Network Rail pays out less Schedule 4 compensation than expected. As a result an operator receives less money but has more access than forecast. When calculating Network Rail's financial performance, we adjust for the lower level of Schedule 4 payments as a result of reduced activity, so Network Rail does not benefit financially.

## Conclusion

22. In light of the consultation responses received and our further assessment of these issues, we are not making any changes to the way ACS is calculated for CP6. We think the risks associated with amending the methodology are significant given the limited impact variations have on the parties involved.

# Annex C: Conclusions on negotiated compensation for possessions

## Summary

1. After considering the issues carefully and the responses to our December 2016 consultation, we have decided not to make any policy changes to the negotiated compensation arrangements for possessions set out in Schedule 4 as part of PR18. However, we will correct an inconsistency with respect to the Sustained Planned Disruption (SPD) revenue thresholds. Any additional proposals for recalibrating thresholds for claiming bespoke compensation would need to be addressed as part of Rail Delivery Group's (RDG) recalibration of Schedule 4.

## Background

### The passenger regime

2. In return for the payment of an Access Charge Supplement (ACS), franchised passenger operators receive cost and revenue compensation for all possessions. This is determined by a formula. Compensation entitlements in the passenger operator Schedule 4 regime vary with the length of the possession:
  - Type 3 possessions (single possessions greater than 120 hours (including public holidays)): operators receive formulaic compensation automatically and are entitled to claim actual revenue losses and costs compensation (subject to a materiality threshold). Open access operators are entitled to claim this actual loss compensation, without paying ACS;
  - Type 2 possessions (single possessions greater than 60 hours excluding any public holidays, but less than or equal to 120 hours): operators receive formulaic compensation automatically and are entitled to claim actual costs compensation (subject to a materiality threshold and in respect of categories of direct costs only); and
  - Type 1 possessions (all other possessions): operators receive formulaic revenue and cost compensation only.
3. The Sustained Planned Disruption (SPD) mechanism is designed to protect train operators (both franchised passenger operators and open access operators) from instances where possessions cause disruption over a sustained period. Additional compensation for SPD is triggered when the impact of disruption crosses a pre defined threshold (in terms of lost revenue or increased costs) under which train operators may claim additional revenue and cost compensation above that covered by the liquidated sums payable under Schedule 4.

## The freight regime

4. There are three categories of compensation available within Schedule 4 for freight. These depend on the degree of disruption. Examples of the three categories of disruption (referred to in the freight regime as ‘variations to service’) are:
  - Category 3 disruption includes situations where access to a destination is blocked meaning freight needs to be conveyed by another means. Freight operators receive the Enhanced Planned Disruption Sum or Actual Costs compensation for Category 3 disruption;
  - Category 2 disruption includes those resulting in cancellations of affected services. Freight operators receive the Enhanced Planned Disruption Sum for Category 2 disruption; and
  - Category 1 disruption includes those resulting in increased journey length or a significant change in arrival/departure time. Freight operators receive the Normal Planned Disruption Sum for each Category 1 disruption.

## Our December 2016 consultation

5. In our December 2016 consultation we highlighted an issue with the current contractual wording for SPD revenue thresholds. The current wording has an inconsistency between the benchmark revenue (the defined service group revenue, which is an annual figure, i.e. 13 railway periods) and the time over which it applies (the two thresholds apply to three and seven periods). We proposed to amend the wording as follows (proposed changes marked in red and underlined) in line with the original intent such that either party may trigger SPD when an operator’s formulaic Schedule 4 revenue loss compensation is either:
  - a. greater than 20% of 3/13 of defined service group revenue over 3 consecutive periods; or
  - b. greater than 15% of 7/13 of defined service group revenue over 7 consecutive periods.
6. We also set out two issues we wanted to consider further:
  - the appropriateness of the current SPD thresholds; and
  - the contractual wording and process for making bespoke compensation claims with a view to making the process less cumbersome and protracted.

## Consultation responses

7. While many respondents to the December 2016 consultation did not comment on the issue of negotiated compensation, four TOCs specifically supported a review of the SPD thresholds. They did not, however, provide empirical evidence demonstrating that there is a material problem caused by the current thresholds to justify a detailed review.
8. Network Rail said that the lack of SPD claims over CP5 did not necessarily mean that the mechanism is not working, as SPD is intended to cover only the most disruptive possessions. It noted that any decision to change to the thresholds should take account of the scale of impact on limited industry resources, and should be based on evidence showing where passenger operators' costs and revenue losses increase substantially above formulaic Schedule 4 compensation.
9. Network Rail also noted that more than 5% of service groups are eligible to claim for SPD in CP5 so far. It believed that this is consistent with the intent of the mechanism. It noted that the mechanism is intended to capture the most disruptive possessions (around 1%).

## Our assessment of the issue

10. In terms of the issue of contractual wording, the current wording relating to SPD is such that whenever criteria (a) is satisfied, criteria (b) is also satisfied. This was not the intention of the original drafting. It is important that this inconsistency is addressed to ensure the regime works as intended. Therefore, we think it is appropriate to amend the wording as set out in paragraph 4 of this annex. This change would be implemented along with any other changes to contractual wording as part of PR18 implementation.
11. Appropriate thresholds for claiming bespoke Schedule 4 compensation are important for:
  - ensuring that the benefits to operators of the liquidated damages regime (of reducing administrative burden of negotiated compensation) are balanced with that of negotiated arrangements (of delivering more accurate compensation); and
  - acting as an accurate incentive on Network Rail with respect to particularly long/large possessions.
12. However, at this stage there is little evidence to support changing thresholds for bespoke compensation (e.g. the intent of the scale of possessions that would meet the criteria). However, if RDG updates the thresholds as part of its work on

recalibration of Schedule 4, and clearly sets out the basis by which it does so, we will consider this accordingly.

## Conclusion

13. After considering the issues carefully and the responses to our December 2016 consultation, we have decided not to make any policy changes to the negotiated compensation arrangements for possessions set out in Schedule 4 as part of PR18.
14. We will make changes to contractual wording, to make it consistent with PR18 policy, as part of PR18 implementation. As part of this, we will correct the wording with respect to the SPD revenue threshold, consistent with that set out in paragraph 4 of this annex. Any additional proposals for recalibrating thresholds for claiming bespoke compensation would need to be addressed as part of RDG's recalibration of Schedule 4.



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