Heathrow Expansion

Updated scheme design -

Development Strategy submitted to the Airports Commission by Runway Innovations Ltd and Heathrow Hub Ltd

May 2014

6 DEVELOPMENT STRATEGIES

6.1 Introduction

This section supplements our 14th May 2014 submission and covers remaining elements of the requirements outlined in the AC Appraisal Framework Appendix B for development strategies.

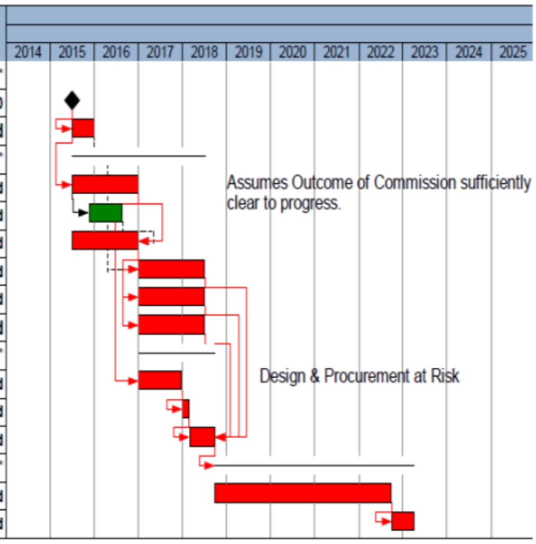
6.2 Construction

6.2.1 *Construction Programme*

An outline permitting and construction programme is given in **Figure 6.1** below.

Figure 6.1 Outline Permitting and Construction Programme

Outline Code	Description	Early Start	Early Finish	Original Duration
1	Key Dates	01JUL15	01JUL15	0 *
1.1	Davies Commission Reports	01JUL15 *		0
2	Government Determines Policy	01JUL15	31DEC15	132d
3	Planning & Permitting	01JUL15	03JUL18	785d *
3.1	Preliminary Design	01JUL15	30DEC16	393d
3.2	Update Safety Case	18NOV15	23AUG16	200d
3.3	Environmental Statement	01JUL15	30DEC16	393d
3.4	Planning (DCO)	02JAN17	03JUL18	392d
3.5	Compulsory Purchase	02JAN17	03JUL18	392d
4	Other Orders	02JAN17	03JUL18	392d
5	Design Development & Procurement	02JAN17	25SEP18	452d *
5.1	Design Development	02JAN17	29DEC17	260d
5.2	Approval to Tender	01JAN18	26FEB18	41d
5.3	Procurement	27FEB18	25SEP18	151d
6	Construction & Commissioning	26SEP18	31MAR23	1178d *
6.1	Construction	26SEP18	30SEP22	1048d
6.2	Commissioning	03OCT22	31MAR23	130d



The programme shows a political decision to proceed in 2015, planning permission secured by 2018, construction commencing in 2018 and completing in 2022, and commissioning in 2023. This is based on assumptions including:

- The Commission reports in summer 2015. The magnitude of the issues suggests that it is unlikely to be able to conclude its work earlier.
- The Commission's recommendations are sufficiently clear to allow early adoption as policy and for development work, including for example ecological baseline surveys, to be progressed. Basing the proposal on existing facilities means that, with a clear policy direction, the time period for action is reduced compared with non-airport sites where an appropriate organisation will need to be put in place.
- Our working assumption is that permission for the scheme would be sought by applying for a Development Consent Order (DCO) under the Planning Act (2008)[1]. This would be the appropriate planning route as the scheme would be considered a Nationally Significant Infrastructure Project (NSIP) and would take the typical timescale for developments using this route.

[1] The alternative would be a hybrid bill.

- Development of the Safety Case, design and procurement would be undertaken with a certain degree of risk, primarily in respect of the mitigations required rather than the principle, which would be a matter of policy. A clear policy direction through an Aviation National Policy Statement (which we anticipate would be prepared by the government following the Davies Commission's final report) and the benefits to the industry of an early opening date lead us to consider this reasonable. Substantial work would have already been done to prepare for the Development Consent Order Application and the other permissions required, such as Compulsory Purchase, Highways Orders and the like. Continuing the design work would be likely to be cost-effective even at risk. The clear policy direction would facilitate the involvement of stakeholders such as the Highways Agency, local highway authorities and utility companies in advance of final permissions.
- The Safety Case would be developed in parallel to the preliminary design, because it is both informed by the design and may have consequence on the design. As this proposition has limited impacts on airspace in itself and does not involve the risks associated with the use of three parallel runways it is assumed that it would take no longer than the safety case for other Heathrow options.
- Construction and commissioning would take 54 months based on outline consideration of the work.

The programme indicates that the earliest opening date would be around 2023, some eight years following the report of the commission.

Risks are outlined in Section 6.3.7 below.

6.2.2 *Transition Period Arrangements*

This proposition is for incremental development of an existing airport. Significant parts of the development are remote from the airport boundary which will limit the impacts on operations whilst these are constructed.

All airports are subject to development and have procedures in place to manage construction projects. Heathrow Airport Limited is no exception to this and is used to delivery of major projects within a constrained environment including Terminal 5 and the new Terminal 2.

The masterplan has been conceived to develop additional facilities relatively quickly to reduce the need for transitional arrangements between now and when capacity can be developed. It has also been developed with phasing in mind and this will allow some of the development to be made in line with demand.

6.3 Financing Plans

6.3.1 *Introduction*

In this section we set out our expectation in respect of financing the proposed expansion scheme. It is intended that private sector investment is attracted for the core commercial aspects of the proposal, and our preliminary analysis indicates that our core airport proposal would be highly attractive to and viable for the private sector. In addition our Heathrow Hub interchange development is also potentially attractive. In order to complete the external transport infrastructure, which we also propose, some government support is likely to be necessary, but the overall level of government support required is anticipated to be relatively modest and cost-effective. We have also identified areas of committed expenditure for future rail enhancements, which would no longer be required under our proposals, allowing investment to be hypothecated to offset a significant proportion of the cost of our suggested enhancements. We will shortly submit a further paper on our surface access proposals, including estimates of cost, demand and potential additional rail revenues. These are secondary recommendations that may fall outside the Commission's brief and as such they are therefore separately costed throughout.

Our proposal contains three distinct elements:

- the core airport infrastructure
- the Heathrow hub interchange and
- wider potential rail access improvements.

A framework for potential development of the components of our proposition is presented in **Table 6.1** below.

Table 6.1 Funding Options

Developer	Extended runway and associated infrastructure	Heathrow Hub interchange and associated facilities	Rail access improvements
HAL	Yes – in full	Potential – in full or in part	Potential – in part
RIL/HHLtd	Compensated for IP[2]	Potential – in full or in part	Potential – in part
Third party	No	Potential – in full or in part	Potential – in part
Government	No	Potential – in part	In part

The baseline assumption is that the development of the airport element of the scheme will be financed by the existing airport operator, HAL, probably under the existing Regulatory Asset Base (RAB) model. The Heathrow Hub element could either be fully or partly incorporated into the airport RAB, or be fully or partly developed and operated by RIL/HHLtd – either on a stand-alone basis or with a third-party private sector investor (such as a property fund).

The upgrade of road and rail links required to support the expansion scheme will service underlying organic growth in transport demand as well as additional airport specific demand created by the expansion project. It will therefore be necessary to understand in more detail the breakdown of future traffic/rail passenger demand between airport/non-airport (i.e. establish the base case/do nothing scenarios) and from this base the airport-related funding requirement can be explored in conjunction with key stakeholders such as the Highways Agency.

The remainder of Section 6.3 covers:

- Section 6.3.2 – preliminary details on our work on costs
- Section 6.3.3 – comment of the likely range of charges that would be acceptable to airlines
- Section 6.3.4 – summary of our analysis in relation to private sector finance of the scheme, assessing the likely attractiveness of the expanded Heathrow Airport and Heathrow Hub to both equity and debt finance parties.
- Section 6.3.5 – consideration of public sector finance
- Section 6.3.6 – outline framework for financial analysis
- Section 6.3.7 – consideration of reactions of competitors
- Section 6.3.8 – risks and uncertainties.

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[2] It is assumed that RIL will be compensated at a commercially acceptable level by HAL for its Intellectual Property (IP) rights and for a return on costs incurred in the development of the proposal.

6.3.2 *Costs*

RIL have engaged Gardiner & Theobald LLP to provide masterplan level cost advice for this stage of our submission. Through engagement with the URS-led, team a cost plan structure has been established that provides clear distinction between the principal areas and elements for the proposal. The base case proposal is shown in **Figure 6.1** below.

The attached cost plan at **Attachment 6-2** provides a high level estimate for the airport infrastructure elements of our proposal. This includes:

- Executive summary
- Cost estimate
    - Airport – runways, taxiways, apron, satellites, transit and baggage system
    - M25 diversion and associated road works
    - Phasing allowance
    - Other development costs including land and property acquisition for on-airport infrastructure and off-site mitigation (e.g. floodplain capacity) and noise compensation
- Notes and exclusions
- Basis of estimate.

