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Airports Commission Consultation
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PO Box 1492
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3rd February 2015

Dear Sir / Madam,

Subject: Network Rail Response to Airports Commission Consultation

Thank you for the opportunity to comment on the Airports Commission's emerging thoughts on airport capacity in London and the South East.

Network Rail has been working with both the Commission and the scheme promoters in order to help align the potential options for airport expansion with the future strategy for the rail network, which is currently being determined by the industry's Long Term Planning Process. It should be noted that the airport operators have been proactively engaging with the rail industry for many years, effectively contributing to both previous and current strategic planning activity. This professional engagement has led to the development of a credible range of options for the train service on the relevant routes that have the ability to meet both growing airport passenger demand and wider rail demand from other customers.

Network Rail has the following comments on the Commission's consultation document which was published in November 2014. These all relate to the surface access elements of the Commission's portfolio.

Brighton Main Line

The Commission's consideration of surface access requirements includes an 'extended baseline' which comprises schemes that are likely to be required irrespective of potential airport expansion.

For the proposal at Gatwick Airport this includes a programme of infrastructure works on the Brighton Main Line (BML) which have been proposed by the South East Route Study: Sussex Area[1].

The Commission has noted the fact that these proposals are at an early stage of development and are yet to enter Network Rail's GRIP[2] process. Network Rail will be

[1] Please note the list of interventions in the Commission's suite of documentation needs to be updated to be fully consistent with the draft Route Study

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launching GRIP 2 development work on certain elements of the BML Upgrade Programme shortly. The outputs of the GRIP 2 study should be available in mid-2016 and this is the next point at which we will have greater certainty of the costs, feasibility and outputs of the Brighton Main Line works described in the extended baseline. Despite this we will be undertaking some further work on some of the key locations over the next three months including East Croydon and we would welcome the opportunity to update the Commission in April of 2015.

Until the point that cost, feasibility and outputs are understood in more detail, the conclusions made by the Commission on BML peak capacity may be subject to change. However, Network Rail acknowledges that these are the most reasonable assumptions that can be made at this time.

The Commission should also note the references in the Sussex Route Study to the ongoing performance challenge on the BML and the possible need in CP6 for further investment outwith the current scope of the capacity enhancement programme if current PPM targets are to be met or indeed exceeded. In our view such investment is likely to be needed with or without airport expansion.

It is also worth noting that access for maintenance and renewal activity is an ongoing challenge on all of Network Rail's Main Line routes into London. For the BML, information on current access regimes and future plans is available to the Commission if required.

Great Western Main Line

In terms of the extended baseline for the Heathrow Airport proposals, it is not clear whether Southern Rail Access to Heathrow (SRAtH) forms part of the baseline or not. In some cases it is referred to as being tested in an 'extended baseline with SRAtH' scenario, but it appears that a cost has been assumed for the scheme when assessing the cost of airport expansion. This should be clarified in the Commission's final publication.

It is important to note that the Commission's Interim Report recommended that the industry undertake a detailed study to find the best option for enhancing rail access into Heathrow from the south. The DfT has since remitted Network Rail to undertake a feasibility study into SRAtH and we will report to DfT in summer 2015.

The study is being undertaken in two stages, the first stage considers the potential markets that could be served by a SRAtH link and which of these would be of most value. We are shortly due to publish the 'Southern Rail Access to Heathrow Market Study' report. The Market Study findings are consistent with those identified in previous strategic rail studies on such a scheme, suggesting that a SRAtH scheme would generate a significant amount of demand and revenue. It indicates that rail services to Waterloo and via Woking would be most valuable. This demand and revenue generation exists when Heathrow is operating at current levels of flight capacity and further increases in a scenario with airport expansion.

[2] GRIP (Governance of Railway Investment Projects) is Network Rail's project development process, undertaken in eight stages.

Network Rail will subsequently progress with the second stage of the SRAtH Study, which will consider infrastructure feasibility and a value for money assessment. As stated above, this work will conclude in summer 2015 at which point the potential costs, outputs and feasibility of such a scheme will be better understood, although it is worth noting that this will be at a pre-GRIP level of development. Until the SRAtH scheme is further developed the conclusions made by the Commission on connectivity to Heathrow Airport may be subject to change.

The Commission's surface access report for Heathrow concludes that there will be sufficient rail capacity to accommodate passengers between London and Heathrow Airport, but it should be noted that there are capacity challenges for other services that operate on the Main Line. The Commission's report assumes that the airport continues to be served by utilising four dedicated paths on the Main Line, but Network Rail recommends that a holistic approach across both Main and Relief lines be adopted when considering capacity on the Great Western Main Line (GWML).

