

Economic regulation of Heathrow Airport Limited: further consultation on regulatory framework and financial issues

CAP 1876



Published by the Civil Aviation Authority, 2020

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First published January 2020

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About this document

This document follows on from our March 2019 Consultation¹ on the regulatory framework for Heathrow Airport Limited (“HAL”) and sets out our evolving thinking on regulatory framework and financial issues for capacity expansion at Heathrow airport.

Views invited

We welcome views on all the issues raised in this document.

Please e-mail responses to economicregulation@caa.co.uk by no later than 5 March 2020. We cannot commit to take into account representations received after this date.

We expect to publish the responses we receive on our website as soon as practicable after the period for representations expires. Any material that is regarded as confidential should be clearly marked as such and included in a separate annex. Please note that we have powers and duties with respect to information under section 59 of the Civil Aviation Act 2012 and the Freedom of Information Act 2000.

If you would like to discuss any aspect of this document, please contact Dan Rock (dan.rock@caa.co.uk).

¹ See Economic regulation of capacity expansion at Heathrow: policy update and consultation (CAP1782) (“the March 2019 Consultation”) at: <http://publicapps.caa.co.uk/docs/33/CAP1782%20March%202019%20.1.pdf>

Executive summary

Introduction

1. This consultation updates our thinking on the regulatory framework for HAL as we move in to a key phase of our work on setting its next main H7 price control.
2. HAL published its statutory planning consultation on capacity expansion in June 2019 and its plans for expansion are phased over a 30 year period and require very substantial levels of investment. The first phase of expansion, which will involve the construction of the third runway and associated infrastructure, will be the focus of our work on the price control review (although we will also have regard to the longer term).
3. We are publishing this document just after HAL has provided its Initial Business Plan (IBP). We have not had the opportunity to review the IBP properly or integrate our thinking on the IBP into this document. Nonetheless, we plan to publish our thinking on the IBP in April 2020.
4. In December 2019, we published a consultation paper on the regulatory treatment of the early costs that HAL expects to incur to deliver capacity expansion. This paper noted that while the benefits to consumers of new capacity are not straightforward to quantify, they are likely to be substantial. This is consistent with what we have previously said about how additional runway capacity in the south east of England should benefit air passengers and cargo owners and that the timely delivery of more capacity should enable future consumers to have greater choice (and avoid higher airfares) and better service quality.
5. We have statutory duties to protect present and future consumers and secure that reasonable demands for airport services are met and must also have regard

to HAL's need to finance its activities and promote efficiency.² Taking our duties together with the potential benefits of new capacity for consumers suggests that the regulatory framework should enable the efficient delivery of capacity expansion. Nonetheless, in terms of both airports and regulated companies in the UK, the capital programme that HAL is proposing for capacity expansion is of unprecedented scale and complexity and it would be the largest privately financed infrastructure project in the UK. This means we will need a particular focus on:

- the financing challenge; and
- incentives for efficient delivery and the treatment of construction risk in the regulatory framework so that there are incentives for capacity expansion to be delivered in a way that is affordable for passengers and airlines.

6. In the March 2019 Consultation, we set out a financeability framework to help address these issues in a coordinated way, with a view to promoting the efficient financing of capacity expansion that can support affordable airport charges. This paper further develops this framework and sets out our updated views on:

- incentives for capital expenditure and risk allocation;
- allowed returns; and
- our approach to assessing financeability.

Our approach to the regulatory framework

7. Our approach to the regulatory framework builds on the approach presented in our previous consultations.³ In those documents, we have talked about the importance of combining incentives for efficiency with protections for HAL from

² Appendix A provides a fuller discussion of our statutory duties. In this consultation, the terms “consumers” and “users” are used interchangeably.

³ Including the updates and consultations published as:

- (i) CAP1610 (“the December 2017 Consultation”): see <https://publicapps.caa.co.uk/CAP1610>;
- (ii) CAP1658 (“the April 2018 Consultation”): see <https://publicapps.caa.co.uk/cap1658>; and
- (iii) the March 2019 Consultation.

undue risks, such that the regulatory framework should allow capacity expansion to be financeable and while also incentivising delivery at the lowest overall cost to consumers. It is also important that we avoid any undue complexity in developing the regulatory framework for HAL and have regard to the principles of better regulation, such that our approach is proportionate, targeted and transparent. Building upon this thinking, we have identified the following five policy aims that should facilitate the financeability framework as discussed in the March 2019 Consultation and the overall affordability and financeability of capacity expansion.