As agreed with the Commission, and described at section 3.2.1 of this submission, we have assumed that HAL's capital development programme will have delivered the following as part of a two runway airport masterplan by 2023:

- Terminal 2 expansion complete to ultimate 60mppa capacity
- Terminal 5 optimised to 35mppa capacity
- Terminal 4 retained, 10mppa capacity
- Additional satellites developed in optimum toast rack layout between T5 and T2
- T2-T5 baggage tunnel complete.

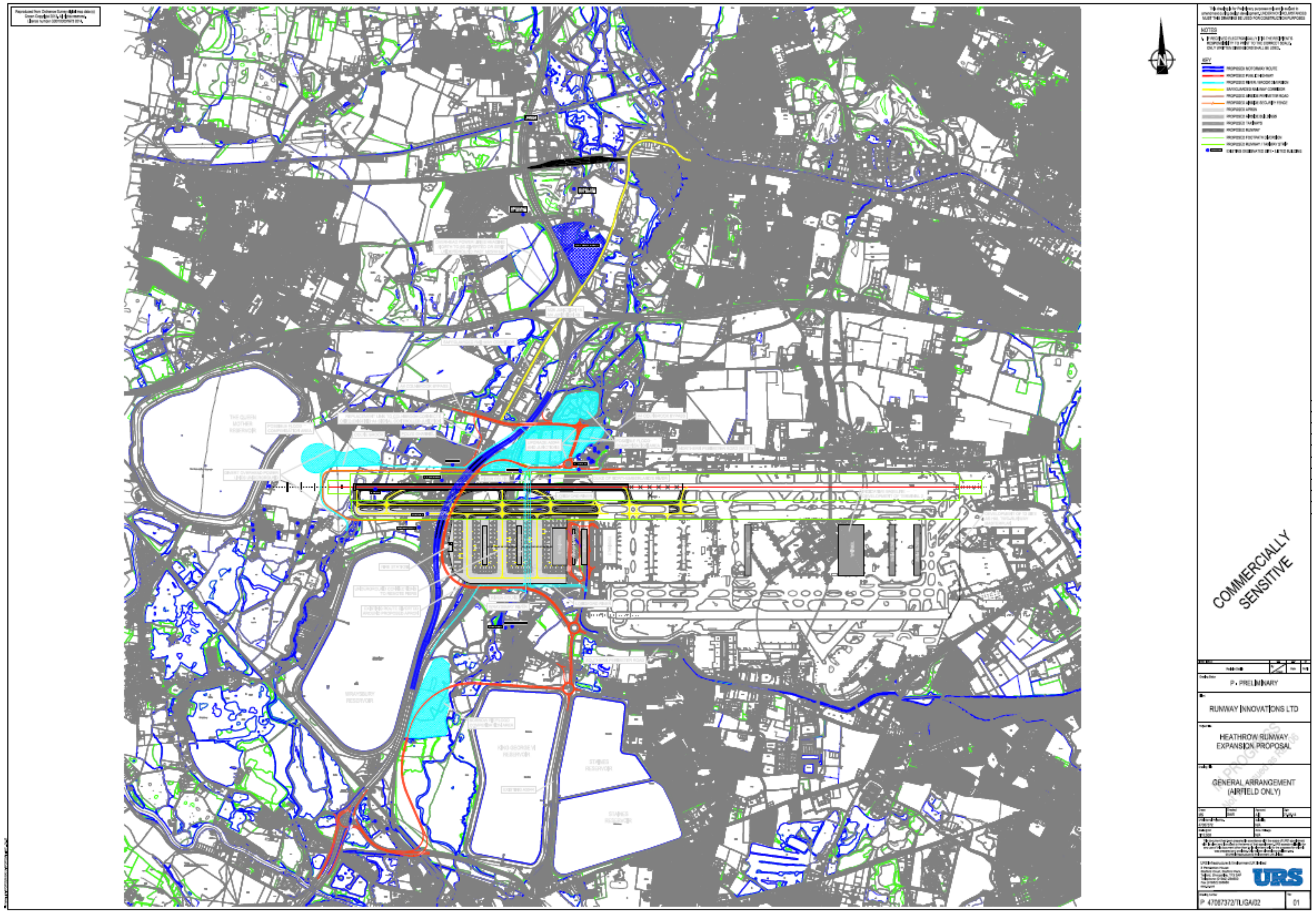
On this basis the key cost estimates for the core airport infrastructure element of our proposals are shown in **Table 6.2** below.

Table 6.2 Heathrow Expansion Cost Estimates Summary

No	Description			Estimate £
1	**AIRPORT**			5,880,000,000
2	**M25 DIVERSION / OTHER ROAD WORKS**			540,000,000
		SUB-TOTAL CONSTRUCTION		**6,420,000,000**
3	**PHASING ALLOWANCE (Say at 2%)**			130,000,000
		SUB-TOTAL Incl. PHASING		**6,550,000,000**
4	**OTHER DEVELOPMENT COSTS (Including Land Acquisition)**			866,000,000
		SUB-TOTAL Incl. OTHER DEVELOPMENT		**7,416,000,000**
5	**FEES (Professional, Planning & Building Control) (15%)**			982,500,000
		SUB-TOTAL Incl. FEES		**8,398,500,000**
6	**CONTINGENCY :** *Airport*		*874,000,000*	
	M25 Diversion/Other Roads		*159,000,000*	
				1,033,000,000
		SUB-TOTAL CONTINGENCY		**9,430,000,000**
7	**INFLATION** (Base Date 2Q 2014)			***EXCLUDED***
8	**OPTIMISM BIAS**			***EXCLUDED***
		ESTIMATED PROJECT COST TOTAL (Excl. VAT)		**£9,430,000,000**

Source: Gardiner & Theobald, May 2014

Figure 6.1 HAL Heathrow Expansion Base Case Infrastructure



The cost plan responds to the level of detail available for respective elements of the scheme. The following points express the basis for costs included against indicative substantive scope items:

- Overall gross area allowances for ecology/environmental, enabling works and utilities
- Spot allowances for major scope items (without design at this stage) facility/elemental level benchmark rates where design scope evident e.g. area rates for airfield apron construction, area rates for terminal development, satellites and stands
- Percentage based allowance for preliminaries and on-costs
- Risk factored into cost plan through individual assessment of each area of cost (indicated in columns throughout). Range of risk provision between 15% and 50% associated with respective elements.

We also attach, at **Attachment 6-3** a comparison of our capital costs and HAL's, using the elemental breakdown in HAL's Cost Plan Summary included at Section 14 Volume 3 of their May 2014 Technical Submission to the Airports Commission. Our estimate includes risk provision of between 15% and 50%, which is at variance with HAL's application of a single 15% allowance[4]. We are also not clear how professional fees and phasing allowance have been treated in HAL's cost estimate, or whether HAL's estimate assumes that some costs are offset by public funding, whether through hypothecated proceeds from congestion charging or some other mechanism[5].

Our forthcoming surface access paper will provide cost estimates for the two additional elements of our proposal, which do not form part of, and are not essential to, our central airport expansion scheme but relate to our proposed Heathrow Hub road/rail interchange and wider surface access strategy;

- Heathrow Hub interchange, associated road works and Automated People Mover (APM) and baggage system connecting with the airport campus
- Wider potential rail access improvements, (including southern rail access)

We note the Commission's advice that these additional proposals will be assessed in relation to both HAL's and our airport expansion proposals, and these are therefore treated separately from our airport proposals.

We are completing our discussions with Network Rail and TfL and envisage being in a position to submit our detailed surface access report to the Commission by the end of June 2014. This will also consider how the costs of these proposals could be substantially defrayed by offsetting capital investment from other rail enhancements that would no longer be required, and by the additional rail revenues that the proposals could deliver.

In addition to the construction and mitigation costs, the overall financial proposal will also need to reflect the costs relating to the following:

- Financing costs: whilst for the airport element of the scheme the Q6 settlement provides benchmarks for the weighted average cost of capital (WACC) and average cost of debt, it needs to be considered to what extent these benchmarks will remain valid for the proposed scheme. Project specific risks will be assessed by investors/lenders and factored into the finance costs/conditions.
- RIL Intellectual Property: as detailed above (Table 6.1) it is not proposed that RIL deliver the airport element of the scheme. Consideration must however be given to the

[4] 6.8.7.1 and 6.8.7.9, Cost Plan Methodology, Volume 1 HAL Technical Submission to the Airports Commission, May 2014

[5] 6.8, ibid

compensation of RIL for the development of the scheme, and negotiations undertaken between stakeholders to identify a commercially viable solution in this area.

