Delay attribution review
Scoping stage report
July 2019
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Executive summary

Passengers and freight users rely on both Network Rail and train operators to work together to deliver punctual and reliable train services. Delay attribution plays a critical role in understanding and improving train service performance. Where it works well it can provide an effective tool to drive improvement. However, there are aspects that can potentially impede both the quality of data and the effective collaboration between different parties.

During the 2018 periodic review (PR18), a number of stakeholders expressed a number of serious concerns about elements of the current delay attribution process.

Following this feedback, in the PR18 final determination we committed to launching a review of delay attribution in early 2019.

On 15 January 2019, we launched the scoping stage of the review\(^1\), the purpose of which was to work collaboratively with the industry to define the objectives for the later stages. This involved establishing facts; clarifying issues; identifying priority areas for improvement; and suggesting potential courses of action. This document concludes the scoping stage.

We would like to thank everyone who has contributed to the scoping stage by attending our stakeholder workshop in February, submitting written responses to our consultation letter or meeting with ORR’s review team. In particular, we would like to thank the Delay Attribution Board (DAB) for the presentations it contributed to the workshop and the ongoing support it has provided.

Recommendations

The evidence we gathered from stakeholders suggests the rules, processes, systems and governance structures developed over the last 20 years have generally been fit for purpose.

However, there are areas that could be improved and need to be examined further to ensure the system delivers better quality and reliability of information and provides the right underlying framework for all parties to work together to deliver better performance for passengers and freight users.

This document sets out our findings from the scoping stage in a series of recommendations to shape the next steps. These are:

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\(^1\) Delay Attribution Review, Office of Rail and Road, January 2019. This may be accessed [here](https://example.com/).
industry working group to evaluate options and agree a way forward for strengthening industry and/or regulatory governance to achieve greater consistency in the application of delay attribution principles and rules;

industry working group to explore the costs and benefits of moving the responsibility for delay attribution away from Network Rail routes;

industry working group to invite further evidence on the extent to which the distribution of voting rights on the DAB has given any party an advantage over changes to delay attribution rules and prevented the introduction of improvements to the DAPR;

DAB to review potentially redundant delay codes and make proposals for changes;

DAB to carry out gap analysis of existing delay codes and set out the costs and benefits of introducing greater or less detail;

DAB to identify the types of incident where joint responsibility would be deemed more appropriate and propose changes, for discussion with industry working group;

industry working group to work with Network Rail to develop and evaluate options for improving or replacing TRUST DA\(^2\) and the underlying sources of train running information;

industry working group to work with Network Rail and DAB to jointly develop and evaluate alternative options for increasing the proportion of sub-threshold delay that is attributed;

industry working group to work with Network Rail and DAB to develop a proposal for greater automation of the attribution of reactionary delay; and

industry working group to develop and evaluate options for setting up a common competency framework for all delay attribution staff and for developing new training opportunities.

**Next steps**

The review was split into three stages: a scoping stage; an options development/problem solving stage; and an implementation stage. The publication of this recommendations report concludes the scoping stage of the review and we consider industry best placed to lead the options development and implementation stages. However, we recognise ORR will continue to have a role to play.

An industry working group will be set-up to facilitate the subsequent stages of the review. This is because we think that the industry is best placed to lead subsequent stages of the review. Users of delay attribution information and those with detailed knowledge of the

\(^2\) Train Running Under System TOPS (Total Operating Processing System) Delay Attribution
system are naturally best placed to develop detailed options, to assess their costs and benefits and to implement future changes. This document outlines our proposals for the industry working group, including ORR’s involvement in the next stages.
1. Introduction

What is delay attribution?

1.1 Delay attribution is the process by which the reasons for delays to train services are determined; this includes identifying both what caused the delay and the party responsible.

1.2 The information and data provided by delay attribution play an important role in understanding performance on the network; it is also used to develop performance improvement plans and to produce business cases for performance improvement projects.

1.3 The information from delay attribution supports a number of other industry processes, including franchise bids and ORR’s determinations on Network Rail’s performance trajectories for each control period.

1.4 Finally, delay attribution information underpins the calculation of the compensation payments between Network Rail and train operators in Schedule 8.

Background to the review

1.5 As part of the 2018 periodic review (PR18) consultation process, we proposed to base future Schedule 8 compensation payments on delay minutes caused by one operator on another (known as ‘TOC-on-TOC’ delay), in place of the current proxy measure –the delay that an operator causes to its own trains (known as ‘TOC-on-self’ delay).

1.6 Mainly in response to this proposal but also at other stages of PR18, a number of stakeholders expressed a lack of confidence in the delay attribution process. Stakeholders’ concerns with the current delay attribution process included:

- issues with specific delay attribution rules;
- effectiveness of governance arrangements;
- effectiveness of dispute resolution mechanisms; and
- the amount of industry resources the process requires.

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3 Schedule 8 in train operators’ track access contracts is a performance regime that involves payments to and from operators and Network Rail depending on the amount of delay they cause. There are separate performance regimes for passenger, freight and charter train operators, reflecting the differing nature of the services operated.

4 Improving incentives on Network Rail and train operators: A consultation on changes to charges and contractual incentives, Office of Rail and Road, December 2016. This may be accessed here.
1.7 It was suggested that our proposed Schedule 8 change would increase the cost and complexity of the process further, and hinder effective collaborative working within industry\(^5\).

1.8 In listening to these views, we decided not to implement our Schedule 8 proposal in control period 6 (CP6)\(^6\). However, we noted that this decision would provide time to review the effectiveness of the delay attribution process more generally and for any improvements to be implemented to the delay attribution process ahead of the next periodic review\(^7\).

1.9 In the PR18 final determination, we confirmed that we would consult on issues and areas for improvement in delay attribution in early 2019\(^8\). While the original intention was to focus on a specific element of Schedule 8, in developing the objectives of the review we concluded that the focus should be broader.

**Overall objective of the review**

1.10 Due to the importance of delay attribution in understanding performance on the network and the other performance related industry processes that the information supports, the ultimate objective of this review is to support improved network performance.

1.11 This review can help achieve this by focussing on:

(a) improving the understanding of the causes of delay;
(b) improving the governance arrangements;
(c) facilitating future improvements to contractual incentives between Network Rail and train operators;
(d) increasing industry trust and confidence in the delay attribution process; and
(e) identifying potential improvements to the existing systems and processes.

1.12 This review also has the potential to help improve the efficiency of the delay attribution process, for example, by reducing the resources the process requires and reducing the number of disputes.

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\(^5\) Several train operators suggested that when Network Rail manages the impact of operator caused delays poorly the resulting reactionary delay is not reliably attributed to Network Rail. Train operators explained that in these situations they would have to dispute the attribution of delay, or pay for the delay that was a consequence of Network Rail’s mismanagement. The result of this increase in disputes would be a significant increase in the administrative costs of delay attribution.

\(^6\) CP6 runs from 1 April 2019 to 31 March 2024.

\(^7\) Charges and contractual incentives – consultation conclusions, Office of Rail and Road, June 2017. This may be accessed [here](#).

\(^8\) 2018 periodic review final determination – Overview of approach and decisions, Office of Rail and Road, October 2018. This may be accessed [here](#).
Scope of the review

1.13 This review covers the following three themes of delay attribution:

- Governance: This covers governance structures, including ownership of delay attribution systems, responsibility for setting delay attribution principles and rules (DAPR), compliance with DAPR and dispute resolution powers and procedures.

