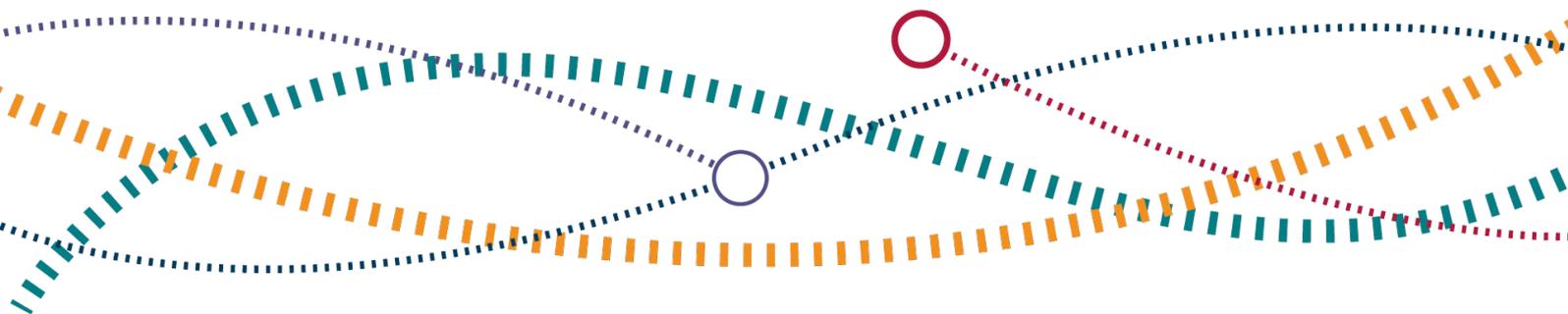




Schedule 4 possessions regime

Factsheet

30 September 2021



Purpose of this document

This factsheet provides an overview of the key elements of the Schedule 4 possessions regime for both passenger and freight operators. It is intended to provide a useful reference for industry to assist with engaging with the PR23 process and responding to our consultations.

This document provides a high-level background on Schedule 4 and reviews the passenger and freight Schedule 4 regimes separately. For each regime, this document reviews:

- The type of disruption events Schedule 4 compensates operators for;
- The conditions under which operators are eligible for compensation;
- How compensation is determined; and
- How Schedule 4 compensation costs are funded.

We have published this note alongside our [initial consultation on the PR23 review of the Schedule 4 possessions regime](#). This guide focuses exclusively on the existing structure of the Schedule 4 possessions regime for CP6. Our initial views about how this structure might change in PR23 are discussed in our initial consultation.

If you have any queries about the information contained within this note, please contact Joe Quill (Joe.Quill@orr.gov.uk), Senior Economist at ORR.

Background to Network Rail's Schedule 4 possessions regime

What is Schedule 4?

Schedule 4 is the portion of track access contracts that sets out the level of compensation Network Rail is required to pay train operators for delays, service changes or cancellations as the result of planned disruption on the network. This type of disruption occurs largely as the result of Network Rail taking temporary possession of the network to undertake planned engineering work, but can also be the result of other disruptive events such as severe weather.

What is the purpose of Schedule 4?

The Schedule 4 possessions regime has two key functions:

- (a) to provide compensation to passenger and freight operators for loss of revenue and additional costs incurred as the result of disruption to services due to possessions; and
- (b) to act as an incentive on Network Rail to plan possessions efficiently, so as to minimise disruption to operators, and final customers.

Schedule 4 also provides Network Rail and other industry parties with information about the impact of possessions on users of the railway. This enables Network Rail, and other relevant industry parties, to consider the most appropriate trade-off between the impact on users of restricting access to the network against the length and/or number of possessions, and the cost of undertaking the work.

Passenger regime

Under Schedule 4, operators can be compensated for the revenue losses and additional operating costs caused by the disruption due to possessions.

This chapter reviews the type of disruption events operators can be compensated for, the conditions under which operators are eligible for compensation, how compensation is calculated, and how the cost to Network Rail is funded.