6.3.3 *Charges to Airlines*

Based on an airport expansion cost of £9.4bn we have made an indicative projection on the level of future aeronautical charges assuming the continuation of the single till RAB-based regulatory model. Our proposed core airport expansion scheme will increase the charges from £19.10 per passenger which will be charged by the end of Q6 settlement in 2018/19 [6] to £22 per passenger (at 2011/12 prices) by 2023 based on WACC of 5.4% similar to Q6 settlement.

This analysis assumes that our proposals are developed in their entirety within a single phase for completion by 2023. However our inclusion of a phasing allowance within the cost estimate allows for early delivery of runway extension, taxiways, aprons and stands to provide new capacity at the earliest possible date, and in advance of terminal and satellite facilities. This would allow an early increase in revenues, which could assist in reducing and/or smoothing user charges.

The limited increase in airport charges will not affect the attractiveness of Heathrow to legacy network airlines, and retains the potential to attract point to point/low cost carriers. Evidence shows that even the most cost sensitive of today's airlines recognise the yield benefits of serving major airports located close to cities and to large, attractive markets. For example Ryanair has recently established operations at Rome Fiumicino, Lisbon, Athens and Brussels Zaventem, following the lead of easyJet who have demonstrated the financial benefits of serving well-located airports even where this incurs higher airport charges.

As well as additional capacity, our proposals also allow new facilities to be developed in a form that would be attractive to low cost airlines. This has been a key feature of airports such as Barcelona and Schiphol, where new facilities have been developed to meet the specific needs of low cost carriers. Our proposed apron and stand layout would allow highly efficient ground operations, with two way taxiways, permeable aprons and minimal taxiing times enabling the short turn-round times that are critical to the economics of low cost airlines.

Comparison with Gatwick

In considering the effect of capital expenditure on user charges, we believe it is important to recognise the very different values of Heathrow and Gatwick's asset bases:

- Gatwick's capital cost estimate of £5-9Bn[7] to provide additional runway and terminal capacity is around two to four times the value of the airports closing RAB of £2.39bn at 31st March 2013[8] and the forecast RAB by 2020 of £2.47bn[9]
- In contrast Heathrow's closing RAB of £13.8bn 31st March 2014[10] (2011/12 prices), forecast to reduce to £13.5bn by 2018[11], is broadly equivalent to HAL's estimated cost of expansion of around £16bn – and substantially higher than the cost of our airport expansion proposals.
- Gatwick's average fare is also much lower than Heathrow[12], increasing the effect of higher user charges as a proportion of fares, whilst passengers travelling on LCCs are

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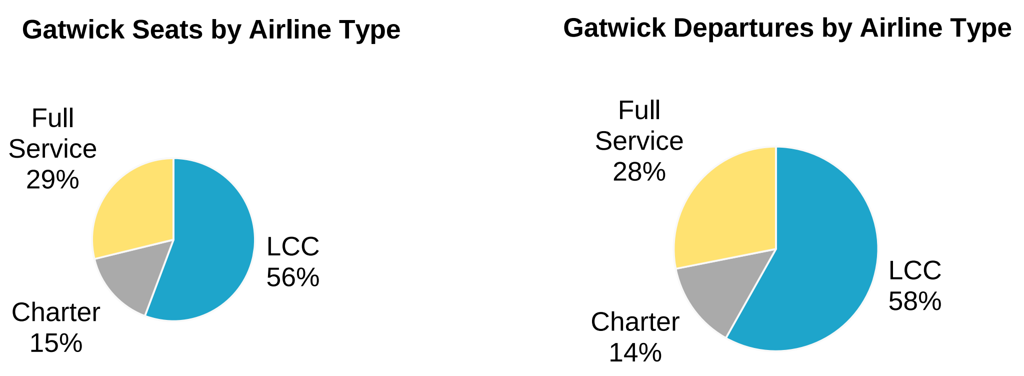
[6] Economic regulation at Heathrow from April 2014: Notice granting the licence, CAA 2014 http://www.caa.co.uk/docs/33/CAP1151.pdf
[7] http://www.gatwickobviously.com/sites/default/files/downloads/gatwick_for_growth.pdf
[8] http://www.gatwickairport.com/Documents/business_and_community/investor_relations/Gatwick_Airport_Limited_Regulatory_Accounts31March2013.pdf
[9] http://www.caa.co.uk/docs/33/CAP1102.pdf
[10] http://www.heathrowairport.com/about-us/investor-centre/results-and-performance/regulatory-asset-base
[11] http://www.caa.co.uk/docs/33/CAP%201103.pdf
[12] See Figure 16
http://mediacentre.heathrowairport.com/imagelibrary/downloadmedia.ashx?MediaDetailsID=2196&SizeId=-1

highly price sensitive, with demand often stimulated by lower fares. Gatwick's high proportion of low cost traffic makes the airport particularly sensitive to increased user charges.

Below **Figure 6.2** shows the breakdown of seat capacity flown out of Gatwick for May 2014 by airline type. This shows the majority of seats and departures from Gatwick are flown by low cost carriers.

The low cost carrier business model is much more sensitive to increases in airport charges than a full service airline. For the latest financial year (2013), airport charges and ground handling costs were 28.5% of total costs for easyJet or £15.84 per seat. Given that easyJet's average revenue per seat for the 2013 financial year was £68.54, any material increase in airport charges that Gatwick would need to impose to deliver additional capacity could have a significant detrimental impact on easyJet's business model.

Figure 6.2 Seat Capacity at Gatwick



Source: Capstats

As Carolyn McCall, easyJet's Chief Executive, has stated:

"*Our greatest concern is about the lack of regulatory control of a proposed second runway at Gatwick where the CAA has handed GAL* [Gatwick Airport Limited] *a licence to print money and has significantly enhanced the value of the future sale of GAL by private infrastructure fund GIP* [Global Infrastructure Partners]. *Using GAL's own figures passengers could be paying £28 more per flight for years in advance of the opening of a new £9 billion runway without any real oversight by the CAA*."

The sensitivity of the easyJet model to airport charges is highlighted in their 2013 Annual Report which states:

'*Airports and ground handling cost per seat increased by 9.4% (7.9% at constant currency), primarily driven by increases in charges at regulated airports, with significant increases in Spain and Italy. The increases in Spain by AENA were a factor in the decision to close easyJet's Madrid base earlier in the year.'*

In comparison the business model of full service carriers is arguably much less impacted by airport costs. Using data from the 2013 British Airways Annual Report, landing fees, en route charges, handling charges, catering and other operating airport costs (a much wider range of costs than shown in the analysis above for easyJet) were still only 19.8% of total costs. British Airways average revenue per passenger in 2013 was £263, so an increase in aeronautical charges at Heathrow as a consequence of new runway capacity has a much smaller impact on average fares than for an LCC operating out of Gatwick.

As the country's only hub airport, Heathrow is, for most airlines serving the UK market, the first airport of choice. Airline yields are stronger for Heathrow than at Gatwick and are likely to remain so even if Gatwick was to add a second runway. A new runway at Heathrow would provide additional competition on existing routes, provide opportunities for new destinations to be served, and is most likely to remain the preferred choice of airlines.

It is also highly likely that if new runway capacity was added at Heathrow, some airlines would choose to move their services from Gatwick to Heathrow. Based on experience over many years and a wide range of economic cycles, it is probably much less likely that airlines would choose to do the opposite. It is possible that higher user charges would also drive the most price sensitive traffic away from Gatwick, to other airports with ample spare capacity and what would be far lower airport charges. This is not an unlikely scenario. Low cost carriers are inherently footloose, (absent the commitment to long term investment in the necessary hub/transfer/lounge etc. infrastructure of legacy network airlines) and with a model of small, flexible base fleets. It would therefore be regrettable if the effect of a Government decision to support expansion at Gatwick resulted in a situation where new capacity at Gatwick was under-used, without providing any relief to Heathrow's capacity constraints.

As well as the wider economic disadvantages of such a scenario, there is also the risk that this would result in increased noise impacts on communities around Heathrow, as airlines made commercial decisions to optimise scarce capacity at their airport of choice by employing larger aircraft.

We conclude that the high relative cost of Gatwick expansion, at an airport which evidence consistently shows is not the preferred location for most airlines, coupled with the airports growing reliance on highly price sensitive LCC/point to point airlines, would make Gatwick expansion a high risk option for the UK.

Airline Views

The CEO of easyJet, the UK's biggest airline, has confirmed that they would consider flying from an expanded Heathrow, *"if it was right for us."* We believe the limited increase in user charges necessary to fund our proposals, and the highly efficient nature of our airport layout, would indeed create the right conditions for LCCs, as new entrants, to use new capacity at Heathrow.