- Principles and rules of delay attribution: This relates to any issues stakeholders have with specific rules and principles set out in the Delay Attribution Principles and Rules (DAPR).

- Processes, systems and ways of working: This relates to the processes and systems used to measure delay on the network and provide information underpinning the delay attribution process.

1.14 It is important to note that, as set out in the PR18 final determination, potential reforms to Schedule 8 in CP6 are out of scope of this review. We recognise that delay attribution and Schedule 8 are fundamentally linked and that the financial implications of Schedule 8 are a significant driver of Network Rail and train operators’ behaviours in relation to delay attribution.

1.15 However, the purpose of this review is to ensure that the delay attribution process is fit for purpose to support improved network performance. Any improvements to the delay attribution process resulting from this review may facilitate future changes to Schedule 8, but this review is not looking at the functioning of Schedule 8.

1.16 Any changes to Schedule 8 will instead be considered as part of the 2023 periodic review (PR23) process. During PR23, which will begin either in late 2020 or the start of 2021, we will take into account any relevant information we receive as part of the present review in relation to Schedule 8.

Plan for the review

1.17 This review is split into three stages; a scoping stage, a development of options stage; and an implementation stage.

Scoping stage

1.18 This document is the outcome of the scoping stage of the review. The stated purpose of the scoping stage is to:

- set out the objectives of delay attribution;
- establish facts;
- clarify issues;
identify priority areas for improvement; and

suggest potential courses of action.

1.19 We launched the scoping stage of the review in January 2019 with a consultation letter inviting stakeholders’ views on the current delay attribution process. We gathered stakeholders’ views at a workshop we hosted in February 2019 and later received 22 written responses.

1.20 Based on our assessment of this evidence and further engagement with Network Rail and the DAB, we have developed recommendations for areas of the current delay attribution process that we consider need to be improved. These are set out in the “Recommendations” chapter of this document.

1.21 The publication of our recommendations in this document concludes the scoping stage of the review.

Development of options and implementation

1.22 The next stage of the review will be to develop and evaluate detailed options for changes to the current delay attribution process, based on our recommendations. The final stage will see through the implementation of the options deemed to be worth taking forward.

1.23 As delay attribution is conducted and governed by industry (i.e. a combination of Network Rail and train operators), we consider industry best placed to lead the subsequent stages of the review. At the same time, we recognise ORR will continue to have a role to play.

1.24 The letter from our chief executive, John Larkinson, accompanying this report, and the “Next steps” chapter of this document sets out our detailed proposal for an industry working group to facilitate the development of options stage of the review and explains what we see as ORR’s future role.

Timings

1.25 We expect the industry working group to be able to formally begin work on the development of options stage in September 2019 at the latest. This stage of the work should take approximately six months to complete, meaning we would expect the development of options stage to conclude by April 2020.

1.26 We then envisage the implementation stage of the review concluding by April 2021, although we accept any system changes may take longer to see through. This timeline will ensure that any changes will be known as PR23 begins and fully in place by the start of the next control period.

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9 Letter: Delay Attribution Review, Office of Rail and Road, January 2019. This may be accessed [here](#).
Figure 1: Timeline for delay attribution review

1.27 The rest of this document is structured as follows:

- **Chapter 2**: Context
- **Chapter 3**: Recommendations
- **Chapter 4**: Next steps
2. Context

Introduction

2.1 The purpose of this chapter is to provide an explanation of how the current delay attribution process works and to set out some key facts and figures.

What is a delay?

2.2 A train service is delayed when the actual running of the service deviates from its planned timetable.

2.3 The timetable against which service performance is measured is known as the ‘Plan of the Day’. It is generally agreed by industry parties prior to 2200 hours the previous day, and then uploaded into industry systems by the Network Rail System Operator.

How is delay measured?

2.4 The specific location of trains on the network is continuously monitored by the signalling system. This is undertaken using track detection - on the GB network this is predominantly track circuits and axle counters. In some more remote areas, signallers record actual running times manually.

2.5 When a train arrives at a location later than specified in the Plan of the Day, this is recorded by the TRUST system. TRUST also records other events, such as a service omitting a station it was scheduled to stop at or when a service is completely cancelled or fails to run part of the journey.

TRUST and TRUST DA

TRUST is a mainframe system used for operating the railway, which Network Rail is responsible for. It takes a real-time feed of train locations from the signalling system and compares this with the timetable to work out where each train is and to identify if there are any delays.

TRUST DA is used for delay attribution and uses a feed from TRUST. When there is a delay, or another event that means a service has experienced unplanned disruption, the TRUST DA system identifies where delays have occurred and, for delays above a certain threshold (see paragraphs 1.13 to 1.18), creates a delay alert, allowing users to investigate the delay and attribute it accordingly.

10 Train Running Under System TOPS (Total Operating Processing System)
How is delay attributed?

2.6 When a delay alert is created in TRUST DA, it appears on the screen of a Level 1 Train Delay Attributor (TDA) at the relevant Network Rail route. The TDA then begins the process of investigating and attributing it.

2.7 The TDA will undertake a preliminary investigation to determine whether the alert is a new delay or is linked to an existing delay. The TDA will come to a judgement based on available evidence, including information from controllers or signallers or from TRUST or interrogating Control Centre of the Future (CCF). CCF is a system used by Network Rail TDAs to watch train movements, check signal aspects and confirm route settings in real-time. There is also a replay facility to review these parameters at a later date, if required.

2.8 If the alert is deemed to be a new delay, an incident is created and a manager code and a cause code are assigned.

- **Manager codes**: The manager code shows who was responsible for the delay. Each relevant manager has a code, for example signalling, train crew, station and control managers.

- **Cause codes**: The cause code is a description of what triggered the delay.

2.9 In addition, there are also **root cause codes**. Root cause codes provide more detail than cause codes, such as the specific component of a train that caused a fleet delay. These codes are not used in TRUST, they are only included in systems used by train operators to understand delays in more detail. Network Rail does not use root cause codes.

2.10 If the alert is deemed to be linked to an existing delay, the alert is attributed to an existing incident as **reactionary delay**. If the preliminary investigation identifies the incident as a Network Rail caused delay, the TDA will code it accordingly.

2.11 Alternatively, if it is thought to be an operator-caused delay, the Network Rail TDA will provisionally code it as such and it will be forwarded, via TRUST, to the relevant operator. A Level 1 representative for the operator will then review the incident and assign a manager code and cause code. In both cases, the incident will then appear (or reappear) on the system of the responsible manager for further investigation.

2.12 If the responsible manager acknowledges that the cause of the delay and all reactionary delay within it is correctly attributed, the incident is accepted. If it is believed the attribution of the incident is incorrect, it becomes disputed. The party disputing it will provide the reason for dispute and/or suggest an alternative responsible party; the incident will then be sent to the suggested manager to review. It is possible that the responsible party agrees with the attribution of the incident, but
disagrees with the attribution of the reactionary delay. In this situation, only the reactionary delay will be disputed.

**Unattributed, uninvestigated and unexplained delay**

2.13 Although all delay on the network is recorded, it is not all attributed, investigated or explained.

2.14 Delays of three minutes or less deemed not to cause any reactionary delay of three minutes or more are not attributed. For this sub-threshold delay, no action is taken to understand the cause or to assign responsibility. According to Network Rail, c.35% of all delay minutes on the network are sub-threshold and that figure goes up to 70% for some individual operators.

