Management of Congested Infrastructure

Network Rail's Code of Practice

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Section 1 – Introduction

1.1 The purpose of this Code of Practice

This Code of Practice sets out the principles and procedures that Network Rail will follow in identifying and managing Congested Infrastructure on the Network pursuant to The Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016, *inter alia*:

Regulation 23 – Scheduling and co-ordination

Regulation 24 - Ad hoc requests

Regulation 26 – Congested infrastructure

Regulation 27 – Capacity analysis

Regulation 28 – Capacity enhancement plan

1.2 Compliance with this Code of Practice

This Code of Practice applies to all Network Rail employees, but particularly those dealing with capacity planning and timetabling processes. All relevant employees will receive appropriate briefing on the principles and procedures of the Code of Practice. The Code of Practice will be publicised internally to all employees, and externally on Network Rail's website.

1.3 Review of this Code of Practice

Network Rail will review the application of this Code of Practice each year, and propose any changes it believes are necessary to achieve the purpose of the Code of Practice. Network Rail will consult with stakeholders on any proposed changes to the Code of Practice.

1.4 Queries and comments

Comments on the content and application of this Code of Practice are welcome at any time. Comments can be sent to:

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Email: toby.patrick-bailey@networkrail.co.uk

1.5 Working together

The successful implementation of this Code of Practice depends on developing a two-way working relationship with stakeholders and therefore feedback is encouraged.

Section 2 – Recognising the needs of Stakeholders

2.1 Network Rail's obligations to stakeholders

This Code of Practice outlines the process which Network Rail (as the owner and operator of the national railway infrastructure in Great Britain) will adopt to:

- a) Identify and declare areas of congested infrastructure on the network
- b) Undertake capacity analysis and produce a capacity enhancement plan
- c) Allocate or ration the use of congested infrastructure
- d) Revoke declarations when appropriate

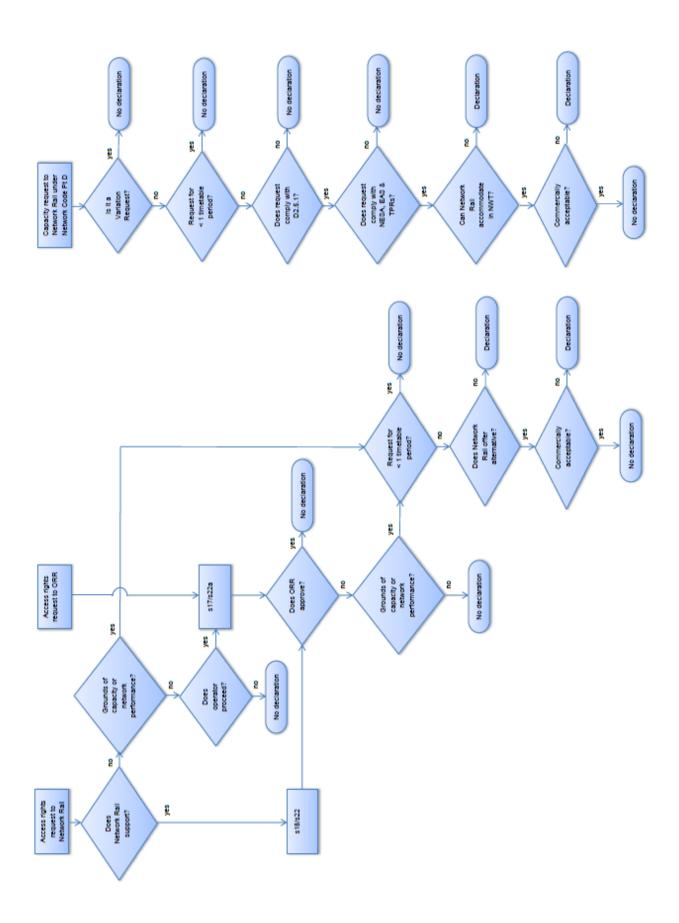
This Code of Practice does not change the existing industry processes for the award of access rights, nor the timetabling process set out in Part D of the Network Code.