We have also held discussions with a number of senior airline executives and analysts. Whilst these are non-attributable, we summarise as follows and would be pleased to facilitate further discussions with the Commission:

CEO of major point-to-point UK airline:

- *It is too easy to take the easy option and expand Gatwick. There may be a perception that it is cheaper than Heathrow with less disruption to the infrastructure and a lower noise impact, but whether it transpires to be so is unclear at this stage.*
- *It is obvious though that it has to be Heathrow to maintain the UK's position as a globally competitive hub for connectivity.*
- *We need to work around the short term inconveniences and make the effort to ensure that this is the case.*
- *We must think about the wider economic impact of Heathrow vs Gatwick.*
- *In addition the regions are crying out for some aviation connectivity to London. The regions represent 80% of UK GDP and any expansion at Heathrow that could accommodate regional flights would be of huge benefit to regional economies in the UK. It has to be Heathrow given its proximity to London.*

Senior transport analyst at Liberum Capital:

- *The key is to look back at long haul activity since the peak year in 2007 when the North Atlantic market was deregulated with the Open Skies Agreement.*
- *The long haul (predominantly US) airlines voted with their feet and this was driven by passenger preference.*
- *Gatwick's long haul activity collapsed by 40% and has been on a downward trend ever since.*
- *Heathrow long haul activity has grown by 10% in the same time period in spite of being capacity constrained.*
- *It is obvious where long haul operators want the expansion to take place and which would have the greatest benefit to the UK in a wider context.*
- *Only Heathrow can accommodate the growth in all the types of passenger journeys that will be demanded of the UK's airport capacity whether it be long or short haul, hub traffic or point to point.*

Senior airline analyst:

- *The value of an extra runway at Heathrow will far exceed the value of another at Gatwick due to the increased number of combinations passengers will be offered.*
- *Metcalfe's law states that the value of a telecommunications network is proportional to the square of the number of connected users of the system. The same applies to UK aviation.*

6.3.4 *Investors and Private Sector Finance*

There is understood to be good appetite from specialised infrastructure investors for regulated infrastructure assets, and the key risks in this area are seen to be traffic and regulatory. Overall the proposal is seen to offer potentially attractive opportunities for private sector investors.

Overview of Finance for Project Elements

The proposal is split into three distinct elements:

- the core airport infrastructure
- the Heathrow hub interchange and
- wider potential rail access improvements.

For the core airport facilities it is assumed that the capital costs associated with the expansion of the core airport facilities will be developed by HAL and delivered probably under the existing RAB model. This has several distinct advantages to maximise private sector investment including:

- Investment at an existing hub airport with a proven and highly attractive catchment minimises traffic risk – a key concern for investors
- Delivery of the expansion scheme by HAL helps minimises delivery risk as it demonstrates a strong track record in project delivery
- Continuation of the RAB model is seen to be favourable since it provides investors with predictable and stable returns, a clear policy commitment to the continuation of the RAB model will be key to obtaining committed finance.

In addition the Heathrow Hub concept offers commercial attractions including:

- It will be a potentially high value real estate investment benefitting from integrated transport services and direct linkage into Heathrow Airport.
- Its off-site location can broaden out the potential funding pool from infrastructure funds to incorporate commercial property funds.
- It allows risks to be mitigated by enabling better phasing of works, with potentially more limited impact on existing operations
- Heathrow Hub could introduce additional competition into the Heathrow market for a range of ancillary services including, for example, car parking.

All airport expansion proposals are likely to require significant investment in road and rail links. Some of the investment is directly and wholly related to the airport expansion project, whilst other investments, although directly related to the airport expansion (e.g. rail connections at Heathrow Hub), will also accommodate demand growth generated by wider economic growth in the UK. Our proposals also provide an opportunity, agreed in principle with Network Rail, to hypothecate committed expenditure from other rail enhancement projects, which would not be required as a result of our proposals. These issues will be addressed further in our forthcoming surface access paper.

In respect of increased road capacity it will be necessary to determine the forecast growth in demand with/without airport expansion. The road traffic forecasts should take into account the impact on airport related demand that the enhanced rail connectivity at Heathrow Hub provides. This additional analysis will enable the future costs of upgrading road links in a do nothing scenario to be understood, and therefore enable a fair apportionment of road costs between the project and the government.

In respect of the rail links there is also a requirement to understand the growth in demand for rail capacity under the do nothing scenario to ascertain the baseline investment that would need to be made in the event that the expansion did not progress. Again the broader benefits of the investments across the network should be taken into account when determining what proportion of rail costs should be allocated directly against the proposal.

Private Sector Investors

Globally, and in the UK, private sector investment in airports is well established. However the ability of the sponsors of an infrastructure project of this scale to raise the necessary finance is determined in part by the risk/reward profile of the scheme and in part by the market conditions at the time of financing. Whilst project sponsors can positively influence the former, as can the government, the latter is outside of both sponsor and government control.

The lengthy timeline for the development of major infrastructure projects is also such that it becomes more challenging to bring these projects to market in line with favourable finance market conditions. Project costs may be impacted by prevailing finance market conditions, and in the worst case delivery may be delayed.

To attract private sector investment the project must be delivered under a clear regulatory framework that provides predictable returns and demonstrate an attractive business case with visible and acceptable allocation of risk.

Our proposal is seen as having the strongest potential to meet the above criteria:

- Clear regulatory framework – the existing RAB model has proven to be acceptable to HAL's current private sector investors (equity and debt) – an investor base which includes some of the largest global funds.
- Predictable returns – the RAB model provides good visibility on future returns.
- Business case – our proposal is anticipated to have reasonable overall costs and we therefore think it gives most potential to offer an attractive business case.

- Risk allocation – we have undertaken wide ranging early consultation with stakeholders in relation to risk and this will continue as the project develops

Equity Investment

Equity investors in the infrastructure sector are in general seeking long-term investments with stable and predictable returns. Market regulation is not an obstacle to investment, and in the case of the RAB model currently in operation at Heathrow it is seen to be beneficial in providing the necessary certainty in respect of the major and ongoing capital investment programme.

The attractiveness of the sector to equity investors is further evidenced in the current ownership of/recent transactions within the UK airport market. Globally the emergence of the secondary (re-sale) market for airport equity is also seen to be encouraging,

The airport sector is seen to be attractive to a range of equity investors including infrastructure funds, pension funds and sovereign wealth funds, with the latter two in particular seen as having the ability to make long-term investments.

Our proposal is also seen to offer equity investment opportunities for commercial property developers/commercial property funds at Heathrow Hub, which are likely to have different investment criteria than pure infrastructure funds.

Debt finance will be essential in respect of the delivery of the privately financed elements of the proposal.

As detailed in KPMG's report to the Commission,[13] the scale of the investment required is substantial and there are broader risks relating to the ability/capacity of the market to handle such a large transaction. Whilst this risk is common to all proposals, our proposal - by offering the potential to split the investment between sponsors (i.e. HAL developing airport element and RIL/3rd party developing Heathrow Hub), and by careful phasing of the capital expenditure - reduces this risk compared to the alternative schemes. Our proposal is also seen to offer significant benefits in respect of mitigating other key project risks – the single UK hub model is seen to be favourable to the financing of the project.

Debt Finance

No discussions with HAL as to the financing strategy have been undertaken, but it is assumed that the company would raise the finance for the construction via a combination of syndicated non-recourse loans and bond finance.

The majority of HAL's current net debt comprises bond issues. Current investment grade ranges from A- to Ba3, depending upon where in the corporate structure the debt is held.

In terms of assessing risk relating to the airport aspects of the RIL scheme then the credit ratings for HAL bonds provide insight into issues of key concern for the finance community:

- Traffic risk – Heathrow's position as a hub airport located in a strong origin/destination market mitigates traffic risk (i.e. assessed to be a resilient market), albeit that current capacity constraints are seen to mitigate against variation in demand during economic cycles
- Regulatory risk – the transparent price cap regulation set on five yearly cycles by the Civil Aviation Authority (CAA) offers both advantages and disadvantages, with

[13] High-level Commercial & Financial Assessment of Selected Potential Schemes, KPMG, December 2013

uncertainty increasing in the run up to each settlement. However overall the regulatory mechanism has to date been key in providing sufficient transparency and certainty in respect of both capital investment plans and returns to support HAL's long-term financing requirements
- Track record – HAL has a track record of delivering major investment programmes on time and on budget. HAL is seen to be satisfactorily managing the on-going investment requirements – i.e. expansion and replacement capital investment programmes.

In addition to the above business factors, credit risk is also related to the level and structure of debt held within the business. This is an area for further investigation in conjunction with HAL.

In respect of the debt finance required then early engagement with the European Investment Bank (EIB) is a possibility. EIB support for large scale infrastructure projects is helpful in attracting other investors.

The EIB also offers a range of structured finance and loan guarantees that can help enhance credit quality, with potential cost savings in relation to the senior project loans.

If the Heathrow Hub interchange is developed separately from the airport element of the scheme (i.e. by RIL or a third-party developer), then it is assumed that the debt financing options will be weighted in favour of syndicated loan finance, especially for the initial phases of the project. There is some additional risk relating to this element of the project due to its position outside of the RAB and its status as a greenfield development as opposed to an expansion of an existing operation. However Heathrow Hub has the potential to attract investors specialising in both the infrastructure and commercial property markets.