The Western Route Study considers a number of options for addressing future capacity demands. This includes the option of a) serving the airport solely on the relief lines, through an integrated airport rail service, or b) grade separation of Ladbroke Grove Junction to achieve sufficient additional main line capacity. It is recognised that there is a clear requirement for the continued delivery of a high quality and frequent airport service within the mix of services on the GWML, and, particularly after start up of the Crossrail service, the industry has options to ensure that this can be provided in any scenario.

The Commission should also note the references in the Western Route Study to the ongoing challenge of providing a resilient and maintainable railway specifically in the Thames Valley area of the GWML and the possible need in CP6 for further investment outwith the current scope of the capacity enhancement programme if current PPM targets are to be met or indeed exceeded. The emerging access strategy for the GWML also needs to be considered alongside the performance and capacity requirements to ensure that the railway can be sufficiently maintained alongside the growing requirements for services. In our view such investment is likely to be needed with or without airport expansion.

It should be noted that the infrastructure schemes discussed above on the BML and GWML do not currently have committed Government funding.

Route Resilience

We note the Commission's references to resilience issues on the BML and GWML. Network Rail is of the view that, assuming the Commission considers the resilience of the lines in question a significant factor in comparing the feasibility of surface access proposals, further analysis should be conducted involving Network Rail and, where appropriate, the current operators.

Between September 2011 and September 2014, an assessment of line closures indicates that the BML experienced 22 incidents which resulted in total line blocks between London and Gatwick Airport which equates to an average of 7 – 8 per year.

Of these, approximately 70 per cent were fatalities and in these instances Network Rail aims to re-open the line within 90 minutes.

However, 12 of the 22 incidents were on the sections between Stoats Nest Junction and Earlswood or after the route splits to London Bridge and London Victoria. Therefore, at these locations there is an alternative route to London available and a service to London from Gatwick Airport would in most cases have been maintained, though likely with some service disruption. This therefore means that there are only 3 – 4 incidents per year that would result in the total loss of any direct access to London from the airport.

Gatwick Airport also has alternative routes to London via Guildford or Tonbridge, though these would result in extended journey times, the need to interchange and current service patterns are not currently configured to accommodate large volumes of diverted passengers.

Comparatively, between September 2011 and September 2014 an assessment of line closures indicates that the GWML experienced 21 incidents between London Paddington and Heathrow Airport which resulted in trains not running between London and Heathrow Airport on either the GWML or Heathrow branch[3]. This equates to an average of 7 per year. Of these, approximately 75 per cent were fatalities where Network Rail would aim to re-open the line within 90 minutes.

Heathrow Airport is also served by the Piccadilly Line which provides an alternative route to the airport in such instances.

Current and Future Performance

In Network Rail's view, the day to day performance challenges on the routes in question are as relevant of consideration by the Airports Commission as the issue of route resilience (as defined by the Commission as maintaining a service to the airport in times of disruption).

The BML and GWML are both highly utilised mixed-used rail arteries which by the end of CP5 will be operating at near full network capacity. Operating this high level of service brings with it challenges in terms of performance that we are already experiencing today.

The rail industry measures train service performance using the Public Performance Measure (PPM) which shows the percentage of trains which arrive at their terminating station on time and is presented by train operating company (TOC).

Historical PPM data for TOCs on the GWML and BML shows that achieving performance targets has been increasingly challenging in recent years. The table below shows the relevant TOC's performance targets and actual PPM at the end of Control Period 4 (CP4).

[3] On the Heathrow branch, this only includes incidents that caused >200 delay minutes.

Train Operating Company	Public Performance Measure	
	Target	**Actual**
First Capital Connect	90.7%	86.1%
First Great Western	90.7%	87.9%
Gatwick Express		93.2%
Heathrow Connect		93.4%
Heathrow Express	95.5%	93.8%
Southern	89.5%	85.8%

A significant part of the challenge in delivering PPM targets is the increasing number of services running on the network in order to accommodate passenger demand.

By the end of CP5 the Thameslink, Crossrail and Intercity Express Programmes will result in further service increases on the BML and GWML. Whilst these programmes will deliver new infrastructure at some locations, challenges will remain going forward in achieving robust levels of performance on the routes in question.

Going Forward

Network Rail looks forward to continue working with the Airports Commission to help inform the process to establish recommendations for future airport capacity.

Yours faithfully,

[redacted]

Paul Harwood
Strategy and Planning Director, South
Network Rail