Aim 1: create a framework that enables the efficient delivery of capacity expansion

8. We aim to create a regulatory framework that will enable the efficient delivery of capacity expansion in a way consistent with the interests of consumers, as they should benefit from both new capacity and airport charges that reflect value for money.

Aim 2: deliver affordable charges in the H7 price control period

9. We will set HAL's H7 price control in a way that will allow capacity expansion to be financeable and provides for airport charges that reflect value for money, so to best protect the interests of consumers. To the extent it is practicable to do so, we will seek to meet the aspirations set out by the Secretary of State on affordability in 2016 (when the government announced that the northwest runway was its preferred location for capacity expansion) for no real increase in charges as well as meeting airlines' aspirations for affordable airport charges. In this light, we will aim to set charges in a way that is no higher than is necessary, provided that in combination with the other elements of the regulatory framework there are sufficient incentives for investors to make available the funds necessary to deliver capacity expansion.⁴

⁴ We published affordability and financeability analysis in the April 2018 Consultation and in our working paper "Heathrow expansion – affordability and financeability update" (CAP1812) ("the June 2019 Working Paper"): see <https://publicapps.caa.co.uk/cap1812>. These pieces of analysis highlighted the trade-off between charges

Aim 3: provide reasonable assurance about longer term affordability

10. Affordable charges are also important to airlines and consumers in the medium and longer-term, and would also support overall financeability by making Heathrow airport more competitive. Therefore, to make a longer term assessment of financeability, we need to be reasonably confident that the longer-term profile of charges is credible.
11. We will continue to produce affordability and financeability analysis that assesses the credible range of charges in the longer term with a view to making decisions on the regulatory framework that promote a credible and reasonable profile of airport charges in the longer-term.

Aim 4: enable efficient equity financing, risk allocation and incentives

12. Equity financing has a key role in allowing a business to manage risks and providing a financing buffer to allow the business access to relatively low cost debt finance. This will be particularly important during capacity expansion.
13. While the regulatory framework allows risks to be allocated to either HAL or consumers, there are advantages in developing arrangements that provide incentives for efficiency, but with these incentives calibrated in such a way that the risks on HAL:
 - are appropriate and proportionate; and
 - do not trigger undue increases in the cost of equity finance and the overall level of allowed returns (which might jeopardise affordability).
14. A key theme in our previous consultations on the regulatory framework for HAL has been to improve the incentives for the efficient delivery of capital expenditure. Such incentives can help to align HAL's incentives better with the interests of consumers and airlines. Our analysis in the April 2018 Consultation⁵ provided an initial assessment of the potential impact on HAL's returns on equity of new incentive arrangements. We intend to build on this approach during the

which are lower and benefit consumers more in the shorter term and charges which are higher and benefit consumers more in the longer term by enabling the financeability of expansion.

⁵ See the April 2018 Consultation.

price control review and will seek to set a price control under which HAL is exposed to appropriate risks (i.e. those that it is reasonably able to control or mitigate and which are proportionate to its capital base and the allowed returns profile of a relatively low risk regulated company).

Aim 5: expose debt finance to risks consistent with a low cost of debt

15. We have previously said debt finance will play an important role in financing the very significant sums required for expansion⁶ and set out our initial view that the H7 price control should be compatible with a “reasonable investment grade credit rating”⁷ to enable HAL to continue to access cost effective debt finance. This remains important and we will seek to develop the regulatory framework (including the incentive arrangements and associated risks and rewards for HAL) in a way that is consistent with our assumptions on credit ratings and assumptions on the cost of debt finance.⁸ This will mean exposing debt investors to risks consistent with a relatively low cost of debt and consumers benefitting from a lower overall level of allowed returns.

Incentives for capital efficiency

16. Chapter 1 discusses the advantages of new incentives for capital efficiency and the importance of carefully calibrating incentives so that they are consistent with an efficient approach to equity financing. This is central to aim 1 (create a framework that enables efficient financing) and aim 4 (efficient equity financing, risk allocation and incentives). Appropriate incentives for efficiency also support affordability, particularly in the medium and longer-term.
17. Incentives will expose HAL to some risk on the delivery of its capital expenditure programmes, but can also offer rewards for effective and efficient delivery, and chapter 1 explains how we intend to explore the development of new incentives and allocating risks in a measured and proportionate way. Where appropriate this approach will build on that which is used to set HAL’s current (“Q6”) price

⁶ See, for example, paragraph 1.19 of the March 2019 Consultation.