Feedback from Investors

We have discussed our proposals with a range of equity and fixed income analysts and research personnel from institutions including Credit Suisse, JP Morgan, Liberum Capital, HSBC, Deutsche Bank and Barclays.

While the following summary of comments is non-attributable and represents personal commentary, we would be happy to facilitate direct discussions with the Commission.

Expansion at Heathrow presents the most logical option and safest place for investment:

- *Expansion at Heathrow is the lowest risk option from a financial perspective as it is clear that the demand exists to fill the slots, largely irrespective of future airline and aviation demand scenarios*
- *The slot price evidence makes clear that a slot at Heathrow is valued highly*
- *The presence of pent-up demand at Heathrow (from all carrier types, including those seeking to serve emerging markets) compared to the situation at Gatwick (which is effectively used for low cost, plus spill-over routes), means that modelling Heathrow expansion can be done much more reliably than Gatwick. This is key for international investors*
- *Evidence suggests that airlines are unwilling to commit to Gatwick and alliances will be reluctant to move somewhere untested – major airlines are sticky in their behaviours.*
- *Expansion at Gatwick relies on a highly specific set of assumptions which markets see as implausible and inherently high risk. In contrast expansion at Heathrow would be likely to succeed in a much wider range of market scenarios*
- *It is seen as important that Government recognises that there are few if any levers to influence commercial decisions by airlines,.*

Heathrow has an attractive investor track record:

- *Heathrow has an A- debt rating and is popular with investors*
- *In contrast Gatwick is BBB+ and yields reflect this. It has also only raised small amounts historically*
- *Heathrow's take-up of bond issues has been top decile with substantial support from international investors*
- *Heathrow has issued over £10Bn of debt with current yields around 3.2%*
- *In contrast Gatwick's funding (£1Bn outstanding) has a yield around 4.5%.*

A hub at Heathrow is likely to be consistent with LCC and point-to-point growth scenarios:

- *The LCC model is slowing its growth (see 14th May submission, Section 2.2)*
- *Evidence from the US provides a precedent for such a slow down as markets mature (see Section 2.2)*
- *Short haul will continue to be a battleground but it seems likely that the blurring between ultra low cost (Ryanair), low cost (easyJet), short-haul operations like Vueling will continue as growth falters in the pure short haul low cost model*
- *Based on orders for new aircraft, it is clear that the next 10-15 years will be a period of continued growth in the airline industry. Both Boeing and Airbus are increasing production rates and order books stand at record levels ensuring a strong supply of new commercial aircraft.*
- *We should expect Emirates to continue expanding and they, as of April 2014, had an outstanding order book of 370 aircraft with a value of US$162bn.*
- *The Asian and Middle Eastern airlines are developing and also have large order books. The manufacturers envisage China being a major recipient of new aircraft for the next two decades and the Chinese outbound market is expected to grow very strongly in particular.*

In contrast funding Gatwick expansion is problematic and risky:

- *There has been spare capacity at Gatwick for a considerable period - however it is not possible for policy makers to change airline demand patterns without significant, and potentially legally challengeable, financial incentives and/or regulatory changes*
- *Relative to RAB, Gatwick's need for capital is extremely large. More equity would be needed, demanding a higher return or Government guarantees.*
- *The necessary private finance for Gatwick's expansion could be dependent on Government making what would be presumably legally binding and long-term undertakings preventing similar expansion at Heathrow. One of Gatwick's bankers believes that without, this assurance, the airport would be likely to find it highly challenging to raise the necessary funds at the current yields*
- *In considering the funding of Gatwick's proposals, the market would be concerned about the possibility of Heathrow being allowed to expand; if it believed this could happen, even in the longer term, the Gatwick case would be seriously threatened*
- *It is highly likely that securing any agreement to constrain Heathrow's capacity, without the willing participation of HAL, would be difficult and open to legal challenge. The 1979 agreement between West Sussex County Council (WSCC) and Gatwick Airport's former owners, British Airports Authority (BAA), which provided a binding undertaking preventing construction of a second runway for a period of 40 years, had a different legal basis in being willingly entered into by the airports owners.*
- *A twin hub model has been tried before, both at Gatwick itself (BCal and BA) and overseas, eg; Tokyo (Haneda and Narita) and Rome (Fiumicino and Ciampino) and has failed each time.*

Funders are concerned that Gatwick seems to rely on the assumption that increasing supply inevitably increases demand. Experience however suggests that an expanded Gatwick may not attract and retain airlines in the way they assume. New entrants may appear in the early years but it seems unrealistic to assume that this will be sufficient to fill capacity to the extent necessary to provide a return on investment costs in the payback period demanded by investors. If demand does not appear, or growth is slower than anticipated, then user charges may need to increase beyond forecasts in order to continue to provide a satisfactory return on investment, leading to a vicious circle of increasing costs further depressing demand.

This would be a severe threat not only to the airport, but also to the UK economy, where new capacity would be delivered in the wrong place, resulting in say twenty years of lost opportunities for expanding capacity where demand existed. It is likely that this would have a serious adverse impact on the UK's competitiveness and FDI perceptions.

Even a recommendation by the Commission in 2015 to proceed with Gatwick expansion in preference to Heathrow could have adverse impacts on investment. Existing companies whose locations are determined by ease of access to Heathrow are likely to question future investment, and new inward investors could well be discouraged by policy signals that seek to constrain Heathrow's competitiveness. Even the current uncertainty appears to be deterring investment in one of Europe's powerhouse economies, and a critical UK asset:

'Thames Valley Chamber of Commerce have already experienced a reluctance to invest in the Thames Valley by foreign businesses owing to the uncertainty which exists around future aviation provision in the region' – Report to Cabinet, Slough Borough Council 16th July 2012

6.3.5 *Public Sector Finance*

There are a number of potentially relevant central and local government sources of finance that could be used to fund elements of the proposals. These include:

- Treasury loan guarantees (subject to State Aid)
- Department for Transport (DfT) finance for roads and rail
- Rates retention
- Community Infrastructure Levy (CIL) and S106 payments.

Our initial analysis suggests:

- Heathrow expansion is a promising project for Treasury loan guarantees
- Heathrow is estimated to generate significant existing rates revenues of around £200m pa
- There is the potential to generate additional revenues through rates retention mechanisms which we estimate at around £60m pa
- Depending on how CIL is defined (via Regulation 123 lists) there could be significant potential to generate S106 and CIL[14] revenues, though this would represent additional costs to HAL and/or the developers of Heathrow Hub.

In general terms it is possible to comply with State Aid requirements and/or be granted exemptions if investment is in public infrastructure (i.e. for the wider benefit of society) and/or market failure can be demonstrated.

We believe that our rail proposals deliver significant wider benefits as they are not dedicated airport services, but instead increase capacity on the rail network and open new journey opportunities for non-airport passengers. Work with Network Rail and TfL also suggests the potential for our proposals to assist in defraying or avoiding infrastructure work elsewhere on the public transport network.

[14] Our cost consultants estimate a CIL payment of £50m. Our calculation of CIL based on current rates suggests a lower cost but we have made an allowance for potential increase in CIL rates at the time the application is determined.

We see the issue of public sector finance as particularly relevant to surface access proposals. For example, our discussions with Network Rail have confirmed the principle of the possibility of hypothecating savings from committed and other rail schemes (e.g. Western Rail Access to Heathrow, Great Western Main Line platforms at Old Oak Common interchange) which would not be required with our proposals. This would make a significant contribution to the capital cost of our surface access proposals, whilst our demand forecasts suggest the potential for significant additional rail revenues from providing access to Heathrow. There is also the precedent of privately developed and operated rail stations (e.g. Southend Airport, Warwick Parkway) which would assist in defraying the cost of new rail infrastructure.

6.3.6 *Outline Financial Model*

The balance between private and public sector funding will be influenced by a number of factors – many of which are not clear at this stage. We suggest that the Commission considers developing appraisal scenarios as follows:

- All infrastructure: this scenario assumes all capital costs (including road and rail) are funded by private sector with charges passed on to users. This scenario could result in unacceptably high charges to users
- Airport infrastructure only: this scenario assumes only the capital costs of the airport investment are funded by the private sector under the current RAB model. This scenario is likely to result in marginal increases in airport charges to users. This scenario would identify the likely maximum requirement for public sector funding.
- Airport plus: this scenario would estimate the likely maximum acceptable user charges for an expanded Heathrow to calculate the percentage of total scheme costs that could be funded by the private sector at commercially acceptable levels of return. This scenario would identify the most likely requirement for public sector funding.