2.2 Particular needs of stakeholders

Stakeholders have sought clarification of how the Regulations relating to congested infrastructure are implemented on the railway network in Great Britain. The regulations have some clearly mandatory elements, but other elements are open to interpretation and there are some areas (such as revocation of a declaration) where they are largely silent.

Network Rail intends to meet the needs of its stakeholders by adopting a process that will set out transparent, consistent, unambiguous answers to the questions of interpretation and application of the Regulations relating to congested infrastructure.

Indicative flowchart to accompany section 3



Section 3 – Congested infrastructure

3.1 Principles for the identification of congested infrastructure

- 3.1.1 Regulation 26 sets out circumstances where Network Rail must make a declaration of congestion. These are:
 - (a) Where, after co-ordination of requests for capacity, it is not possible to satisfy all those requests adequately; or
 - (b) Where, during timetable preparation, Network Rail considers that an element of the infrastructure is likely to become congested during the next timetable period.
- 3.1.2 The following sections 3.2 to 3.4 set out the way Network Rail will interpret and apply these requirements. For ease of reference the process is shown in a flowchart on page 4. The flowchart is indicative, not definitive; the conditions to be applied are described in full in the text in this section 3.

3.2 Identification of congested infrastructure arising from an application for new or amended access rights

- 3.2.1 Network Rail may declare congested infrastructure if:
 - (a) Network Rail decides not to support a reasonable and credible access application (in accordance with its Stakeholder Relations Code of Practice) on the grounds of capacity and/or network performance;
 - (b) ORR rejects an access application on the grounds of capacity and/or network performance. In this case the declaration will be made regardless of whether Network Rail supported the access application; or
 - (c) Network Rail considers that it is likely that one or both of the circumstances described in (a) and (b) above will occur in the next timetable year, i.e. before the December after next.
- 3.2.2 The circumstances in 3.2.1 include consideration of network performance impact, i.e. the expected increase in *reactionary* delay arising from the proposed additional/changed service(s). A proposal which is not supported by Network Rail and/or ORR solely because of concerns about the *primary* delay it will cause (for example, because of rolling stock known to be unreliable) would not lead to a declaration of congested infrastructure.
- 3.2.3 Network Rail will not usually declare congested infrastructure if the application that cannot be satisfied adequately is for a duration of less than one timetable period as defined in section D2.1.6 of the Network Code.
- 3.2.4 Network Rail considers that a request for capacity has been adequately satisfied when the proposal offered in response to the request is still commercially acceptable to the operator.

- 3.2.5 Commercial acceptability is for the applicant to judge. In order to know whether it can provide a commercially acceptable proposal without wasting time on repeated offers, Network Rail needs help from the applicant to understand the 'tipping point' that would make the access rights acceptable or not (e.g. the time limit that would trigger an additional resource diagram, or the effect of different days run). Network Rail does not require commercially confidential information for this purpose.
- 3.2.6 In identifying what parts of the infrastructure it should declare to be congested, Network Rail will consider the service pattern, infrastructure and any relevant contractual constraints that are preventing the request from being met adequately.

3.3 Co-ordination of requests for capacity made through Part D of the Network Code

- 3.3.1 In the event of conflict between different requests for infrastructure capacity while preparing the next working timetable, Network Rail is required under regulation 23 to consult the applicants and co-ordinate requests to attempt to ensure the best possible matching of all requirements. This obligation is discharged during the timetable preparation period.
- 3.3.2 The co-ordination obligations in Regulation 23 could involve industry parties in significant cost, so this Code identifies a limit on what is reasonable.
- 3.3.3 If a request for capacity conflicts with others, then Network Rail will attempt to resolve each separate conflict it identifies.
- 3.3.4 In attempting to resolve the conflicts, Network Rail will consider the retiming of other train paths in addition to those involved in the conflict, exercising its flexing right, having due regard to the decision criteria, and attempting to meet the 'commercial acceptability' test (as described in section 3.4.3 of this Code) for each service.
- 3.3.5 In respect of each specific conflict identified, if all the requests for capacity cannot be satisfied adequately when at least 3 other trains (not directly involved in the conflict) have been retimed, then Network Rail will consider rejecting one or more of the requests, in accordance with the Network Code, and declaring congested infrastructure.
- 3.3.6 This approach inevitably involves an arbitrary number, but such a number is required to balance the need for a minimum quantity of exploratory retiming activity before a declaration is made, with the need to limit the potentially endless amount of such work that Network Rail could undertake in each timetable cycle.