2.15 All above-threshold delay (or sub-threshold causing threshold reactionary delay) should be investigated. However, there are instances where Network Rail chooses not to, or is unable to, investigate the causes of delay. Uninvestigated delay tends to spike, for example, during periods of severe disruption on the network when Network Rail may not have sufficient resources to investigate all the delay that occurs in a timely manner.

2.16 If Network Rail does investigate the delay, but no cause can be found by either of the parties involved, the delay is classified as unexplained.

2.17 Uninvestigated and unexplained delays are attributed to Network Rail under the ‘Network Management/Other’ delay codes, either manually by TDAs, or automatically by TRUST as default. The fact these delays are attributed to a delay code distinguishes them from unattributed delays.

2.18 Figure 2 shows the possible outcomes of the delay attribution process when a delay occurs on the network.
Governance of delay attribution

How are rules set?

2.19 Delays are attributed to the identified cause and responsible party using the Delay Attribution Principles and Rules (DAPR)\textsuperscript{11}.

2.20 The DAPR is incorporated into the Network Code and it is therefore expected that all parties should adhere to the DAPR. However, we understand that, for certain types of delay incident, Network Rail routes and operators will sometimes enter into bespoke commercial agreements for the purpose of performance payments and that this can cause delay attribution to diverge from the DAPR.

2.21 The DAPR includes:

- the \textbf{cause codes} used to identify ‘what’ caused the delay, which are standard across the network;
- the \textbf{standardised structure for determining manager codes}. However, the manager codes in TRUST DA for attributing delay to a responsible party are not included in the DAPR because they differ across operators and within Network Rail; and

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\textsuperscript{11} Delay Attribution Principles and Rules, Delay Attribution Board. This may be accessed \href{http://example.com}{here}.
- **guidance on dual codes**, to explain the circumstances under which delays can be attributed jointly, in line with the Track Access Agreement, to both Network Rail and operators.

2.22 However, it should be noted that, because root cause codes are only used by certain operators and bespoke to each operator that uses them, they are not included in the DAPR.

2.23 The DAPR is owned by the Delay Attribution Board (DAB). The DAB is an industry body that was established under the Network Code, which states:

> “The purpose of the [Delay Attribution] Board is to lead, monitor and advise on the effectiveness and accuracy of the delay attribution process and use of the Delay Attribution Principles and Rules and the Performance Data Accuracy Code.”

2.24 The DAB meets every four weeks and consists of the Chair, the Board Secretary and 12 Members, six from Network Rail and six from passenger and freight operators.

2.25 The DAB, Network Rail and individual operators can all propose an amendment to the DAPR. Reasons for amendments to be considered include:

- it is considered that the physical format or presentation of the DAPR requires amendment;
- changes are required to the scope of the DAPR, either to provide more detail or to simplify the contents;
- Network Rail and an operator cannot agree on the interpretation of a clause within the DAPR and have sought guidance from the DAB;
- an incident has occurred which has not occurred in the past, requiring the DAB to provide guidance and for the DAPR to reflect this; and
- a new potential cause of delay has been introduced and requires DAPR guidance, such as tilt systems on trains or new signalling systems.

2.26 Where changes are proposed, a formal Proposal for Amendment (PfA) is generated and circulated to the industry for comment. Responses from industry are then reviewed at the next DAB meeting. For the proposed amendment to be accepted by the DAB, a minimum of seven members must vote in favour of the proposal, including at least two Network Rail members and two non-Network Rail members.

2.27 If the DAB approves the proposal for the amendment, the final version of the proposal is sent to the ORR for approval.
2.28 After a change has been approved by ORR, the DAPR is amended accordingly and the relevant staff are briefed on the change. Over the last 3 years ORR have approved 78 proposals for amendments to the DAPR or to the Delay Attribution Guide (DAG), as it was previously known.

How are disputes settled?

2.29 The attribution of delay for an incident can be disputed at various stages in the process, as set out below.

- **Level 1**: If the Level 1 TDA at Network Rail attributes an incident to an operator, the Level 1 TDA on the operator side may dispute it if they believe the attribution is incorrect.

- **Level 2**: If delays are disputed once responsible managers have processed them, this will be reviewed at Level 2. This is typically undertaken by Delay Resolution Coordinators (DRCs) in Network Rail, while operators have various titles for this role.

- **Level 3**: If a dispute cannot be settled at Level 2, it is passed to Level 3, which is typically at Head of Performance level.

- **Level 4**: If a dispute can still not be resolved at Level 3, it can be raised again to Level 4, at which point Operations or Commercial Directors and equivalents may become involved.

2.30 If a dispute cannot be resolved between Network Rail and an operator, it can be escalated to the DAB for guidance; if there is still no resolution, it can be submitted to the Access Disputes Committee (ADC) for a ruling. Delay attribution disputes requiring independent guidance from the DAB or adjudication from the ADC are relatively rare. The DAB informed us that in the last three years there have been nine submissions to the DAB and only two of those were escalated to the ADC.

2.31 There are no set rules for when disputes have to be put to the DAB or to the ADC, which has resulted in a number of incidents being in dispute for a long period of time, up to several years.

How delay attribution supports improved performance

2.32 The information that comes out the delay attribution process supports improved performance in two ways.

2.33 Firstly, it provides a substantial amount of information on individual incidents, including who caused the incident, what caused it, where and when it happened and the impact it had on other operators.
2.34 This information provides the basis for Network Rail and operators to take actions to improve performance. For instance, it allows them to identify recurring issues and take mitigating action.

2.35 Secondly, delay attribution outputs underpin the Schedule 8 performance regime. Schedule 8 is intended to incentivise Network Rail and operators to improve performance by requiring the party responsible for causing a delay, Network Rail or an operator, to compensate the affected party when performance is worse than a pre-determined benchmark.

Facts and figures

2.36 This section describes the relative magnitude of different causes of delay and shows key trends in recent years.

2.37 Note that the data presented in this section only includes delay that has been attributed. According to Network Rail, unattributed delay represents c.35% of total network delay minutes.

Causes of delay

2.38 Figure 3 shows the moving annual total of delay minutes on the network, split by responsibility and broad type of delay, and the moving annual average for the share of delay on the network that Network Rail is responsible for, between April 2016 and March 2019.

Figure 3: Threshold delay minutes moving annual total by category of delay and moving annual average of Network Rail share of delay, Great Britain, 2016-17 to 2018-19

<table>
<thead>
<tr>
<th>Delay Minutes (MAT)</th>
<th>Source: Network Rail</th>
<th>Network Rail Share (MAA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2018-19 P13 MAA/MAT</td>
</tr>
<tr>
<td>Network Rail: Track, Non-Track and Network Management/Other</td>
<td>7,857,791</td>
<td>78.5%</td>
</tr>
<tr>
<td>TOC-on-TOC</td>
<td>2,291,862</td>
<td>22.9%</td>
</tr>
<tr>
<td>TOC-on-Self</td>
<td>7,002,202</td>
<td>70.0%</td>
</tr>
<tr>
<td>Network Rail: External and weather</td>
<td>3,239,671</td>
<td>32.4%</td>
</tr>
<tr>
<td>Network Rail Share</td>
<td>54.4%</td>
<td></td>
</tr>
</tbody>
</table>
2.39 Below is an explanation of each category of delay in Figure 3:

- **TOC-on-TOC**: These are delays a train operator causes to another train operator. There are a wide range of causes for this type of delay, such as a broken down train, delays at stations or issues with passengers on trains.

- **TOC-on-Self**: These are delays that train operators cause to themselves. The potential causes for these delays are the same as the causes for TOC-on-TOC delays.