6.3.7 *Reactions of Rivals/Competitor Analysis*

Overview

The commission's revised guidelines placed an increased emphasis on competition within module 1. We make three central assertions in this arena:

- The dominance of Heathrow as a leading international hub is in danger of being eroded by overseas competition. There is an acute need to expand capacity to maintain the competitive status of the UK in international aviation. This is particularly critical when forecasts suggest that Europe may already be over-supplied with hub airports.
- Claims from Gatwick that its expansion would fuel a golden era of increased competition and choice for consumers lack plausibility. Moreover it is likely that Gatwick would emerge as a costly spill-over option, creating considerable risk for investors and potentially for the public purse in the event of any slowdown in demand.
- Heathrow Hub's proposal offers a unique competitive advantage over HAL's proposals by creating a new site where substantial competitive forces could be introduced for the benefit of consumers.

Range of Destinations and Competition for Slots

Our expansion plans add terminal and runway capacity at an affordable cost. Under EU regulations 50% of slots that become available must be made available to new entrant carriers. In order to create more competition it would be possible for ground facilities to be configured to meet the needs of new entrant carriers. The introduction of inter-terminal competition could also lead to a more diversified offering in contrast to HAL's current approach of designing all terminal facilities to meet the needs of full-service carriers.

As highlighted by HAL, considerable pent up demand exists for slots at Heathrow – both from incumbents and from new entrants. While the slot allocation rules will heavily influence the nature of growth, we can be relatively certain that competition would increase on popular routes and particularly in short haul travel. Furthermore, there is the possibility that high end LCCs (such as easyJet and Vueling) could operate from Heathrow in the future.

easyJet's CEO, Carolyn McCall has publicly not ruled out the possibility of easyJet operating from Heathrow. easyJet strategically targets the largest European routes and routes where there is a strong business content which makes the prospect of the carrier using Heathrow a possibility, particularly if the operational integrity of the airport is improved with additional runway capacity.

Vueling is the low cost airline arm of IAG, and is being used by the Group to fly short-haul services across Europe. As British Airways and Iberia seek to offer a cost competitive product in short-haul markets, it is possible that Vueling could do more flying from Heathrow (it already serves Heathrow on a very limited number of routes).

Heathrow currently serves over 172 destinations. With existing limitations on slot availability, airlines in general, and British Airways in particular, have to be highly selective about the use of scarce slot resources. This has led, in recent years, to a concentration of services to high yield, long haul destinations to the detriment of domestic and emerging market destinations. With more slots available to operators the expectation would be that carriers would seek to add frequencies to existing markets but also serve additional, new cities. In order for the UK to be competitive in the global marketplace, being connected by air to a wider range of cities in the emerging economies of China, Russia, South America, Africa and the Far East will be key benefit for the UK economy. By way of illustration, there are 178 international destinations served from Paris Charles De Gaulle (CDG) and Frankfurt that are not currently served from Heathrow.

With expansion in capacity and slots it is likely that airlines would seek to develop new routes to markets in Asia, particularly China, and Russia/Commonwealth of Independent States (CIS). The recent tie-up between Delta and Virgin could lead to increased capacity on US services, and there are potentially many more African and South American markets that could be served.

Heathrow can accommodate all principal airline economic models, and LCCs are increasingly recognizing the economic benefits of serving well-located airports. There is no evidence of airlines moving the other way.

Gatwick

It is envisaged that the UK airport most impacted by the expansion at Heathrow will be Gatwick. There is a clear preference amongst many airlines to serve Heathrow rather than Gatwick. This was highlighted at the time of the UK-US Open Skies agreement, which saw US airlines move services overnight from Gatwick to Heathrow once the deal was concluded.

Heathrow offers a stronger local catchment area than Gatwick, is better connected to the large population base in the Midlands and west of England, and the range of destinations served, coupled with having a based 'network carrier', means that Heathrow is able to generate significantly more connecting opportunities. Although aeronautical charges are higher at Heathrow, there is a significant yield premium at Heathrow versus Gatwick, which more than compensates for this.

Aviation Economics has for the period September 2013 to May 2014 been tracking fares on the Dublin route which is served from both Heathrow and Gatwick. Over this period average fares were 18% higher from Heathrow, which provides some evidence of the yield premium that exists at Heathrow versus Gatwick.

The lack of slots at Heathrow and their cost of acquisition has been a barrier to entry for airlines in general, and possibly for some airlines based at Gatwick that would prefer to operate from Heathrow. **Table 6.3** below shows a number of airlines/destinations that might move to Heathrow from Gatwick if capacity became available.

Table 6.3 Potential Routes Currently Served from Gatwick that could move to Heathrow

Route	Airline
Baghdad	Iraqi Airways
Beijing	Air China
Hanoi	Vietnam Airlines
Harare	Air Zimbabwe
Jakarta	Garuda (route being closed in 2014)
Kiev	Ukraine International
Minsk	Belavia
Saigon	Vietnam Airlines
Seoul	Korean

We do not envisage a major competitive reaction from Gatwick. For those long-haul carriers that may move operations from Gatwick to Heathrow given the opportunity to utilise newly available slots to operate from the higher yielding hub airport, we would envisage Gatwick would seek to offer these carriers some form of incentive package to remain at Gatwick. However, given the EU Directive on Airport Charges we do not see Gatwick being able to offer any meaningful deals to individual carriers that would alter their decision to move to Heathrow without diluting charges to other airlines serving the airport.

We do not see that the major incumbents at Gatwick, including LCCs such as easyJet Norwegian and Ryanair, and full service carriers such as British Airways and Virgin shifting their existing capacity away from Gatwick. We would envisage British Airways in particular wanting to maintain a presence at Gatwick Airport. For the LCCs, Gatwick is likely to remain the preferred choice of London airport, with a stronger yield than at other airports serving London (Luton, Southend and Stansted) and with the ability of the LCCs to compete against full service carriers enhanced to some extent as those carriers face higher charges at Heathrow as a consequence of the expansion.

It is possible that easyJet, and perhaps others, could provide services from Heathrow in the future. The airline has already indicated as much. However we would see this as additional capacity, rather than a shift of capacity away from Gatwick, Stansted, Luton or Southend.

UK Regional Airports

Today the only cities connected to the UK's premier hub airport are Aberdeen, Belfast, Edinburgh, Glasgow, Leeds, Manchester and Newcastle. The shortage of slots at Heathrow has led airlines to use slots previously used on domestic services, using narrow body, regional aircraft to be switched for use on international destinations, often served by wide body aircraft.

UK cities/airports that have lost their Heathrow service in recent times include Durham Tees Valley (MME), East Midlands (EMA), Guernsey (GCI), Inverness (INV), the Isle of Man (IOM), Jersey (JER), Liverpool (LPL), Newquay (NQY), and Plymouth (PLH). Leeds Bradford (LBA) lost its service, though it subsequently restarted following British Airways' acquisition of bmi.

Communities served by these airports continue to generate demand for air travel. Air passengers from these areas wishing to reach points not served by their local airport are faced with three options: reaching Heathrow by air from those cities still with an air service; by other means of transport (road or rail); or choosing to reach their final destinations by using other hub airports such as Amsterdam, Dubai, Dublin, Frankfurt and Paris (which may incur additional carbon costs).

The consequences of the lack of connectivity for these cities is hard to measure in economic terms, as is the fact that these passengers will be flying on foreign airlines rather than British carriers. Nonetheless, it should be of concern that the regional economies of the UK are, to an extent, dependent on the aviation policy of other governments – some within the EU and some not; and the strategies of non-UK air carriers. With the slot shortage removed as a consequence of a third runway at Heathrow, there is the possibility that these communities could regain their air services to the UK's only hub airport. This would introduce competition and increase passenger choice, as well as transforming FDI perceptions of UK regional accessibility.

We see little competitive reaction from other UK airports. Ensuring connectivity to Heathrow will remain a priority for those airports with an existing Heathrow service, and for those UK airports that do not have a Heathrow service, it is likely that they will try and secure one.

International Competitors

For the major European hub airports such as Frankfurt and Paris CDG we do not envisage any material competitive reaction.

The European hub airport that may be impacted most by an expansion of capacity at Heathrow would be Amsterdam Schiphol. Schiphol relies to a much a greater extent than Frankfurt and Paris on transfer passengers and has built up a strong network to many UK cities to provide Schiphol with such feeder traffic. If Heathrow expansion allows greater domestic connectivity in the UK with the hub airport then Schiphol may seek to offer airlines more attractive transfer pricing in order to maintain its share of UK originating feed. The fact that there is no Air Passenger Duty in the Netherlands means that Schiphol has, at present, some competitive advantage in terms of pricing for passengers.

Other Aspects of Competition

Our proposals offer a unique competitive advantage

It is frequently forgotten that airports derive around 50% of their revenues from non aeronautical sources – principally car parking and retail sources. Unlike user charges (which fall indirectly on the consumer), and are largely determined by regulation, competition in non-aeronautical services represents a potential area for rapid improvement. Our proposals create an opportunity for competition in a number of areas and, should passenger and baggage processing technology continue to develop, the Heathrow Hub interchange could potentially also provide passenger processing facilities in the future, delivering a further competitive force over time.