⁷ See paragraph 1.28 of the March 2019 Consultation.

⁸ See paragraphs 1.8-1.14 of the March 2019 Consultation.

control. We also intend to develop new incentives for capital efficiency. New capital efficiency incentives could clarify and strengthen the incentives on HAL (including by reducing returns in the event of construction cost overruns against cost baselines) and so would promote efficient and affordable delivery. Such an approach, including providing HAL with rewards for effective and efficient delivery, should also provide assurance to airlines that HAL's incentives are aligned with their desire to see capacity expansion delivered in a timely and efficient manner. Nonetheless, we will calibrate these incentives and allocate risks in a way that is appropriate and proportionate (including providing realisable opportunities for rewards) and does not unduly increase the cost of equity or jeopardise HAL's access to relatively low cost debt finance.⁹

18. We also set out our response to the concerns of respondents about new incentives and explain our next steps with respect to these matters.

Allowed return

19. Chapter 2 updates our thinking on the base level of allowed returns that will support the efficient financing of capacity expansion and be consistent with the incentive arrangements which will be designed to incentivise the delivery of capacity expansion at the lowest overall efficient costs.
20. We explain our latest views and position on the following elements of the allowed returns (or weighted average cost of capital (WACC)):
 - the “business as usual” cost of equity;¹⁰
 - the impact of expansion on the cost of equity;
 - the allowance for the cost of debt; and

⁹ To provide some context to the materiality of the allowed return, the Heathrow regulatory accounts for 2018 (see [https://www.heathrow.com/content/dam/heathrow/web/common/documents/company/about/regulatory-accounts/Heathrow-\(SP\)-Limited-Regulated-31-December-2018.pdf](https://www.heathrow.com/content/dam/heathrow/web/common/documents/company/about/regulatory-accounts/Heathrow-(SP)-Limited-Regulated-31-December-2018.pdf)) show a RAB of £16.2 billion and airport charges of £1.7 billion. One percentage point of allowed return would alone generate an annual allowance of £162 million, which equates to almost 10% of airport charges in 2018.

¹⁰ The “business as usual” cost of equity means the cost of equity that would apply if there were no capacity expansion

- the allowance for tax.

21. Although we discuss these different elements of the estimate of returns, we will also judge the appropriate cost of capital in the round, taking account of a broad range of analysis informing the different components of WACC. We are ultimately seeking to estimate a cost of capital sufficient to reward investors for an efficiently financed project, taking account of the risks that they will have to manage and incentive arrangements that will be part of our price control proposals.
22. Our approach to estimating the cost of equity finance is based around a two stage process: (i) estimating HAL's business as usual cost of equity; and (ii) making an extra allowance for the special circumstances of capacity expansion. Assessing the impact of capacity expansion will be particularly important and challenging given the scale of the investment programme, which is very different from the programmes typically financed by regulated companies. We will also consider the overall return for equity in the round having regard to the risks that HAL faces in the light of broader regulatory framework and incentive arrangements that will form part of the H7 price control.
23. Bearing in mind the challenges of the capacity expansion programme and that HAL will need to raise very significant amounts of new debt finance, the focus of the discussion on debt finance is the cost and regulatory treatment of new debt. Our aim is to create a regulatory framework that will support efficient and low cost debt financing. We note that expansion is of such scale that HAL will likely need to widen its access to a more diverse range of debt finance, including increased reliance on raising debt in currencies other than sterling.
24. Our approach is designed to appropriately remunerate debt costs (including non-sterling debt costs) while recognising that HAL's management should retain responsibility for managing its financing arrangements in a prudent and efficient way.
25. The allowance for tax was provided for in the Q6 price control as an element of the allowed return. In this consultation, we explore the possibility of setting a separate allowance for tax in a similar manner to the approach used by Ofgem

and Ofwat. Our aim is that consumers fund an appropriate allowance for corporation tax costs that better reflects the costs that are actually incurred.