1. Types of disruption events for the purpose of Schedule 4 compensation

There are five different types of disruption event for which operators can be compensated:

- (a) Possessions which are shorter than 60 (continuous) hours, known as **type 1** possessions;
- (b) Possessions which are longer than 60 hours but shorter than 120 (continuous) hours, known as **type 2** possessions;
- (c) Possessions which are longer than 120 (continuous) hours, known as **type 3** possessions;
- (d) Periods of **sustained planned disruption** (SPD), which are identified when the disruption caused by a possession surpasses specific revenue and cost thresholds. This is explained in more detail below; and
- (e) **Late notice** (within 12 weeks of delivery of the possession, i.e. T-12) **cancellation of a type 1 possession.**

Sustained planned disruption

Sustained planned disruption is defined as a planned disruption event which results in revenue and cost impacts that cross pre-set thresholds:

- (a) The revenue threshold is defined as revenue loss compensation that is either equal to or greater than 20% of defined service group revenue over 3 consecutive periods; **or** equal to or greater than 15% of defined service group revenue over 7 consecutive periods.
- (b) The cost threshold is defined in terms of the difference between Schedule 4 (formulaic) cost compensation normally available and the costs actually incurred by

an operator. One of two cost thresholds has to be passed, as shown in the table below (using 2017-18 prices).

Table 1. CP6 Cost thresholds for sustained planned disruption

Passenger operator	CP6 SPD cost threshold 1 (over 3 consecutive periods)	CP6 SPD cost threshold 2 (over 7 consecutive periods)
C2C, Chiltern, Grand Central, Heathrow Express, Hull Trains, LOROL, Merseyrail	£342,223	£684,447
All other passenger operators	£684,447	£1,368,893

2. Eligibility for compensation

The compensation an operator is eligible for depends on whether it has chosen to pay an access charge supplement (ACS) up-front.

Compensation for operators who do not to pay an ACS

Passenger operators who choose not to pay an ACS can claim cost and revenue loss compensation for type 3 possessions and for periods of sustained planned disruption.

Compensation claims should be based on evidence of actual costs and revenue losses incurred due to possessions. In practice, agreement on the appropriate level of compensation is subject to negotiation between operators and Network Rail based on the evidence presented.

Compensation for operators who pay an ACS

Passenger operators who pay an ACS are eligible for compensation for possessions of any length. They also get access to formulaic compensation (where revenue loss and cost compensation is determined by pre-set formulas).

The compensation these operators may be eligible for is as follows:

- (a) **Type 1** possessions: operators are eligible for formulaic revenue loss and cost compensation.
- (b) **Type 2** possessions: operators are eligible for formulaic revenue loss and cost compensation (as in type 1 possessions) and can claim compensation for actual cost incurred if this is believed by Network Rail or an operator to be more than £10,000 different from what was already provided in formulaic compensation.

- (c) **Type 3** possessions and periods of **sustained planned disruption**: operators are eligible for formulaic revenue loss and cost compensation (as in type 1 possessions) and can claim compensation for the revenue losses and cost actually incurred if this is believed by Network Rail or an operator to be more than £10,000 different from what was already provided in formulaic compensation.

In addition, operators can recover any costs they incurred to accommodate a type 1 possession which was later cancelled at late notice (T-12) by Network Rail, provided those costs amount to £5000 or more.

The table below summarises the compensation operators may be eligible for under Schedule 4, depending on whether they pay an ACS and the type of disruption event.

Table 2. Summary of passenger operators' eligibility for Schedule 4 compensation

Compensation		Type 1 possession	Type 2 possession	Type 3 possession	SPD	Late notice cancellation of type 1 possession
Operator paying an ACS	Revenue loss compensation*	Formulaic revenue loss compensation.	Formulaic revenue loss compensation.	Actual revenue loss compensation, above formulaic compensation.	Actual revenue loss compensation, above formulaic compensation.	X
	Cost compensation	Formulaic cost compensation.	Actual cost compensation, above formulaic compensation.	Actual cost compensation, above formulaic compensation.	Actual cost compensation, above formulaic compensation.	Actual cost compensation
Operator not paying an ACS	Revenue loss compensation*	X	X	Actual revenue loss compensation.	Actual revenue loss compensation.	X
	Cost compensation	X	X	Actual cost compensation.	Actual cost compensation.	X

*Notification factors apply, as described below.

3. Calculation of compensation amounts

Schedule 4 sets out specific methodologies to calculate revenue loss and cost compensation, which are summarised below.

Compensation for loss of revenue

Compensation is intended to cover the loss of revenue on the day and future revenue loss due to passengers being deterred from travelling by rail in the future as a result of previously experienced disruption.