- **External and weather**: These are delays that are attributed to Network Rail. Delays labelled as ‘External’ are caused by incidents such as trespassers on the network, bridge strikes and animals on the line. Those labelled as ‘Weather’ are caused by severe weather, such as snow, lightning and high-winds, which can require vehicles to slow down or cause infrastructure blockages, e.g., through landslips.

- **Track, Non-Track and Network Management/Other**: All these types of delay are also attributed to Network Rail. Delays related to track include track faults and speed restrictions due to track condition. Incidents categorised as ‘Non-track’ relate to any delays caused by failures to other types of Network Rail asset such as signals, overhead line equipment and third rail. Finally, ‘Network Management/Other’ is a broad category of delays covering all uninvestigated and unexplained delay as well as any delays caused by engineering works over-runs, timetable planning and signalling operations.

2.40 Network Rail attributed delay represents slightly over half all delay minutes and its share has been stable over the past three years.

2.41 Overall delay has been on an upward trend since the start of 2018, having risen by 13% over the past 18 months to March 2019.

2.42 Figure 4 shows the recent trend for the five key categories of delay attributed to Network Rail. Network Management/Other and External have all been on an upward trend over the past three years, with Track-related delays growing by over 30% in the 18 months to March 2019.

2.43 There are similar fluctuations in Network Management/Other, Non-Track Assets and Weather, suggesting that they could have some factors in common.
Uninvestigated and unexplained delay

2.44 As explained above, a proportion of delay on the network is uninvestigated or unexplained. Figure 5 shows the moving annual total of uninvestigated and unexplained delay as a percentage of all above-threshold delay minutes, highlighting the Network Rail routes with the highest proportion of uninvestigated and unexplained delay minutes. For GB as a whole, in the last period, this amounted to 5% of total delay; at its peak, in 2017, it amounted to around 8%.
2.45 Figure 6 shows the moving annual total of uninvestigated and unexplained delay minutes across the network between 2016-17 and 2018-19. It shows that, despite a significant increase in uninvestigated delay in 2016-17, unexplained delay is consistently higher than uninvestigated delay.

2.46 The dip in unexplained delay matches the peak in uninvestigated delay during 2017. This suggests that the peak in uninvestigated delay may have been caused by Network Rail not investigating some delay that would otherwise have been deemed unexplained.
Figure 6: Uninvestigated and unexplained delay minutes as a percentage of all threshold delay minutes moving annual average, Great Britain, 2016-17 to 2018-19

Uninvestigated/Unexplained as a Percentage of all Threshold Delay Minutes (MAA)

Source: Network Rail
3. Recommendations

Introduction

3.1 This chapter summarises our findings through a series of recommendations, which are principally based on our analysis of the key points made by stakeholders.

3.2 A more detailed summary of written responses is available in Annex A.

Areas covered by our recommendations

3.3 Our recommendations cover the following areas:

Governance
- Enforcing consistent application of delay attribution rules
- Responsibility for the delay attribution process
- Setting of delay attribution rules

Principles and rules of delay attribution
- Range of delay attribution codes
- Joint responsibility codes

Processes, systems and ways of working
- Delay attribution system
- Sub-threshold delay
- Reactionary delay
- Delay attribution resources, training and competencies

3.4 There are links between some of these recommendations, which we highlight in the text below.

3.5 In some areas, it is clear what steps are needed to resolve an issue, while in others further detailed work is needed to develop and evaluate options. Accordingly, some of our recommendations are more prescriptive than others.

Governance

Enforcing consistent application of delay attribution rules

3.6 Several stakeholders expressed concern over the fact that Network Rail and individual operators sometimes agree to deviate from the DAPR, and that there is no way to enforce the consistent application of the DAPR. They felt that this results in an inconsistent approach to delay attribution across the network, which in turn distorts the delay attribution information available to all parties and is a cause of disputes.
3.7 As set out in the context chapter, the DAPR is incorporated into the Network Code, which in turn is incorporated into access agreements. Access agreements, and amendments to them, need to be approved by ORR. If one party chooses to deviate from the DAPR, the other party may therefore be entitled to initiate a dispute under the relevant contractual provisions. In practice, we are not aware of any instances where this has been the case. On the other hand, if both parties choose to waive the DAPR (and hence the Network Code), then this is at their own risk.

3.8 At the same time, where there is ambiguity, the DAB can provide guidance but this is not enforceable until it is formally incorporated into the DAPR. ORR has no power to directly force changes to the DAPR; this process is governed autonomously by industry via the DAB. We touch on the DAB’s voting arrangements under a separate recommendation.

3.9 We understand that, for certain types of delay incident, Network Rail routes and operators do sometimes enter into bespoke commercial agreements for the purpose of performance payments and that this can cause delay attribution to diverge from the DAPR. In some cases, this may be driven by a shared view that delay attribution rules do not accurately reflect underlying responsibility for delays\textsuperscript{12}. In other cases, it may be driven purely by commercial considerations, such as the desire to mitigate financial risks.

3.10 We recognise these types of side agreement may provide benefits to the parties involved. For example, they can lead to a more collaborative approach; they can reduce disputes by creating a proportionate approach to attributing the delays for types of incidents where it is difficult to identify a specific cause; and they can reduce financial risks that parties are not in a position to control.

3.11 However, they also have disadvantages, in particular for the quality and transparency of delay attribution. Firstly, they can cause confusion over which rules stand – those in the DAPR or those practiced locally. In turn, this can lead to misunderstandings or disputes with those parties not involved in the agreement. Secondly, they can potentially distort delay attribution information and therefore undermine its accuracy and usefulness for the industry as a whole.

3.12 On balance, we consider that the consistent application of delay attribution principles and rules should take precedence over other factors. Thus, whilst we are neutral to the existence of bilateral commercial agreements where these do not cause undue discrimination, these should not be allowed to distort the accurate application of the DAPR. In practice, this means that there needs to be a clear separation between delay attribution and its financial implications.

\textsuperscript{12} For example, where delay is conventionally attributed to one party or another but where both parties could have done something to mitigate the cause or its effect.
3.13 While the ORR has no role in such side agreements, we note that where a side agreement varies the terms of the Network Code, and therefore an access agreement, there is a risk that the amendments are unenforceable by either party (in accordance with the Railways Act 1993).

3.14 We recommend that the industry working group considers the most appropriate way to achieve greater consistency in the application of the DAPR across the network. This could include, for example:

- industry parties signing up to a voluntary code of conduct on delay attribution;
- giving powers to a new or existing industry body to enforce the consistent application of the DAPR; or
- issuing a formal regulatory statement to require greater consistency in the application of delay attribution.

**Recommendation 1: Industry working group to evaluate options and agree a way forward for strengthening industry and/or regulatory governance to achieve greater consistency in the application of delay attribution principles and rules**

**Responsibility for the delay attribution process**

3.15 Partly linked to the previous point, several operators raised a concern that there is inconsistent application of the DAPR across Network Rail routes. During discussions, some stakeholders suggested there could therefore be merit in moving this responsibility elsewhere.

3.16 This could potentially remove certain perverse incentives. For example, because Network Rail routes are financially incentivised to minimise their Schedule 8 payments, their management may also have a financial incentive to influence the outcomes of delay attribution.

3.17 Taking delay attribution out of routes could contribute towards greater trust and transparency, improving the consistency of information and potentially reduce the number of disputes.