Creating a financeable regulatory framework for expansion

26. Chapter 3 sets out our broad approach to designing a regulatory framework that should enable the efficient financing of capacity expansion and updates our thinking on a range of issues (in addition to those covered in chapter 1 and chapter 2) that will be important to financeability, including:
- Longer term certainty: consistent with our aims of achieving an affordable and financeable approach to capacity expansion, we consider the possibility of extending certain elements of the price control beyond the period during which HAL is expected to deliver the initial phase of capacity expansion and the new runway. We explain that longer term certainty is likely to be most suitable for the allowances for the cost of equity and the overall approach to incentives. This could promote a lower overall cost of equity finance and a smoother profile of allowed returns. Each of these considerations should support affordability in the short and medium term. It would be more difficult to set other elements of the price control for longer, as the possibility of forecasting errors could create undue risks that would push up the cost of capital and jeopardise overall affordability;
 - Equity commitment: given the reliance on HAL to deliver expansion and the importance of equity finance to overall delivery, we explain that we intend to ask HAL to demonstrate (as part of the H7 price control process) its ability to secure the necessary amount of equity financing;
 - Credit rating: to access the volume of debt necessary for expansion, HAL will need to be sufficiently credit worthy. In the March 2019 Consultation, we set out our thinking that the price control should be consistent with a “reasonable investment grade credit rating”. In this consultation, we explain our view that a credit rating materially lower than the existing A- rating would not be compatible with efficient financing;
 - Financial structure and gearing: we have discussed in previous consultations our use of a “twin track” approach to assessing financeability.

This would involve considering a traditional regulatory approach of assuming a moderate level of gearing and also an approach that would better align with the circumstances of the efficient financing of capacity expansion. We maintain the view that a twin track approach is helpful for assessing financeability and discuss the merits of assuming a whole business securitisation structure in the context of the efficient financing of capacity expansion.

- Equity financeability: the March 2019 Consultation discussed our approach to assessing debt financeability and this consultation focuses on our approach to assessing equity financeability. As we explain in our broad aims for the regulatory framework above, equity financing is important to support appropriate incentives and to create a financial buffer to allow access to cost effective debt finance. In chapter 3 we discuss how we should assess whether our price control proposals will provide sufficient rewards for equity financing.

The regulatory timetable

27. HAL issued its interim business plan in December 2019 and we were expecting it to provide a final business plan in July 2020, around the same time as it was expected to make a DCO application. Between now and finalising its business plan, we expect a period of constructive engagement with airlines and for HAL fully to support the next main programme gateway M5, when airlines will have an opportunity to express their commercial views on whether the capacity expansion programme should proceed.
28. We consulted on the regulatory timetable in July 2019 as part of our consultation on early costs. At that time HAL was targeting the opening of the new runway by the end of 2026. It is now clear that the wider timetable for capacity expansion will be delayed. For instance, HAL is now not expecting to complete the first phase of its capital expenditure programme and deliver a new runway until 2028 or 2029. HAL has also said its DCO application will now not be made until towards the end of 2020.

29. We are currently reviewing the timetable for our work on HAL's next main price control in the light of these developments and expect to provide an update on these matters in Spring 2020. Nonetheless, we have previously stressed there would be advantages for consumers in retaining the existing timetable for setting the H7 price control. This would involve us in making initial proposals for HAL's new price control in late 2020. These proposals would then be updated in Spring 2021 with the CAA's final decision on the H7 price control with associated licence modifications made in second half of 2021.
30. In the more immediate term, we plan to issue the following documents on the regulation of HAL and the H7 price control:
- early Category C costs decision document in late April 2020 or early May 2020;
 - an update on allowed returns and affordability to help inform programme gateway M5 and our views on HAL's initial business plan in April 2020; and
 - working paper / updates on capital efficiency incentives and financial ring fencing in Spring 2020.

Our duties

31. In developing this consultation, we have had full regard to our statutory duties under CAA12, which are set out more fully in Appendix A.

Structure of this document

32. The structure of this consultation document is as follows:
- chapter 1 deals with issues around developing our approach to the incentives on HAL to deliver its capital programme efficiently;
 - chapter 2 presents our thinking on issues related to the allowed return including the cost of debt and allowance for tax costs;
 - chapter 3 sets out our thinking on financeability policy matters, including equity commitment, credit rating, financial structure and gearing, regulatory depreciation and the approach to assessing equity financeability;

- Appendix A summarises our statutory duties;
- Appendix B describes our approach to making adjustments and allowances for corporation tax cost; and
- Appendix C presents our analysis of factors relevant to credit rating policy.