Schedule 4 sets out two possible methodologies for calculating compensation:

- (a) **Formulaic revenue loss compensation:** The formula calculation is based on the expected level of disruption to passenger services due to a possession (as measured by extended journey times and/or service cancellations, converted into equivalent minutes of delay) multiplied by the expected level of revenue loss per minute of delay. A busyness factor is applied to the revenue loss calculation to account for differences in the number of passengers carried by individual service groups. There are separate calculations for revenue loss on the day and over the long-term:
 - (i) The expected revenue loss on the day (due to passengers deciding not to travel as the result of changes in service levels) is based on (1) the assumed proportion of passengers who are made aware of possessions before deciding to travel, (2) the average passenger revenue for that service, and (3) the expected proportionate reduction in demand, on the day, as the result of delays experienced, based on [empirical research](#).
 - (ii) The expected long-term revenue loss is based on (1) the proportion of passengers who arrive on the day unaware of the possessions and therefore experience disruption to their journey, with the effect that they in future decide to reduce the number of rail journeys they make, (2) the average passenger revenue for that service, and (3) the expected proportionate reduction in future demand as the result of past delays experienced, based on [empirical research](#).
- (b) **Actual revenue loss compensation:** Operators can claim compensation for the revenue losses actually incurred. Operators must supply evidence of the losses incurred and negotiate payment with Network Rail.

Notification factors

Network Rail can obtain a discount on the amount of revenue loss compensation due, which is greater the earlier it notifies operators about forthcoming possessions. This discount exists to recognise the fact that the sooner operators know about a possession, the sooner they can inform passengers, thereby causing less inconvenience to passengers as a result of late service changes. The level of discount is based on empirical evidence about the link between prior notice of forthcoming disruption and passengers' positive perception of rail travel.

There are separate discounts for each of the three notification thresholds corresponding to the amount of notice given to operators and the type of service being disrupted.

(a) **D-26** (read as 'D minus twenty-six') is known as 'the early threshold' and is set at 26 weeks before a new working timetable comes into effect (which happens in May and December each year)¹.

(b) **T-22** (read as 'T minus twenty-two') is known as 'the informed traveller threshold' and is set at 22 weeks before a possession is planned to take place. The threshold is set at 22 weeks so that it can inform the production of the informed traveller timetable that is published 12 weeks before a service is due to operate. The publication of the informed traveller timetable is the first point at which passengers are able to book train journeys. As such, it represents the first opportunity for most passengers to become aware of changes to services due to planned disruption.

(c) **Late threshold**. This relates to what is known as 'the applicable timetable', which is when operators are notified of a possession by 10pm on the day before the possession is due to take place. Any disruptions to services that are not included in the applicable timetable are treated as unplanned disruption, under the Schedule 8 performance regime.

Table 3 shows the notification factors (with the percentage discount being equal to 100% minus the notification factor) for each notification threshold and by type of service.

¹ About 80% of possessions are notified before the early threshold by Network Rail.

Table 3. Notification factors for CP6

	London & SE long distance	London & SE short distance	Not London long distance	Not London short distance	Airports
Early threshold (D-26)	44%	69%	36%	60%	31%
Informed traveller threshold (T-22)	44%	69%	36%	60%	31%
Late threshold	92%	90%	93%	88%	90%

Compensation for additional costs

Compensation covers additional bus replacement costs, when services are cancelled, or fuel costs and access charge payments incurred (based on train mileage payment, i.e. “TMP rates”), when services are diverted or cancelled.

Bus replacement costs are based on estimated bus mileage (EBM) payment rates, which represent the average cost per mile of operating replacement bus services, multiplied by the estimated road distance between pairs of rail stations which have to be connected as the result of cancelled services².

There are two EBM payment rates, one that applies to services operating in London and the South East or to longer distance services stopping in London, and another, lower, rate that applies to services in the rest of the country. The same rate applies regardless of how busy a given service is.

TMP rates reflect average track access charges and fuel costs per train-mile, taking account of differences between vehicle types. The rates are calculated at the level of individual service groups. TMP rates are then multiplied by the change in train-mileage that results from service diversions.

Note that changes in TMCs can be either positive or negative (e.g., a cancellation would reduce train mileage).

In some circumstances (see table 2), operators are either expected to claim for actual costs incurred rather than in accordance to the formulas above, or they are able to claim for actual costs incurred where this exceeds the amounts given by formula. In these

² [Review of Possessions Cost Compensation - Final - Faber Maunsell](#)

instances, operators are required to present evidence of the costs incurred and negotiate payment with Network Rail.

4. Funding of the passenger regime

When a possession is related to enhancement projects, Schedule 4 compensation costs are included in cost estimates for the project and funded out of its budget.