3.4 Identification of congested infrastructure arising from a request for capacity through Part D of the Network Code

- 3.4.1 Network Rail may declare congested infrastructure if:
 - (a) Network Rail, after co-ordination in accordance with regulation 23, is unable adequately to satisfy all requests for capacity, subject to the provisions in sections 3.3 and 3.4 of this Code; or
 - (b) Network Rail considers that it is likely that the circumstance described in (a) above will occur within the next timetable year, i.e. before the December after next.
- 3.4.2 Network Rail considers that adequate satisfaction of a request for capacity is when the response to the request is (a) within the parameters of the request or applicable flexing right; or (b) outside the parameters of the request but still commercially acceptable to the operator.
- 3.4.3 Commercial acceptability is for the applicant to judge. In order to know whether it can provide a commercially acceptable proposal without wasting time on repeated offers, Network Rail needs help from the applicant to understand the 'tipping point' that would make the response acceptable or not (e.g. the time limit that would trigger an additional resource diagram, or the effect of different days run). Network Rail does not require commercially confidential information for this purpose.
- 3.4.4 Capacity constraints may exist off the Network Rail network; on connected facilities or on infrastructure controlled by other infrastructure managers. In the case of connected facilities, the freight model access contract requires an operator to have suitable access in place on any connected facility prior to any associated bid for access on the network. In the case of other infrastructure networks, and recognising the increasing number of cross-network interfaces in Great Britain, Network Rail will work with ORR and other infrastructure managers to develop a framework for the consideration of congested infrastructure across network boundaries.
- 3.4.5 Network Rail will not usually declare congested infrastructure if the request that cannot be satisfied adequately falls into one of the following categories:
 - (a) The application is for a duration of less than one timetable period as defined in section D2.1.6 of the Network Code. This is so that a declaration is not made where there is not an ongoing requirement for access.
 - (b) The application is incomplete according to the requirements of section D2.5.1 of the Network Code. An incomplete application would not provide sufficient information for Network Rail to assess whether the infrastructure is congested.
 - (c) The application is not compliant with the relevant NESA, EAS and/or TPRs, except where TPRs relate to network capacity e.g. headway or margin against other services. This is so that a declaration is not made in response to applications that are (e.g.) outside the available times of operation.

- (d) The application is a train operator variation request as defined in section D3.3.1 of the Network Code. This constitutes an amendment to the working timetable, so Network Rail does not have an opportunity to coordinate requests and decide whether a declaration would be appropriate.
- (e) The application is in response to a Network Rail variation as defined in section D3.1.2 of the Network Code. This also constitutes an amendment to the working timetable.
- 3.4.6 Network Rail will consider rejection of its own services on the same basis as rejections of requests from applicants: it could be appropriate to declare congested infrastructure if path requests to fulfil Network Rail's network licence obligations cannot be satisfied adequately.
- 3.4.7 In identifying what parts of the infrastructure it should declare to be congested, Network Rail will consider the service pattern, infrastructure and any relevant contractual constraints that are preventing the access request(s) from being met adequately.