Chapter 1

Incentives for capital efficiency

Introduction

- 1.1 As we have explained in the Executive Summary we are seeking to develop a regulatory framework for HAL that facilitates the expansion of Heathrow airport in the most cost effective way practicable. Consistent with this approach we aim to create a package of measures that delivers both relatively low cost financing, but also incentivises HAL to deliver in a timely and efficient way, aligned with the interests of consumers and airlines. Developing this package is particularly challenging in the context of capacity expansion since it will require a large and complex construction programme over a long period of time.
- 1.2 There are clear advantages for consumers in efficiency incentives to encourage the delivery of capacity expansion in a way that is affordable. Nonetheless, in the context of such a large programme, we need to take particular care in developing and calibrating these arrangements to avoid allocating risks to HAL which are disproportionately burdensome. Doing so would require a higher level of allowed returns (to compensate for the risks), which would unduly increase airport charges and, so, would not be in the interests of consumers.
- 1.3 This chapter deals with issues around developing our approach to the incentives on HAL to deliver its capital programme efficiently and:
- summarises what we said in the March 2019 Consultation on these matters and the main points raised by respondents in response;
 - sets out our views on the way forward; and
 - explains the next steps in developing our work programme.

The March 2019 Consultation and stakeholder views

The importance of new incentives

- 1.4 In setting HAL's present price control, we relied on a number of mechanisms to encourage capital efficiency. These included:
- the classification of capital expenditure as core or development spending;¹¹
 - the use of capital expenditure triggers;¹²
 - airport/airline governance arrangements to help monitor spending; and
 - the scope for retrospective reviews of capital expenditure with the scope to disallow spending from the HAL's regulatory asset base ("RAB") if there is evidence of inefficient spending.
- 1.5 If the retrospective reviews show there is evidence of inefficiency, we can make proposals to disallow the expenditure from HAL's RAB, which would prevent HAL from recovering the costs of this spending through airport charges. This approach, combined with the high level scrutiny of HAL's plans at the time of the price review, and on an ongoing basis through the airport and airline governance arrangements, was designed to provide HAL with incentives for capital efficiency.
- 1.6 The March 2019 Consultation explained that we could strengthen these arrangements with new incentives under which HAL would bear a pre-determined share of any under- or overspend against the capital expenditure baseline used to set the price control. These new incentives could either replace or work alongside existing incentive arrangements (and the March 2019 Consultation discussed both improving existing incentives as well as new incentives). The broad rationale for this approach is that incentives based around a pre-determined budget have the potential to deliver greater focus on overall affordability, in part because the calibration of these incentives depends on setting cost baselines. Further, in the context of capacity expansion relying solely

¹¹ This distinction allowed the price control to be flexible to the emerging capital expenditure needs of the airport while retaining pressure (through airline scrutiny) to be efficient in meeting those needs.

¹² The use of capital expenditure triggers provides an incentive for HAL to deliver new capital projects timely and to deliver the full scope specified.

on reviews after projects have completed to disallow inefficient capital expenditure could be unduly burdensome and create perceptions of greater regulatory uncertainty and risk.

1.7 We set out two high level options for new capital efficiency incentives under which HAL would share the risk associated with any capital over- or under-spend against a cost baseline:

- a relatively weaker incentive applying to all capital expenditure; or
- a relatively stronger incentive applying to categories of capital expenditure over which HAL has greater control (so as not to expose HAL to the risks of cost variations in cost areas over which it has relatively less control).

1.8 The March 2019 Consultation also noted some of the practical challenges involved in developing new efficiency incentives and said that our work programmes would focus on these matters. In particular, we said we would:

- consider what might be a feasible timetable for setting a cost baseline and what levels of uncertainty might be associated with such a cost baseline;
- understand more about the likely phasing of HAL's capital programme and the key projects that are expected to be delivered during the H7 price control period; and
- work out at a high level the possible deliverables associated with key projects.