3.18 There is a broad spectrum of options to achieve this. The most extreme would be to create an independent body to administer and manage delay attribution. Our view is that this would be costly, which introduces additional interfaces and therefore potential sources of friction into the system. Alternatively, it has been suggested that responsibility for delay attribution could move to a central function within Network Rail, which would have a less direct interest in the financial impacts of delay attribution and a less close working relationship with individual train operators. There

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13 This could potentially relate to Network Rail’s licence, thereby placing the onus of compliance with the DAPR on this body.
would likely be a much smaller cost involved in this change. However, it could lead to the loss of the close working relationships between Network Rail and train operator staff that exist in some routes. There may also be a loss of knowledge of the way in which the network operates at a more local level.

3.19 On balance, it is not clear to us at this point that this is a significant enough issue to justify the likely costs involved. Moreover, the underlying issues are already addressed to a large extent by the outcome of our recommendation 1.

3.20 In summary, the evidence we have received from stakeholders has not clearly demonstrated the scale of the costs and benefits associated with removing the responsibility for delay attribution from the Network Rail routes.

3.21 Therefore, we recommend that in the next stage of the review the industry working group explores this further to understand the extent to which any changes could improve on the status quo\(^\text{14}\). We expect Network Rail to be central to this work, particularly in determining the financial and other costs involved in a change from the current system.

3.22 It is important that the working group takes into account progress in delivering our recommendation 1 when deciding where responsibility for delay attribution should sit. We intend to assess progress in the implementation of recommendations 1 and 2 in the early stages of PR23 and, if necessary, consult on further changes.

**Recommendation 2: Industry working group to explore the costs and benefits of moving the responsibility for delay attribution away from Network Rail routes**

**Setting delay attribution rules**

3.23 Several train operators have raised concerns that the balance of votes in the DAB means Network Rail effectively has greater ability than operators to influence the outcome of decisions on potential changes to the DAPR.

3.24 The twelve votes on the DAB are split equally between Network Rail and train operators; in addition, changes to the rules must have the support of at least two Network Rail members and two non-Network Rail members.

3.25 Operators have argued that Network Rail members will always vote together, whereas operators will not necessarily do so.

3.26 If this is the case, it means that in practice Network Rail will always be able to block changes to existing rules. Network Rail disagrees that this is an issue.

\(^{14}\) In June 2019 Network Rail reorganised into five regions, which each contain one or more routes. Despite this change, delay attribution is currently still the responsibility of Network Rail routes. It has not yet been decided if delay attribution will become the responsibility of the regions. If that does happen the industry working group will consider if the costs and benefits identified of removing responsibility for delay attribution away from the Network Rail routes are the same as removing it away from the regions.
3.27 The evidence we have received so far has not allowed us to come to a view on whether this is a material issue. We therefore recommend that this is considered further by the industry working group at the next stage, if necessary by calling for further evidence.

3.28 Due to the obvious difference of opinion between industry parties, this is an area in which we expect ORR to be closely involved in the next stage of the review.

Recommendation 3: Industry working group to invite further evidence on the extent to which the distribution of voting rights on the DAB has given any party an advantage over changes to delay attribution rules and prevented the introduction of improvements to the DAPR

Principles and rules of delay attribution

Range of delay attribution codes

3.29 The range of codes used to attribute delay is an important factor affecting the quality of information available to understand poor performance. However, there is a trade-off between the number of delay codes and the amount of time that needs to be spent attributing delay.

3.30 While it is clear that there is scope and appetite to make changes to the current delay codes, views raised on what changes are needed were wide ranging.

3.31 At one end, several stakeholders suggested simplifying and reducing the number of codes available. The rationale for this proposal is that there are some instances where different delay codes relate broadly to the same cause and there is little added value in the additional information this creates. This also creates a risk of inconsistency in attribution for similar types of incident.

3.32 At the other end, some stakeholders asked for more detailed codes for certain types of incident, such as cancellations or station and depot delays.

3.33 On balance, we believe there are likely to be benefits in both targeted reductions and increases in the number of delay codes.

3.34 We note that the DAB continuously looks for opportunities to remove redundant delay codes. However, we recommend that the DAB undertakes a specific task-and-finish review of the existing delay codes that aligns with the timescales of this review. The written responses to our delay attribution review scoping stage consultation letter provide a useful starting point for this work.

3.35 In addition to removing redundant delay codes, we also consider that any review of delay codes should look to identify areas where there would be net benefits from introducing more or less detail. We suggest that this takes the form of a focused gap analysis, meaning each delay code would be assessed to determine if it currently
achieves its intended objective (i.e. does it provide a sufficient amount of information to understand what caused a delay). This approach would produce options for additional or less detailed codes and also explain the advantages of each change.

3.36 Again, we consider that the industry working group should be involved in this process along similar lines as in the case of redundant delay codes.

**Recommendation 4: DAB to review potentially redundant delay codes and make proposals for changes**

**Recommendation 5: DAB to carry out gap analysis of existing delay codes and set out the costs and benefits of introducing greater or less detail**

3.37 We consider that there is value in the industry working group having some oversight of this process to help settle potential disagreements, consider the wider implications of proposed changes and maintain momentum. We envisage that the DAB would carry out this task over the next few months and bring its proposals to the working group by the end of 2019.

### Joint-responsibility codes

3.38 Some stakeholders argued that there are instances where the conventional attribution of delay to a single responsible party would be best replaced by joint responsibility – specific examples included severe weather and suicides. Attributing to a single party by default can mean that the incentive to take action is much greater on one party even where another party has some ability or a duty to prevent it or to mitigate its effects. This also seems to be a cause of tension and cost for industry.

3.39 The evidence we have received suggests there would be benefits in moving towards joint responsibility codes in some instances. We recommend that the DAB carries out an analysis of existing delay codes to identify those where joint responsibility would be justified and propose changes.

3.40 This is a contentious and complex area, which overlaps with the existing contractual framework and with the design of financial incentives related to performance. We would therefore expect the industry working group to be closely involved in the process and to have a deciding role in whether or not to adopt the DAB’s proposals. We also expect to take the outcomes of this process into account when we come to review the performance regime in PR23.

3.41 In addition, we acknowledge that any changes to the allocation of responsibility for delays would have an impact on Schedule 8 benchmarks and regulatory performance targets set at PR18. Therefore, the timing of any future changes will need to be carefully considered and we expect to be closely involved in that process.
Recommendation 6: DAB to identify the types of incident where joint responsibility would be deemed more appropriate and propose changes, for discussion with industry working group

Processes, systems and ways of working

Delay attribution systems

3.42 Stakeholders have highlighted the value of the information generated by the current systems used to measure and attribute delay, TRUST and TRUST DA. In particular, stakeholders have repeatedly said this information improves the understanding of performance and supports performance improvements.

3.43 Other important uses of this information include supporting business cases for investment decisions and franchise bids; providing information for operators to challenge Network Rail, and vice-versa; providing the basis for performance improvement activity; and providing the outputs used to calculate payments between Network Rail and operators in Schedule 8.

3.44 Given the value of the information generated by TRUST and TRUST DA, it is important that these systems are fit for purpose. By this, we mean that information should be sufficiently accurate, precise and comprehensive to meet the purposes for which it is used; and that this information should be sufficiently accessible to users.

3.45 The number of issues raised by stakeholders suggests that this may not be the case. The most common issue mentioned is that TRUST, the train running information system TRUST DA feeds off, only measures delay in whole minutes, while the timetable is planned in half-minute units, reducing the accuracy of the delay information recorded. We consider this a particularly important issue given the industry’s move towards a ‘right-time railway’ (i.e. recording a train as on time, only if it is less than 60 seconds late at all recorded stations). In addition, the growth in traffic density on the network means there could be an increase in the number of re-occurring small delays, which the systems are not able to accurately capture.