When a possession is linked to maintenance and renewals works, the funding arrangements for the Schedule 4 compensation costs depend on whether operators pay an ACS:

- (a) Schedule 4 compensation for operators who pay an ACS is funded from the overall income from up-front ACS payments. If total compensation exceeds total ACS income, the difference is met from Network Rail's overall budget.
- (b) Schedule 4 compensation for operators who do not pay an ACS is met out of Network Rail's overall budget.

The annual ACS amount to be paid to Network Rail by each operator is determined prior to the start of the control period and is calculated so as to cover the total amount of compensation Network Rail is expected to pay out to these operators during a control period in relation to possessions due to maintenance and renewal works.

The calculation of the ACS is based on the forecast volume of maintenance and renewals in that control period and the average expected compensation per unit of volume of maintenance and renewals works.

An important feature of the ACS is that, if the out-turn volume of maintenance and renewals matches the forecasts, and the relationship between volume and compensation follows the historical pattern, then overall Schedule 4 payments made by Network Rail would match its overall income from ACS payments. In practice, this is seldom the case as volumes of work and the nature and amount of notification for individual will vary relative to initial assumptions. Because Network Rail has discretion over how it delivers possessions and when it notifies operators, the ACS acts as an incentive on Network Rail to minimise disruption faced by operators. By managing its possessions more efficiently and taking fewer possessions, Network Rail can increase the difference between the Schedule 4 payments it makes and the ACS income it receives from operators.

Freight regime

Under Schedule 4, freight operators are compensated for the additional operating costs they incur due to possessions, as the result of their services being diverted or cancelled.

This chapter reviews the conditions under which freight operators are eligible for compensation, the levels of compensation payable, and how compensation is funded.

1. Types of disruption event

The level of compensation varies with the type of disruption event. Below, we define the disruption events that are used for the purpose of calculating compensation payments.

For possessions notified by Network Rail **more than twelve weeks** before the freight service is due to depart, Schedule 4 distinguishes between three types of disruption:

- (a) **Category 1** Disruption covers mild disruptions such as a departure or arrival time brought forward or delayed by more than 60 minutes, an extended journey distance (more than 10 miles), or the imposition of more demanding length or weight restrictions.
- (b) **Category 2** Disruption covers more serious disruptions such as cancellation, the imposition of demanding gauge restrictions, or the necessity for an operator to use at least one additional locomotive.
- (c) **Category 3** Disruption covers severe disruptions such as cancellation and the blockage of a route to all freight services, or the necessity to transport all or part of the goods planned to be carried by another mode than rail.

For possessions notified by Network Rail **less than twelve weeks** before the service is due to depart, Schedule 4 distinguishes between two types of disruption event:

- (a) **Service variation** covers disruption such as extended journey distance (more than 5 miles), a departure or arrival time brought forward or delayed by more than 30 minutes but less than 12 hours, or the imposition of more demanding length, weight, or gauge restrictions.
- (b) **Late notice cancellation** covers situations where a freight service is cancelled.

2. Levels of compensation payable

There are four possible levels of compensation for freight operators:

- (a) Normal Planned Disruption Sum, which amounts to £336 per service.
- (b) Enhanced Planned Disruption Sum, which amounts to £894 per service.
- (c) Service Variation Sum, which amounts to £665 per service.
- (d) Late Notice Cancellation Sum, which amounts to £1749 (paid through Schedule 8).

In addition, for category 3 disruption, service variation and late notice cancellation, operators can also claim for actual costs incurred.

The table below sets out the level of compensation payable for each type of disruption event.

Table 4. Summary of freight operators' eligibility for Schedule 4 compensation

Possessions notified before T-12		Possessions notified after T-12	
Disruption faced	Sum payable	Disruption faced	Sum payable
Category 1 Disruption	Normal Planned Disruption Sum (£336 per service)	Service variation	Service Variation Sum (£665 per service) + actual cost compensation
Category 2 Disruption	Enhanced Planned Disruption Sum (£894 per service)	Late notice cancellation	Late notice cancellation Sum - (£1749 per service) + actual cost compensation
Category 3 Disruption	Enhanced Planned Disruption Sum (£894 per service) + actual cost compensation		

Note: all prices based on 2017/18 prices.

3. Funding of the freight regime

Schedule 4 compensation linked to possessions required for enhancement projects are met out of the budget of the enhancement scheme.

Schedule 4 compensation linked to possessions required for maintenance and renewals works are met out of Network Rail's overall funding. Like passenger operators, in principle, freight operators could choose to pay an ACS to receive enhanced compensation. The ACS would then be used to cover Schedule 4 compensation costs to these operators. However, it is not clear what enhanced compensation would cover and how it would be calculated, and no operator has yet chosen to adopt this option.



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