

DfT Airport Capacity Programme Early Assurance Review of Heathrow Airport Limited's Delivery Schedule

8 May 2018

Key findings

Context

This assurance review is part of preparation for any potential designation of an Airports National Policy Statement (NPS). However it does not prejudge any decision on designation, which remains subject to consideration of consultation responses and recommendations made by the Transport Committee as part of their inquiry, or any decision on an application for development consent made at any time hereafter.

The Department for Transport (DfT) has commissioned engineering solutions provider, Costain Group, to undertake an early assurance review of the proposed Northwest Runway Scheme (sometimes referred to as the Heathrow "new" or "third" runway) being promoted by Heathrow Airport Limited (HAL) and referred to in this document as the Heathrow Expansion Programme (HEP). The study is intended to provide Government with an assessment of the airport operator's proposals and its ability to provide additional airport capacity at Heathrow Airport by 2030 to meet any Airports NPS expectations in the event that the NPS is designated in due course. This work should not be taken as prejudging decisions to be made by the Government on how to respond to the consultations on the draft and revised draft Airports NPS or the recommendations of the Transport Committee.

If the scheme proceeds, the HEP would be one of the largest infrastructure projects ever to be delivered in the UK. It is a complex project which will be undertaken within a constrained, safety-critical, operational airport site and its delivery will have a direct impact on a wide range of stakeholders (including communities, transport users, and airport customers and employees) during the construction phase.

There are many challenges associated with the scheme. Significant elements of the existing infrastructure network such as the M25 and A4 would be altered or re-aligned to accommodate the new runway and existing assets and businesses (such as the Lakeside Energy from Waste plant close to the airport) would be displaced to create the space required for the new runway and associated infrastructure.

Costain was appointed by DfT's Airport Capacity Programme at the end of February 2018 and is supported by transportation specialist, Systra Limited. Costain's brief is to carry out an early assurance review of HAL's Delivery Schedule ahead of any potential designation of the Airports NPS. The purpose of this early review is to consider the viability of HAL's proposals to deliver an operational runway by 2026, their publicly stated date for completion, or by 2030, which is the date stated by the Airports Commission and also in the drafts of the Airports NPS upon which DfT has consulted. The scope of the review is limited to an assessment of whether the necessary infrastructure can be in place and operational. Costain did not consider the likelihood of any legal challenge or their potential impact on the Delivery Schedule.

HAL does not yet have a single scheme Masterplan¹, but has developed four initial assembly options that will form the basis of its chosen Masterplan. Within these options HAL's timeline for the construction and opening of the runway itself are consistent, although there are some slight differences in critical path activity. All options reflect the timeline HAL has already set out in public. This report considers the viability of the HAL proposals in the context of the four Masterplan assembly options.

¹ HAL has undertaken an initial consultation, known as 'consultation one' which asked for views on initial scheme design options and airspace change principles. HAL is currently considering responses on these options before designing their scheme 'Masterplan'.

Approach

The information on which this review is based has been provided by HAL in relation to their delivery plans. As HAL is currently considering four Masterplan assembly options and this is a review of early proposals which are commercially sensitive and subject to consultation, Costain has not engaged with the relevant statutory bodies at this early stage (such as Highways England) and the views expressed in the report do not represent their assessment of the proposals.

Costain has engaged widely with HAL's airport expansion team during the two-month period assigned to this study. A formal process of engagement and a clearly defined programme of structured briefings was agreed and implemented. Commencing on 26 March 2018, this consisted of 12 sessions in total with a final feedback session on 25 April involving the DfT, the Costain/Systra review team and senior members of HAL's delivery team.

Supporting documentation to validate the content of, and assumptions made, in the briefing reports has been provided throughout the process up to and including the 25 April session, following access to the initial tranche of documentation provided by HAL on the 28 March. This means that the findings and risks of this review are accurate as of the review's completion in April 2018.

Following the initial review and subsequent presentations, supplementary requests were made to HAL to validate/ratify initial findings from the reviews. Where time has allowed additional working sessions were organised to seek clarity on the data provided.

HAL's team has collaborated and co-operated with Costain in an extremely professional and courteous manner throughout this review, which has greatly assisted in the production of this report.

It should be noted that HAL has clearly stated that the information it has provided for this review is subject to the following caveats:

- that it considers the level of information provided to be appropriate to the current stage of the design process;
- that it is without prejudice to current and subsequent consultations as part of their Development Consent Order (DCO) and TCPA applications;
- that the information provided does not include the outcomes from HAL's recent consultation exercise, known as 'Consultation One', which are still being assessed and reviewed;
- that HAL's proposals are subject to the content of any future Airports NPS;
- that in the absence of a preferred Masterplan, the construction strategy is inevitably immature and therefore some assumptions remain to be tested; and
- that the level of detail required to give precise assurance on timescales or mitigations required as an outcome of Consultation One and any NPS designation is not yet available.

We have taken these caveats into consideration when compiling this report.

Headline findings

The headline findings from this early assurance review are as follows:

1. There is a reasonable degree of confidence that an operational runway can be delivered by 2026, which is HAL's target completion date, but HAL's ability to deliver by this date depends on certain planning, construction and operational requirements being met and is subject to the risks outlined below.

2. There is a high degree of confidence that an operational runway meeting the requirements of the revised draft Airports NPS can be delivered by 2030.
3. A Masterplan option is expected to have been agreed upon by the end of Q3 2018, subject to relevant processes being completed.
4. The project is at a stage where the level of maturity reflected in the documents shared by HAL to date is considered to be appropriate when compared to other large and complex infrastructure projects.

Principal risks to the Deliverability of Additional Capacity by 2026

Costain's view of the principal risks to delivery of an operational runway and the additional airport capacity by 2026 are:

- that mobilisation of construction resources and preparatory works are not completed on time as a result of failures or delays in the procurement process;
- that consents and permits are not obtained within the planned timescale as a result of delays in the statutory processes or in the preceding consultation and engagement processes, and/or legal challenge to the proposals;
- that HAL's proposed scope and programme for the realignment of the M25 motorway and its associated junctions is not agreed with the relevant statutory bodies and other stakeholders within HAL's planned timescale, or that the motorway works are more extensive and time consuming than planned;
- that environmental issues associated with water management, management of landfill waste and piling designs are not agreed with the Environment Agency (EA) for inclusion in the DCO or that the EA challenges these proposals during the examination phase of the DCO process;
- that the construction-related logistics strategy is undeliverable within the planned timescale when all site constraints, operational requirements and detailed methodology are fully understood by HAL; and
- that HAL's current capacity forecasts indicate that airport demand may marginally exceed the available capacity at certain stages of construction, but this is dependent upon HAL's choice of Masterplan option, the current accuracy of forecasts, and the ability of the airport to manage its operational demand.

Possible mitigation measures

Measures to mitigate the identified risks, and to enable DfT to monitor progress include:

- that HAL's Delivery Schedule is developed further to identify all of the activities which need to commence in the first nine months after DCO award;
- that a detailed review is undertaken of all critical permits and consents required;
- that HAL accelerates the finalisation and agreement of M25 realignment and design with Highways England, as appropriate, in line with ongoing and future consultations;
- that agreement is accelerated with the Environment Agency on all outstanding issues;
- that further detailed logistics planning is undertaken; and
- that further early engagement with displaced uses be undertaken to explore further mitigation strategies to enable early relocations and vacant possession.