3.46 Some stakeholders criticised TRUST DA as it requires specialist IT skills and that limitations on the amount of data it can store means it does not provide detailed enough information to fully understand performance.

3.47 At a high level, one way to resolve these issues would be to replace TRUST DA with an entirely new system; another would be to incrementally update and improve the existing system. The information we have received from stakeholders indicates that the only practical solution is to replace TRUST DA altogether.

3.48 Either way, to resolve the issue of measuring delay at a more granular level than whole minutes, an alternative source of train running information to TRUST is needed. Network Rail has suggested that this could involve basing any new TRUST
DA system on the new Paladin Data Extract and Reporting System (PEARS) or CCF systems that are currently being developed, or linking it directly to the signalling system.

3.49 We recognise that improving or replacing TRUST DA would come at significant cost and would take time to deliver. Therefore, we expect the industry working group to commission Network Rail to develop alternative options, to assess their relative costs and benefits and then to decide on the best way forward based on that information.

3.50 We note Network Rail is already considering replacing TRUST DA, although this work is at a very early stage. We have been told that due to limited resources Network Rail is currently not planning to consider this further until the programmes to replace PEARS and CCF are completed. We suggest that the industry working group engages with Network Rail on this issue as an early priority.

**Recommendation 7: Industry working group to work with Network Rail to develop and evaluate options for improving or replacing TRUST DA and the underlying sources of train running information**

**Sub-threshold delay**

3.51 The relatively high proportion of unattributed delay undermines the usefulness of the information recorded. A significant source of unattributed delay is sub-threshold delay.

3.52 There is strong agreement across industry that a greater proportion of sub-threshold delay should be attributed and we therefore recommend that the industry working group commissions relevant parties (likely Network Rail and the DAB) to develop alternative options to increase the proportion of sub-threshold delay that is attributed. We note that, whilst TRUST and TRUST DA have the capability to capture sub-threshold delay, any potential replacements should improve the accuracy of the underlying information, something several stakeholders also highlighted as an issue.

3.53 Increasing the proportion, and accuracy, of attributed sub-threshold delay will also support the move towards a ‘right-time railway’ and improving the understanding of re-occurring small delays that are likely to increase with increasing congestion on the network.

3.54 We understand that the attribution of sub-threshold delay would require increased resources, particularly delay attribution staff. Without increasing the number of staff assigned to delay attribution, there is a risk that the majority of any sub-threshold delay that is attributed will become unexplained or uninvestigated delay. When developing alternative options, we expect industry to identify these and all other costs, allowing them to be compared to the potential benefits.
Recommendation 8: Industry working group to work with Network Rail and DAB to jointly develop and evaluate alternative options for increasing the proportion of sub-threshold delay that is attributed

Reactionary delay

3.55 Stakeholders have explained that the attribution of reactionary delay accounts for a significant proportion of the resources employed in delay attribution and is also a common cause of disputes.

3.56 Network Rail and several operators suggested automating some elements of the attribution of reactionary delay based on hard-coded rules, rather than on a case-by-case basis.

3.57 This proposal would improve the consistency of the attribution of reactionary delay and, by basing it on hard coded rules, would reduce the scope for disputes.

3.58 Given the likely significant benefits that automation would bring, we recommend that the industry working group commissions further detailed work from Network Rail and the DAB to develop the rules and processes by which this could be implemented.

3.59 We understand the Rail Safety and Standards Board (RSSB) is currently developing an approach to automating the attribution of reactionary delay. It may be the case that the most efficient approach is for Network Rail and the DAB to feed into this work. This is for Network Rail, the DAB and the industry working group to consider.

Recommendation 9: Industry working group to work with Network Rail and DAB to develop a proposal for greater automation of the attribution of reactionary delay

Delay attribution resources, training and competencies

3.60 Several stakeholders have raised concerns about the level of training available to staff working in delay attribution. Some said delay attribution is a relatively low status position, characterised by high turnover. These were given as reasons for inconsistent and inaccurate delay attribution.

3.61 Although there is a competency framework and training opportunities for delay attribution staff in Network Rail, something similar does not exist for operators. And stakeholders have highlighted that in Network Rail the competency framework and training is not always followed.

3.62 To address this issue stakeholders have suggested introducing a common competency framework for all staff working on delay attribution. This would apply to delay attribution staff at both Network Rail and train operators.

3.63 Other suggestions included improving the training resources available for staff working on delay attribution. For example, Network Rail suggested creating a replica delay attribution system to allow staff to gain experience in a non-live environment.
3.64 We consider that introducing a common competency framework, underpinned by higher quality and consistent training, could be a cost-effective way to improve the accuracy of delay attribution across the network, whilst potentially generating cost savings in the longer term by reducing the number of disputes, improving staff retention and contributing to a higher skill level across the industry.

**Recommendation 10: Industry working group to develop and evaluate options for setting up a common competency framework for all delay attribution staff and for developing new training opportunities**

**Other recommendations considered**

3.65 In the process of developing our recommendations, we considered several other concerns raised by stakeholders. Although we have decided against making further recommendations, we set out some additional issues and our thinking in this section.

**Enforcement of dispute adjudications**

3.66 Stakeholders commented that guidance issued by the DAB in response to disputes, or formal adjudications issued by the ADC, cannot be enforced if one party chooses to disregard them.

3.67 The recommendations we considered to address this issue included providing an existing or new industry body with powers to enforce dispute adjudications and DAB guidance or introducing a voluntary code of conduct.

3.68 The discussions with stakeholders indicated that this was not an issue industry considered necessary to address. Stakeholders explained that generally DAB guidance is followed and ADC decisions are adhered to.

3.69 In addition, stakeholders highlighted that it is the DAB’s role to provide guidance on disputes, not to adjudicate on them. This means that any changes to address this issue would involve a significant change to the DAB’s role in respect of disputes.

3.70 Based on this feedback, we took the decision not to include a recommendation to address the fact that there is no industry body to enforce DAB guidance or ADC determinations of disputes of this nature. However, this does not prevent the industry working group in the next stages of the review considering it further if it becomes apparent that it is a more significant issue than originally thought.

**Attribution of unexplained delay**

3.71 In cases where the cause of a threshold delay is ultimately not identified, for the purposes of Schedule 8, the current approach is to split the delay minutes involved between Network Rail and the train operator involved.
3.72 The default rule for this split is 50% to be attributed to Network Rail, with the remaining 50% split between Network Rail and the relevant operator based on each party’s proportions of all explained delay on that day.

3.73 A concern raised in the responses to our review, was that this approach reduces the incentive on operators to investigate the causes of unexplained delay. And it has been suggested that unexplained delay should instead be attributed as joint-responsibility between Network Rail and the train operator.

3.74 While we recognise that the default rule used to attribute unexplained delay is a key driver of the incentives Network Rail and operators have to investigate unexplained delay, the rules are set out in Schedule 8 of train operators’ track access contracts, not the DAPR. Therefore, any changes to these rules would require changes to Schedule 8, which we have explained are out of scope for this review.

3.75 We acknowledge the underlying issue and will take it into account in our review of the performance regime as part of PR23.
4. Next steps

Introduction

4.1 As set out in the introduction to this document, the next stage of this review is to develop and evaluate more detailed change options, based on our recommendations.