3.5 Declaration of congested infrastructure

- 3.5.1 When Network Rail decides, in accordance with the principles set out above, to make a declaration of congested infrastructure, it will advise stakeholders as soon as is practical, and before the relevant timetable change date.
- 3.5.2 The advice will include a brief description of the circumstances that gave rise to the declaration, the specific geographical limits of the affected infrastructure, the date on which the declaration was made and the date from which the congested status applies (which would normally be the relevant timetable change date). It will also include commentary on the availability of strategic capacity on the affected infrastructure for ad hoc requests under Regulation 24.
- 3.5.3 The details of each declaration as listed in section 3.5.2 will also be published, by means of an amendment if necessary, in the Network Statement applicable to the year(s) when the congested status applies.

3.6 Capacity analysis

- 3.6.1 Regulation 27 sets out requirements for the capacity analysis.
- 3.6.2 The analysis must identify the reasons for the congestion, considering:
 - (a) characteristics of the infrastructure;
 - (b) operating procedures; and
 - (c) characteristics of the train services.
- 3.6.3 The analysis must also consider measures to alleviate congestion, including:
 - (a) re-routing of services;
 - (b) re-timing of services;

- (c) alterations to the speed of trains within current infrastructure capability; and
- (d) infrastructure improvements.
- 3.6.4 In considering these potential measures, Network Rail will include potential changes to the TPRs (constrained by the technical capability of the infrastructure), and radical diversions and/or service pattern alterations unconstrained by existing contracts. The analysis will not necessarily be limited to the infrastructure that was subject to the declaration of congestion; other infrastructure may be included where relevant. The analysis will include comment on the consequences of the potential measures for the availability of strategic capacity for ad hoc requests under Regulation 24.
- 3.6.5 Network Rail will produce a capacity analysis report in consultation with the Department for Transport (and, in Scotland, Transport Scotland) and any other stakeholders it considers appropriate.
- 3.6.6 The report will be published on the Network Rail website no later than 6 months after the date on which the declaration of congested infrastructure was made. Network Rail will advise stakeholders of its publication.

3.7 Capacity enhancement plan

- 3.7.1 Regulation 28 sets out requirements for the capacity enhancement plan. The plan must identify:
 - (a) Reasons for the congestion;
 - (b) The likely future development of traffic;
 - (c) Constraints on infrastructure development;
 - (d) Options for and costs of enhancing capacity, including the potential effect on charges;
 - (e) Details of the action to be taken to enhance the capacity of the congested infrastructure (following cost benefit analysis); and
 - (f) A timetable for completion of the detailed measures identified.
- 3.7.2 The GB rail industry has a well-established framework for identifying future requirements and planning capacity investment in a holistic way. The existing Long Term Planning Process is expected to satisfy most of the requirements of Regulation 28 in respect of the capacity enhancement plan.
- 3.7.3 Network Rail will produce a capacity enhancement plan in consultation with stakeholders, referencing other published strategies where these exist and are appropriate in order to minimise duplication. The plan cannot commit any funder to any investment, and the usual industry funding processes will apply to determine which investments are made and when.
- 3.7.4 The plan will not necessarily be limited to the geography that was subject to the declaration of congestion; other infrastructure may be included where relevant.
- 3.7.5 A draft of this document will be shared with the Appropriate Minister no later than 9 months after the date on which the declaration of congestion was made, for their approval. This is two months earlier than the requirement of Regulation 28, at the request of the Department for Transport.

3.7.6 The document will be published on the Network Rail website no later than 12 months after the date on which the declaration of congested infrastructure was made, regardless of whether Ministerial approval has been received. Network Rail will advise stakeholders of its publication.

3.8 Capacity allocation on congested infrastructure

- 3.8.1 Regulation 26 permits priority criteria to be set by Network Rail for the allocation of capacity on congested infrastructure. These must:
 - (a) take account of the relative importance of services to society; and
 - (b) ensure the adequate consideration of freight services.
- 3.8.2 Section D4 of the Network Code sets out the processes that Network Rail will follow and the factors that it will consider in making decisions on the priorities for the allocation of scarce capacity; on congested infrastructure these will be applied with regard for the requirements of the regulations.