Stakeholder views

1.9 In response to the March 2019 Consultation, stakeholders expressed a range of views:

- HAL (consistent with its responses to previous consultations on improving capital efficiency incentives) said that new capital efficiency incentives were unnecessary and harmful to delivery of efficient and financeable expansion. It disagreed with the findings presented in the CEPA report¹³

¹³ We commissioned CEPA to develop high level options for implementation of capital efficiency incentives and to

and said that the conceptual frameworks have little practical use, and that Ireland's Commission for Aviation Regulation is adopting a framework similar to HAL's current one, moving away from *ex ante* controls. In addition, HAL formally asked the CAA to demonstrate the value for consumers of moving away from the current framework;

- airline representatives said that the CAA has not yet conducted sufficient analysis on what the scale of the problem or worked out what the likely costs of different approaches are likely to be. On this basis, they did not wish to engage in the detail of the CAA's proposals. They also said that the CAA should make existing processes work better and rigorously assess expenditure, only allowing efficient spending into HAL's RAB. In addition, they said that the CEPA proposals seemed to assume a static and fully worked out capex plan. They noted that this is not always the case, and that use of the Q6 core and development capex model sought to address these issues;
- one airline noted that, if it can be clearly demonstrated that improved incentives would be likely to protect consumers from the risks of capital cost escalation, it would be open to exploring the idea further. However, it also questioned whether there is enough time available for the CAA to resolve the issues raised and develop a robust set of new incentives that improves the regulatory process; and
- another airline said that there remains the clear requirement for rigorous scrutiny of forecast capital investment to ensure allowances are reasonable, as well as a rigorous retrospective review and scrutiny of actual capital investment, to ensure passengers benefit from capital investment efficiency.

consider the practical issues associated with each option. See:

https://www.caa.co.uk/uploadedFiles/CAA/Content/Accordion/Standard_Content/Commercial/Airports/CAA_ExAnteCapexIncentives_310319.pdf

Way forward

1.10 While we recognise the desirability of more effective retrospective reviews of capital efficiency, we are not clear that sole reliance on such an approach represents a practicable or effective way forward in the context of capacity expansion. In addition to these concerns about practicality, if we do not establish carefully calibrated new incentives it is likely to make it more difficult to deliver a regulatory framework that supports both financeability and affordability.

1.11 Without appropriate capital efficiency incentives, HAL's potential returns would not be linked to timely delivery of the full scope of works required. There would be a risk that HAL would not be properly incentivised to deliver capacity expansion in a way that would be affordable or most beneficial for consumers. We note the aspiration of airlines for us rigorously to scrutinise cost forecasts and, while we could seek to do so, without a commercial incentive on HAL not to understate its cost forecasts, we would be able to provide less assurance on affordability.

1.12 We are also conscious of the need to carefully calibrate incentives to deliver on our aim to create a framework that enables efficient financing and that:

- equity financing manages appropriate risks and incentives; and
- the regulatory framework is consistent with HAL retaining access to low risk and low cost debt finance.

Our previous consultations on the regulatory framework started to explore how new capital efficiency incentives could be consistent with these aims and we explain below how we intend to build further on this work.

1.13 In the context of capacity expansion, with a large, relatively novel and complex capital programme, similar considerations would apply to incentives based around retrospective reviews. There would be a strong case for us making explicit assumptions on the risks that HAL would face, the likely scope of possible future capital expenditure adjustments and for us to make assumptions on allowed returns consistent with these risks. We do not accept (as some respondents to the March 2019 Consultation appear to suggest) that incentive

arrangements can simply be constructed in an asymmetric way, because investors would want fair compensation for the risks and uncertainties that this would create, so unduly pushing up the level of allowed returns. Additionally, creating an incentive structure purely based on penalties would struggle to create a strong incentive for HAL to outperform baseline cost allowances. Hence, it may benefit consumers to reward HAL for delivering an appropriate scope of capital works under budget.