4.2 We consider that the best way to develop and evaluate detailed options is for the industry to set up a dedicated and time-limited working group.

4.3 This chapter sets out our proposals for the working group, including what we see as ORR’s role in the next stages of the review.

Industry working group

4.4 We would expect the working group to consider each of our recommendations, develop more detailed options and decide which would be most effective at bringing about an improvement to the issues we have identified.

4.5 For some of our recommendations this will involve first carrying out a more focussed review of particular aspects of the current delay attribution process, such as alternatives to TRUST DA and delay codes. In due course, we would expect the working group to oversee the implementation of the preferred change options.

4.6 The sections below set out more detail on our proposals for the following aspects of the industry working group:

- membership;
- roles for industry bodies, including ORR; and
- governance;

Membership

4.7 The working group should consist of representatives from Network Rail, passenger operators, freight operators, funders, franchising authorities and the DAB.

4.8 The people that represent these industry bodies should collectively have a good understanding of delay attribution, train operations, performance improvement and the Schedule 8 performance regime.

4.9 We recognise that the most appropriate people to attend the meetings will likely vary depending on the topics that are discussed and the intended outcome of the meeting. For example, a meeting intended to discuss potentially redundant delay codes is likely to require less senior involvement and more operational expertise than a
meeting to make a decision on exploring the possibility of removing the responsibility of delay attribution from Network Rail routes.

4.10 Therefore, we recommend that the organisations that want to be part of the working group put forward individuals that they consider to have the necessary knowledge, expertise and seniority based on the agenda for each meeting.

Roles for industry bodies

Organisation and administration

4.11 We propose that the industry working group is hosted, organised and administered by the Rail Delivery Group (RDG).

4.12 We have discussed this proposal with RDG. Ahead of the initial meeting of the working group in July, we will work with RDG to determine the resources required for this role.

Technical work

4.13 The working group should consider on a case-by-case basis which industry party is best placed to undertake any technical work required to develop options and eventually implement them.

4.14 We anticipate that in the majority of areas the DAB and Network Rail will have the expertise to carry out any necessary technical work. This is reflected in the fact that a number of our recommendations specifically mention the DAB and/or Network Rail leading on particular pieces of work.

4.15 We consider that the DAB has an important role to play in the next stages of the review due to the broad range of industry bodies represented and the experience and knowledge of its members. In particular, as the DAB is responsible for the DAPR we would expect the DAB to lead any work that requires elements of the DAPR to be reviewed and possibly changed.

4.16 Network Rail currently owns and manages the delay attribution process and systems, including TRUST DA. Therefore, we consider Network Rail best placed to develop and implement any improvements in these areas.

ORR’s role

4.17 As Network Rail, passenger operators, freight operators, funders and franchising authorities are the parties that will be affected by any changes to delay attribution and are best placed to understand the potential impacts of different options, we are keen for them to lead the next stages of the review.

4.18 However, several stakeholders have raised concerns that disagreement between industry parties on delay attribution may hinder the progress of this review and
prevent the necessary changes from being implemented. To address this issue, stakeholders have suggested that ORR continues to remain involved in the next stages.

4.19 Based on this feedback, we are willing to retain a significant role in the working group. We propose that ORR co-chairs the working group and that one or more other ORR staff attend individual working group meetings. This approach would still see industry leading the development and evaluation of options. However, ORR’s involvement will help maintain momentum and assist decision-making in situations where industry parties cannot agree on the next steps. It will also allow us to have sight of progress in developing and implementing the options, which will be useful in the early stages of PR23.

4.20 ORR is, in principle, willing to provide some resource to help set up and administer the group. We will work with RDG in coming weeks to agree how much support and resource we can each provide.

4.21 Despite ORR’s prominent role in the working group we would expect the majority of the work required to develop and evaluate options to be resourced by industry members, in particular via Network Rail and the DAB where possible.

**Governance**

**Chair**

4.22 As discussed above, ORR is proposing to co-chair the industry working group. We propose the chair alongside ORR is selected by the industry working group.

4.23 An option is for the chair to be on a rotating basis, this would reduce the risk of a particular industry body being perceived as having a disproportionate influence over the outcomes of the review.

**Decision making**

4.24 The main decisions the industry working group will be required to make are how to develop options for each recommendation and which options to adopt.

4.25 Based on the feedback from stakeholders there is a relatively high degree of agreement across industry on the areas of delay attribution that are in need of improvement. Therefore, we expect the industry working group to be able to work together and come to agreement on the majority of the decisions it is required to make.

4.26 However, we recognise there will be cases where the industry parties disagree. In these situations, it will be ORR’s role to make an independent recommendation, based on the evidence available. The industry working group does not have to follow
ORR’s recommendations, but, if it chooses not to, we expect the working group to explain why and its alternative plan for addressing the issue identified.

**Timings**

4.27 Figure 7 sets out our proposed timeline for the industry working group to complete the next stages of the review.

**Figure 7: Timeline for industry working group**

- **1 July 2019**: ORR publishes recommendations
- **22 July 2019**: Initial working group meeting (hosted by ORR)
- **September 2019**: Inception meeting of industry working group

**Options development stage**

- **April 2020**: Industry working group publishes options it plans to implement

**Implementation stage**

- **April 2021**: Delay attribution review concludes

4.28 The initial meeting of the working group is to discuss our recommendations and agree terms of reference for the group. We propose to host this meeting at our London office on Monday 22 July 2019.

4.29 If you would like to join the working group and attend the first meeting, please contact Orr.Delayattributionreview@orr.gov.uk.

4.30 The inception meeting of the group would then be in September.

4.31 As discussed in the introduction to this document, we expect the development of options stage to conclude by April 2020, at which time the working group will publish a document setting out which options it plans to implement.
4.32 When this document is published the implementation stage can begin. This stage should be completed by April 2021, ensuring that any changes will be known as PR23 begins and fully in place by the start of the next control period.
Annex A: Summary of stakeholder responses

Introduction

1. This annex provides a summary of the written responses we received from stakeholders to the letter we published in January 2019 launching the scoping stage of the review. The full responses from stakeholders are available on our website here.

2. It should be noted that our recommendations are not based only/solely on the written responses we received from stakeholders, they also take into account all the information received from stakeholders at the workshop we hosted in February, individual meetings and other forms of engagement.

3. We summarise stakeholder’s comments on the following areas:
   - value of delay attribution;
   - governance;
   - principles and rules of delay attribution;
   - processes, systems and ways of working;
   - incentives and behaviours; and
   - Schedule 8.

Value of delay attribution

4. The majority of respondents highlighted the importance of delay attribution to their businesses or the industry, in general.

5. In particular, respondents explained the information provided by delay attribution supports improved performance by helping industry learn from incidents, informing future planning and setting performance targets.

Governance

6. This covers governance structures, including ownership of delay attribution systems, responsibility for developing the Delay Attribution Principles and Rules (DAPR), compliance with DAPR, and dispute resolution powers and procedures.

7. Respondents highlighted specific issues with the delay attribution governance process. Although most agreed that the dispute resolution process was clear and covered by DAPR, Arriva and Network Rail both noted that there were inconsistencies between the DAPR and the track access contracts. Network Rail also highlighted that some determinations by the Access Dispute Adjudication (ADA) have
been inconsistent with DAPR and track access contracts making it difficult to arbitrate similar incidents.