3.9 Supplementary access charges on congested infrastructure

- 3.9.1 Schedule 3 of the Regulations permits a scarcity charge to be levied for the use of congested infrastructure, where this charge has been set out in the applicable Network Statement.
- 3.9.2 Network Rail does not intend to levy such a charge during Control Period 5. Implementation of a scarcity charge will be considered for Control Period 6 through ORR's review of access charges for the 2018 Periodic Review.

3.10 Revocation of a declaration

- 3.10.1 If the circumstances giving rise to the declaration of congested infrastructure are resolved within 6 months of the date from which the infrastructure was deemed to be congested, then Network Rail will revoke the declaration and advise stakeholders accordingly. In this case, neither a capacity analysis report nor a capacity enhancement plan will be produced in response to that declaration of congestion.
- 3.10.2 During the initial consultation period in respect of each timetable change date, Network Rail will review each section of the infrastructure where a declaration of congested infrastructure has been made and not revoked, considering whether, for the period to which the timetable will apply, there is likely to be a material change to either:
 - (a) the supply of infrastructure capacity; and/or
 - (b) the demand for the use of infrastructure capacity.
- 3.10.3 If Network Rail considers that there is likely to be such a material change, then Network Rail will write to timetable participants during the initial consultation period so that any access proposals they submit at or after the priority date can be made with knowledge of this likely material change. Then, either:

- (a) Where the relevant declaration of congested infrastructure was made in response to an application for additional or amended access rights, Network Rail will review during the timetable preparation period whether, in the period to which the timetable will apply, the infrastructure is likely to remain congested according to the principles set out in section 3.1 of this Code; or
- (b) Where the relevant declaration of congested infrastructure was made in response to a request for additional or amended capacity through Part D of the Network Code, Network Rail will review during the timetable preparation period whether, in the period to which the timetable will apply, the infrastructure is likely to remain congested according to the principles set out in section 3.2 of this Code.
- 3.10.4 If these reviews find that there has been a material change to the supply of and/or the demand for infrastructure capacity, and that the infrastructure is not likely to remain congested, then:
 - (a) Network Rail will advise stakeholders of its intention to revoke the declaration with effect from the relevant timetable change date.
 - (b) Subject to appropriate consideration of any representations received within the five working days after this advice is given, Network Rail will confirm the revocation to stakeholders before the relevant timetable change date.

Glossary:

Appropriate Minister	If the capacity enhancement plan relates wholly to infrastructure in Scotland, Scottish Ministers; if the capacity enhancement plan relates in part to infrastructure in Scotland, the Secretary of State and Scottish Ministers acting jointly; otherwise, the Secretary of State
Congested infrastructure	Infrastructure declared congested under Regulation 26 where the declaration has not been revoked
Control Period 5	April 2014 – March 2019
Control Period 6	April 2019 – March 2024
Decision criteria	The criteria set out in section D4.6 of the Network Code
EAS	Engineering Access Statement
Initial consultation period	The period for consultation concerning a new timetable as defined in section D2.3.3 of the Network Code
NESA	National Electronic Sectional Appendix
Network Rail variation	A proposal to vary the timetable after the timetable preparation period, as defined in section D3.1.2 of the Network Code
ORR	Office of Rail and Road
Priority date	The date, 40 weeks before the commencement of the relevant timetable, by which operators should submit their access proposals, as defined in section D2.4.4 of the Network Code
Regulation(s)	The Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 as amended from time to time
Stakeholders	Existing users of the congested infrastructure; new applicants for use of the congested infrastructure; ORR; the Department for Transport; and (if any element of the congested infrastructure is in Scotland) Transport Scotland
Timetable change date	A date for the implementation of timetable changes as defined in section D2.1.3 of the Network Code
Timetable period	The period between timetable change dates as defined in section D2.1.6 of the Network Code
Timetable preparation period	The period for compilation of a new timetable as defined in section D2.6.1 of the Network Code
TPRs	Timetable Planning Rules
Train operator variation request	A proposal to vary the timetable after the timetable preparation period, as defined in section D3.3.1 of the Network Code