Our proposals could provide terminal infrastructure tailor-made for LCCs which require short aircraft turnarounds. This could apply equally for LCCs such as easyJet operating in short-haul markets as well as for carriers such as Norwegian and Air Asia X operating in long-haul point-to-point markets. Hence, as well as providing additional capacity for established carriers, our proposals would allow new entrants to compete with incumbents at the airport that is best located for the whole of the UK. Such competitive pressures would be likely to benefit consumers.

The possibility that a new terminal could be owned and managed by a new operator could introduce a further element of competition at the airport. The ability of a new operator to be able to offer choice to airlines and passengers with tailor-made terminal facilities and a differentiated pricing structure would create choice and mean that Heathrow Airport Limited would face direct on-airport competition ensuring that HAL managed its own airport infrastructure in an efficient manner. The introduction of inter-terminal competition would almost certainly require a change in the current regulatory structure which may well be welcomed by the airline community.

The impact of competition between airports is over stated

It has been suggested that capacity expansion at Gatwick would provide greater airline competition than equivalent expansion at Heathrow. This claim seems implausible.

Gatwick recognize that their proposals would result in their becoming a “medium cost” airport and would therefore be unlikely to attract substantial LCC growth, particularly considering trends for LCCs to seek attractive markets. Furthermore, it may well not attract any network carriers, who continue to show great reluctance – both in the UK and abroad – to operate from a secondary facility. The drift back to Tokyo’s Haneda from Narita shows that even long term attempts to seed new airports remote from markets can often fail. The total failure of Montreal’s Mirabel airport, intended to be Canada’s new hub, is perhaps the most extreme example. “Stickiness” is high in aviation, and while some growth would undoubtedly occur at Gatwick over time, it seems highly unlikely that a split hub would succeed.

The airline segmentation argument – and its significance – is overstated

The commission has speculated that the development of new long haul aircraft types with lower operating costs could introduce a new airline operating model and provide a case for new capacity at Gatwick. However, the vast majority of these aircraft are being ordered by network carriers and thus any benefits would be obtained at Heathrow as much as at Gatwick. Where new models might emerge, there is a far higher chance of success where they can draw on Heathrow’s much more attractive catchment and the synergies of a better connected airport with greater capacity.

Surface access provision is a major part of the consumer experience and competitive dynamic

Traditional analyses of airport and airline competition under regulation have focused on ticket prices and their relationship to user charges. In practice, ease of surface access is also highly relevant. As the CEO of Dubai Airports has recently stated: *“An airport is only as good as its ground transport links.”*

As well as being concerned about future competitive scenarios, the Commission should also be cognizant of a scenario where the sector contracts

While our proposal offers a perspective on growth in the industry, it should not be interpreted as being dependent on it. In any scenario, including much lower growth than forecast (e.g. in the event of another 9/11 event, pandemic or global recession), we seek to offer appropriate capacity, quickly and at relatively low cost.

Irrespective of the assumptions modelled relating to mix and the scale of aviation growth, our plan delivers sufficient capacity, in the right location, at minimal cost and without need for recourse to the public purse.

Summary

There continues to be speculation over the future of the network carriers, potential growth in long haul point-to-point and the LCC operators, and how these dynamics would interact as capacity grows at Heathrow or Gatwick. Much of this work seeks to portray a highly supply driven view of airline behaviour which is unlikely to emerge in practise. In summary, the studies conducted in recent years show clearly that:

- one hub is preferable to two

- capacity constraints are the major upward pressure on ticket prices
- airlines are sticky with regard to location, and
- the impact of regulation neuters traditional competitive analysis.

Furthermore, non-aeronautical services and surface access have historically been under-analysed in previous studies.

RIL/HHLtd seeks to embrace these realities and to create a plan which guarantees a competitive future for UK aviation and international trade, and which could facilitate increased competition within Heathrow to improve consumer choice and reduce airline operating costs.

6.3.8 *Risks and Uncertainty*

There are a number of sources of risk and uncertainty. One is the overall policy framework within which aviation operates and another is the particular risks associated with the expansion project.

Policy Risk

In terms of policy, fundamentally the future development of hub services in aviation depends upon a climate and environment within which airline services and airport infrastructure can grow together to respond to and meet the demands for connection to increasingly diverse world destinations.

The main delivery risks under this heading for any proposal are:

- There is insufficient policy direction to allow the necessary investment decisions to be made with any reasonable probability of success in terms of securing the necessary engagement of key stakeholders, permissions for investment and for investors to make appropriate returns.
- No airline or airline group is willing or able to develop hub services where sufficient demand exists and capacity is available.
- Airport capacity cannot be developed where there is demand for hub services.

The evidence is that demand will not be met by the existing pattern of airline and airport services as incremental growth runs up against the capacity constraints of the existing hub airport at Heathrow. There seems little appetite for airlines to develop an alternative hub elsewhere in the UK in general or London in particular. Developing an airport remote from established markets would be likely to see airlines serving smaller UK regional airports closer to catchments, relegating the UK to branch line connections to overseas hub airports. Also, in the very lengthy period to develop a new airport, Heathrow's existing facilities would be run down and, looking to future business locational decisions, companies may choose not to invest further in the UK, whilst FDI is unlikely to choose to locate either near an airport due to close, or in areas close to a new airport which have poorer quality infrastructure and local skills than established areas.

This proposal takes as its starting point that the outcome of the Commission's work will be to provide the necessary policy and statutory framework to develop the necessary hub airport capacity.

It addresses the issue of the demand for and the availability of hub services by building on the existing patterns of demand and supply. It does not require fundamental relocations of airline services, businesses and people to re-establish the existing hub position with all the attendant risks that in a world market the hub element of aviation services would end up being provided outside the UK.

Project Risks

In terms of the delivery of infrastructure any proposal contains risks associated with organisation, capital, permissions and permits, and attractiveness to those who wish to use it.

This proposal could make use of the existing Heathrow organisation to plan and procure the infrastructure. There are mechanisms available to allow the investment required to be reflected in charges so that funding is available. These could be introduced in Q7 commencing in 2019, which is around the time the major elements of construction could be in hand.

The objective of the approach is to make best use of the existing infrastructure and limit the overall physical spread of the airport. This limits the impacts to a relatively small region, generally in those areas where the population is already affected by the airport both beneficially in terms of jobs and opportunities and adversely in terms of noise and air quality. This is aimed at reducing the risks to obtaining the necessary permissions. It also limits the initial build costs and allows for some phasing of the development to control and spread the costs that are passed to airlines and their customers. This reduces the risk that the commercial viability of the development of a hub will be unattractive to airlines.

The masterplan contains a number of discrete elements that could be managed separately which would aid control of the project.

Approach to Risk in the Cost Plan

In developing the cost plan we have assigned varying categories of risk to different items. The categories depend upon matters such as the level of information available, the extent of external approvals required and the like.

Conclusion

Heathrow has consistently demonstrated its value to the UK economy and its attractiveness to airlines, in a continually changing and often challenging global market.

Expanding an asset of proven value, where considerable private investment has maintained its competitiveness, is inherently less risky than seeking to seed a comparable, competing asset in a location that has proven less attractive to airlines and which is remote from the principal UK markets.

Our proposals build on Heathrow's success and allow any conceivable market demand to be fully met in a way that is affordable by airlines and fundable by private capital at a competitive cost of capital. They would provide flexible capacity at far lower cost than HAL's, capable of facilitating fast turn rounds and likely to be attractive to LCCs as well as network airlines. Even if new long haul point to point/low cost airline models do emerge and are found to be economically sustainable, these are most likely to succeed where airports serve large established business markets with a high propensity to fly. Hence we believe that introducing new capacity to facilitate competition at Heathrow has overwhelming benefits for passengers, airlines and the UK.

We also propose a unique package of surface access improvements, transforming Heathrow's accessibility, spreading the benefits of Heathrow to more of the UK and also enabling background demand growth to be accommodated on already congested transport networks.

Supporting Gatwick expansion over Heathrow would effectively mean the UK betting its future connectivity and competitiveness on a single, highly uncertain future aviation market scenario – unprecedented and sustainable growth in long haul, point to point low cost carriers. It would also place at serious risk the continued competitiveness of the world-class economy that has developed around Heathrow.

It is also likely that the true cost of Gatwick expansion would be significantly increased as markets priced in risk to the cost of capital. Investors would perceive a worst case risk of an airport which had been doubled in capacity at huge cost, but which, as a result of increased airport charges and congested/non-existent surface access to markets, not only failed to attract new carriers but could actually lose some of its existing business where competitor airports might offer capacity at lower cost.

In contrast, Heathrow is likely to succeed with any conceivable future business model. Our proposals strengthen this inherent competitive advantage by providing the lowest cost, most flexible and simplest capacity expansion whilst also enabling competitive forces and delivering maximum utility for all airline economic models.