8. Several respondents stated that there should be a clear ‘owner’ accountable for delay attribution. Some train operators highlighted that it was difficult to escalate delay attribution issues with Network Rail. One freight train operator highlighted that there was no clear mechanism for challenging incidents with Network Rail. Another freight operator suggested that imposing timescales (similar to those applied to other parties within the process) may speed up the resolution process with Network Rail.

9. In contrast, Network Rail stated that over 40% of delay attribution is disputed but less than 25% of disputed delays are found to be incorrect. It suggested that delay attribution should only be disputed if there is a ‘good reason for believing that it has been done incorrectly’.

10. Several train operators and Network Rail suggested that the DAB could have a different or more significant role in the process of delay attribution. Suggestions for changes to its role included:

   - greater powers to assist with disputes at an earlier stage and enforce good practice;
   - developing and monitoring metrics to measure accuracy of delay attribution; and
   - greater powers to deal with poor performance related to disputing incidents.

11. Network Rail also noted that escalating issues to DAB was often onerous and time consuming which was prohibiting disputes from being submitted for guidance.

12. GB Railfreight (GBRF) stated that an independent body may be necessary to allocate initial delay and manage the level 1 and 2 dispute process. Stagecoach also stated that making attribution independent may assist in removing time wasted in dispute resolution. Network Rail stated that it may be worth exploring independent delay attribution to address the current problems.

**Principles and rules of delay attribution**

13. This relates to any issues stakeholders have with specific rules and principles set out in the DAPR.

14. Respondents generally agreed that delay codes need to be simplified. Network Rail stated that there are currently many different delay codes for the same underlying cause. Most respondents agreed that reducing the number of delay codes would make attribution easier without reducing the quality of information available. The Chartered Institute of Logistics and Transport (CILT) suggested that the current
abundance of codes may be complicating or even potentially introducing error into the task of initially allocating responsibility.

Processes, systems and ways of working

15. This relates to the processes and systems used to measure delay on the network and provide information underpinning the delay attribution process.

16. Due to the importance of the information provided by delay attribution all respondents agreed that the information needed to be accurate and timely.

17. Virgin, Abellio and Stagecoach agreed that TRUST was now outdated and was no longer fit for purpose. MTR Crossrail, First Group and RDG stated that TRUST was fit for its current purpose, but MTR Crossrail and First Group conceded that its use was limited. GBRf stated that the accuracy of initial attribution was the aspect of the delay attribution framework that would most benefit from improvement.

18. Specifically, Virgin and Abellio stated that because TRUST only measures delay in whole minutes it did not align with train timetables, which are planned in half-minutes. These stakeholders explained that this results in false delay and an inaccurate picture of network performance. MTR and Arriva stated that analysis based on this information suffered from the lack of accuracy inherent in TRUST data. Network Rail also stated its concern about TRUST measuring in whole minutes.

19. Abellio, Arriva, MTR and Stagecoach suggested that technology and automation could be more fully utilised to assist with delay attribution. Arriva highlighted that some degree of ‘automation’ is used within some categories of delay that are split by pre-agreed rules. It suggested this type of split encourages both parties to work towards solving these issues. Network Rail supports the automation (through hard-coded rules) of reactionary delay to release resource in order to attribute sub-threshold delays.

20. MTR Crossrail, First Group, Network Rail and RDG highlighted that newly available GPS data should be incorporated into the process to increase accuracy to support investigation into root cause. RDG stated that this technology should be more widely used and shared with Network Rail. However, Network Rail stated that the technology should be widely adopted to an industry standard before the data can be relied upon for train reporting and delay attribution.

21. However, MTR noted the subjectivity of ‘root cause’ and the consequential difficulty of the industry coming to an agreement on automatic attribution of delay. It suggested simplifying the delay attribution rules to allow more automation in the process.
22. Several respondents (Abellio, Stagecoach and RDG) stated that BUGLE and BUGLE Day One are currently used by operators to drill down to root cause to enable a better understanding of the underlying causes of delay.

23. Stagecoach suggested that there was an opportunity to create a new system to replace TRUST, including several related programs covering different railway data and analysis.

**Reactionary delay**

24. A number of respondents raised concerns about the attribution of reactionary delay. According to Network Rail, in the last five years, reactionary delay has increased by 35% compared to a 10% increase in primary delay.

25. With increasing reactionary delay, Freightliner voiced its concern about the associated financial risks on businesses stemming from attribution of this delay. Freightliner and Stagecoach were concerned that Network Rail is not incentivised to mitigate reactionary delays where it was not the primary cause. Network Rail was also concerned about the incentives of other parties to mitigate delay. First Group stated that it considered Network Rail best placed to manage and mitigate all reactionary delay.

26. Stagecoach questioned the potentially perverse incentives that reactionary delay cause such as cancelling or redirecting trains in order for the rest to run on time (less reactionary delay), when it might be more beneficial for passengers for a range of services to run a few minutes late (more reactionary delay).

27. Virgin, MTR, CILT, Abellio, Network Rail and RDG suggested that there should be automatic attribution of reactionary delay. Most of these respondents stated it could free up time and resources currently spent on delay attribution. Network Rail suggested the additional resource could be used for the attribution of sub-threshold delays (see below).

28. In order to support this automation, MTR suggested that the rules around reactionary delay should be simplified. Virgin suggested any new (or simplified) rules should be set out in DAPR.

29. Network Rail suggested that reactionary delay should be shared between itself and train operators to encourage all parties to work to reduce delays. It suggested rule changes whereby reactionary delay also captured activities of other parties helping to reduce delay following an incident. It suggested that reactionary delay be split 50/50 between the affected operator and Network Rail, regardless of which party was primarily responsible.
Sub-threshold delay

30. Respondents were concerned that sub-threshold delays are not attributed. Arriva, Freightliner, Network Rail, MTR, RDG, Stagecoach and Virgin stated that they (and their passengers) were interested in the causes of these types of delay for varying reasons, including improving and managing performance.

31. To address this issue, CILT suggested decreasing the threshold to two minutes. It explained this would enhance the understanding and management of ‘small’ delays. While supportive of increasing the proportion of sub-threshold delay that it attributed, Network Rail had a concern about the additional resources required to attribute sub-threshold delays. MTR also said there should be a practical limit to the size of delay that is attributed in order to keep the volume manageable.

32. Network Rail was concerned that train operators may not be incentivised to provide extra information regarding sub-threshold delays should there be adverse financial consequences to them. Stagecoach suggested that the additional information need not be included within financial regimes, but rather used to understand business issues and develop mitigations and improvements.

Incentives and behaviours

33. Respondents raised concerns about potential perverse incentives, specifically related to the relationship between delay attribution and Schedule 8. Respondents suggested the large financial implications of Schedule 8 inhibits the accurate attribution of delay, encourages disputes, discourages information sharing and distorts resource allocation.

34. Several respondents suggested that the financial incentives of Schedule 8 should be separate from the delay attribution process.

Schedule 8

35. A number of stakeholders specifically highlighted the inherent link between delay attribution and Schedule 8. Due to this link stakeholders were concerned that the functioning of Schedule 8 was out of scope for this review and stated that it must be considered as part of this review.

36. Stakeholders also made a number of other comments in relation to Schedule 8, in particular a number stakeholders explained the reasons they are opposed to basing Schedule 8 payments on TOC-on-TOC delay, as opposed to TOC-on-self delay.

37. As set out in this document potential reforms to Schedule 8 in CP6 are out of scope of this review and will instead be considered as part of PR23. However, we will take
into account all the relevant points raised in the responses to this consultation when we review Schedule 8 in PR23.