6.4 Planning

There are currently two routes the government can follow for obtaining planning permission for a scheme of this type: a Hybrid Bill; or a Development Consent Order (DCO) under the Planning Act 2008. Whilst Hybrid Bill would enable the scheme to become an Act of Parliament, the process can be lengthy and is more commonly applied to linear projects such as High Speed 1 and Crossrail.

For the purposes of this proposal we have made the assumption that the scheme will be considered a Nationally Significant Infrastructure Project (NSIP) and permission will be sought by applying for a DCO. However further review is needed to decide which is the most appropriate route. Part of this work needs to consider whether Heathrow Hub is a separate or combined application with the runway extension proposals.

Current guidance from the Airports Commission has outlined that a recommendation on the scheme to be taken forward will be provided in the summer of 2015 and it is anticipated that this will inform an aviation National Policy Statement (NPS). From this point, should this proposal be taken forward, we would expect to undertake work as soon as possible on the DCO pre-application process in order to meet the timeframes stipulated for the operation of the additional runway.

6.4.1 *DCO Process*

The planning application process for a scheme of this nature can be rigorous and involves consideration of many elements of planning legislation. We would seek to engage with the Planning Inspectorate at the earliest opportunity to ensure the process is in line with the legislative requirements and aviation NPS.

The proposed scheme spans five local authorities. This introduces challenges around potentially conflicting priorities from each of these authorities who will be key stakeholders alongside other statutory consultees such as the Environment Agency, Natural England, etc., throughout the DCO application process.

One of the risks with a DCO application is the length of time required for the process to be completed. This would mean that for a construction commencement date of 2018, pre application planning would need to start immediately alongside the environmental assessment and design work. This is not unusual however and the benefit of a DCO application is that all consents, including land Compulsory Purchase Orders (CPO), Highways Orders, Environmental Impact Assessment (EIA) and any necessary environmental permits are wrapped up within a DCO application.

A critical part of an infrastructure scheme of this scale is a detailed and accurate understanding of the land, its existing use, services, constraints and interests both in order to gain consent but also to correctly identify key stakeholders for consultation. As the detailed design is developed, land referencing searches will need to include any mitigation and/or compensation areas and potentially within the CPO.

6.4.2 *Other Legislative and Policy Requirements*

Although a DCO application includes all necessary statutory requirements, there are two areas which fall outside of this consenting regime: the de-designation of Green Belt land and compliance with European Directive Habitat Regulations.

Elements of the proposed scheme, including some mitigation areas currently sit in areas which are currently designated as Green Belt land. Should there be no viable alternatives outside of this designation at detailed design, we would submit representation to the relevant local authorities asking them to go through the process of de-designation to release this Green Belt in advance so that it does not act as a barrier to scheme development. This submission would consider the reasons for designation – such as whether the land has been designated as such in order to prevent unrestricted sprawl of large built-up areas, to prevent neighbouring towns from merging, to assist in the safeguarding the countryside from encroachment, to preserve the setting and special character of historic towns/features or to assist in urban regeneration by encouraging the recycling of derelict and other urban land. Green Belt boundaries can be altered through the local plans and we would work with the relevant local authorities to redefine if necessary through considering a sustainable development approach that would not lead to further urban sprawl. The risk associated with this process is that by running in parallel with the preparation of a DCO application, there is the potential for a delay in granting consent until de-designation has been completed.

However, we note that the site of the Heathrow Hub interchange contains a wide range of existing commercial activities, many of which are visually intrusive and represent inappropriate development with the Green Belt. Our strategy proposes wholesale demolition of these low density, sprawling activities and their replacement with a single, coherent and well planned development concentrated in a small part of the overall site. This would increase the openness of the Green Belt in this location, meeting one of the key objectives of designation.

As this scheme is situated within 365m of the South West London Waterbodies Special Policy Area (SPA), a Habitats Regulation Assessment Screening would be required to ascertain whether there will be any adverse effects to the SPA as a result of the proposal. This process would be undertaken in parallel with the EIA. Should a full Habitats Regulation assessment be required it would need to demonstrate that alternative scenarios had been considered and a case made to establish that the principles of imperative reasons of overriding public interest (IROPI) were met.

6.5 Engagement

6.5.1 *Introduction*

The proposals have been the subject of a wide-ranging community engagement programme. In particular, Heathrow Hub Ltd has engaged directly with local councils (councillors and officers), Members of Parliament, members of the London Assembly and local groups and other stakeholders to both inform them of the proposals and to seek their views on the key issues of concerns and how these concerns might be overcome.

In addition, the community engagement programme has sought to explain the benefits of the proposal and how these might improve the current situation for many people living in the Heathrow area.

6.5.2 *The Community Engagement Programme*

The key elements of the community engagement programme to date have been:

- A programme of face-to-face meetings with local councils (members and officers), Members of Parliament, members of the London Assembly and local groups and other stakeholders, the majority of which were led by Captain Jock Lowe, Director of

Heathrow Hub Ltd. The details of these meeting are set out below in Section 3 of the **Attachment 6-1** with the key issues raised at the meetings included in its Appendix 1.

- The publication of a factsheet, including details of the proposals, together with further details in the form of 'questions and answers' responding to the key issues raised during the community engagement programme. The factsheet has been available in hard copy format and electronically and is attached in **Attachment 6-1** as Appendix 2
- An interactive website http://www.heathrowhub.com/. The website includes details of the dedicated phone number +44 (0) 845 262 0159 and Email address, heathrowhub@quatro-pr.co.uk.

6.5.3 *The Programme of Face-to-Face Meetings*

A Programme of face-to-face meetings has been arranged with the following councils (councillors and officers), Members of Parliament, members of the London Assembly, local groups and other stakeholders:

- 17th October 2013 - Meeting with Kwasi Kwarteng MP (Conservative, Spelthorne)
- 14th January – Presentation to Spelthorne Borough Council
- 22nd January - Meeting with Alok Sharma MP (Conservative, Reading West)
- 3rd March – Meeting with John Stewart of HACAN
- 4th March – Meeting with Stanwell Moor Residents Association
- 5th March – Meeting with Bucks County Council
- 6th March – Meeting with Richings Park Residents' Association
- 12th March – Meeting with Mary Creagh MP, Shadow Transport Secretary
- 13th March – Presentation South Bucks District Council
- 24th March – Meeting with Hounslow Council
- 24th March – Presentation to Mole Valley District Council
- 25th March – Presentation to Surrey County Council
- 7th April - Meeting with Mary Macleod MP (Conservative, Brentford and Isleworth)
- 8th April – Meeting with Andy Slaughter MP (Labour, Hammersmith)
- 10th April - Meeting with Dr. Onkar Sahota MLA (Labour, Ealing and Hillingdon)
- 14th April – Meeting with Seema Malhotra MP (Labour, Feltham and Heston)
- 16th April – Meeting with South Bucks District Council (Meeting with Officers)
- 22nd April – Meeting with Slough Borough Council (Meeting with Officers)
- 6th May – Meeting with Hounslow Council (Meeting with Officers)
- 8th May – Meeting with Ealing Council.

In addition further meetings have been arranged with the following:

- June - Presentation to Colnbrook with Poyle Parish Council (date to be arranged)
- 11th June - Presentation to Windsor & Maidenhead Council Aviation Forum
- 29th July - Presentation to all Members of South Bucks District Council
- 15th September - Seminar for Surrey County Councillors

Unfortunately, a number of local authorities declined to meet members of the Heathrow Hub team because of their 'in-principle' opposition to Heathrow expansion, as follows:

- London Borough of Hammersmith & Fulham
- London Borough of Hillingdon
- Reading Borough Council.

Details of their written responses are included in a more detailed report on engagement contained at **Attachment 6-1**.

6.5.4 *The Key Issues Raised during the Community Engagement*

The key issues raised during the community engagement programme were:

- **Noise**, particularly in respect of night flights and early morning landings and the need to maintain the current ability to provide respite for residents living in the area
- **Surface Access** – more passengers should be arriving by train, there should be less congestion on the roads
- **Safeguarding** existing jobs and businesses in the Heathrow area
- **Minimising** the impact on local communities
- **Keeping** local disruption to a minimum, particularly around the M25.

Further detail of the concerns raised is included in the more detailed report on engagement containing in **Attachment 6-1**.

6.5.5 *Future Engagement*

We will continue to engage with local communities, their elected representatives and local stakeholders through a programme of further meetings, presentations and briefings. This will be supplemented by further information updates on our website and factsheets which will be distributed around and within the community. Our community telephone hotline will remain available for individual enquiries, as well our community email link through which local residents and groups can give their views and request further information. In addition we will providing the local, regional and national media with regular updates.

We will also work to develop a future programme of consultation and engagement on the specifics of proposals with the aim of taking on board feedback, achieving an appropriate consensus, and securing consents.