- 1.14 While we note HAL's support for the continuation of Q6 price control incentive arrangements, it has not however provided analysis of the above issues. In the circumstances of capacity expansion and new price control arrangements, it would not be appropriate simply to assume that the level of risk experienced at the Q6 price control review (in relation to the Q5 capital programme) reflects the appropriate level of risks for the H7 price control review.
- 1.15 Bearing the above discussion in mind, there is a strong case for continuing to explore new incentives that have the potential better to incentivise capital efficiency in a way that also supports both affordability and financeability. These new incentives would require HAL to commit in advance to a baseline level of capital expenditure (at a suitable point in time) against which its actual spending will be monitored and assessed, providing a degree of comfort and certainty to investors, lenders, airlines and consumers. Such a commitment to a baseline level of expenditure would require mature and reasonably robust cost estimates, supported by a process of engagement and challenge for stakeholders to have confidence in them.
- 1.16 We also consider that well designed incentives can provide the opportunity to reward HAL for delivering outcomes in a timely and efficient manner that are valued by users, including passengers. This could include meeting key milestones on time or early. We would look to develop incentive mechanisms that both reward good performance, while providing incentives to avoid poor performance.
- 1.17 In this context, we consider that any new capital efficiency incentives should have the following goals:

- to increase focus on a realistic expansion budget ahead of construction and create better incentives for efficiency: the development of new capital efficiency incentives will require a reasonable understanding of the project costs to set a baseline cost allowance and incentives. This should support understanding of the scope, timing, outcomes and cost of the project, as well as the risks around the timing and costs. Overall, we would expect this focus to provide a greater degree of certainty around levels and remuneration of capex to support longer term affordability and financeability;
- to reward HAL for delivering key outputs in a timely and cost efficient way and put a sharper incentive on it to manage risks effectively: as well as a cost baseline, the new incentives would need to be based around a set of deliverables and outputs. This would promote the efficient delivery of the outputs that benefits, and be key to furthering the interests of, consumers; and
- to mitigate the risks surrounding capital expenditure over- and underspending: the incentives should be appropriate and proportionate to the scale of risk and the level of control that HAL has over the potential over- and underspending. They should also help create an overall package that incentives delivery in an efficient way but does not unduly impact financeability, allowed returns and/or overall affordability.

1.18 Nonetheless, as we said in the March 2019 Consultation, new incentives are likely to be only part of the answer. We are looking to develop an overall package that provides the best prospect for timely and efficient delivery of an affordable and financeable expansion. A single form of incentive mechanism or approach is unlikely to be appropriate for all aspects of such a complex expansion project. We will also need to consider:

- how best to develop existing governance arrangements; and
- the appropriate use of retrospective reviews where this is the best approach for particular categories of costs.

- 1.19 For instance, as we have noted in the December 2019 Consultation document on early costs,¹⁴ there are significant difficulties in establishing cost baselines that enable us properly to assess efficiency. In these circumstances, we will rely considerably on expert reviews as a means of scrutinising HAL's costs, including the use of retrospective reviews (although we will also consider other options such as the comfort that might be provided by HAL "market testing" contracts and setting initial "top down" benchmarks where these tools are practicable).
- 1.20 However, the experience of our work on early costs also illustrates some of the difficulties with this approach. Without a sharp focus on the initial estimates of cost baselines provided by incentive arrangements the estimates increased by a factor of more than two. There is also a lack of clarity about the risk and reward that HAL's investors are exposed to and the relationship with the level of allowed return. Given the immediacy of the work on early costs, we consider that these arrangements represent a pragmatic solution, but it is not clear they could reasonably support the much larger capital programme associated with the H7 price control period.
- 1.21 We are also undertaking work on the retrospective reviews of Q6 capital expenditure projects. As part of this analysis, we will assess the lessons learnt for the H7 price control period and where and how retrospective reviews work best. We will also consider further the package of risks and rewards that should be associated with these incentive arrangements for the H7 price control period.
- 1.22 We have an open mind as to the way in which the operation of incentive mechanisms could feed through in to HAL's revenues. The adjustments to HAL's revenues that follow from the operation of incentive arrangements can either be made on an annual or periodic basis. The adjustments can also be made directly to revenues or to the RAB (in which case the impact of the adjustment will be amortised over an extended period of time). We will consider a range of options for how incentive arrangements should operate.

¹⁴ See the December 2019 Consultation for further information on our approach to these costs (CAP1871) ("the December 2019 Consultation"): see <https://publicapps.caa.co.uk/CAP1871>.

New incentives as part of an overall package

- 1.23 New capital efficiency incentives will need to fit within an overall package for expansion that works to further the interests of consumers, as well as taking appropriate account of the roles played by airlines and investors. It will be important for us to establish what impact capital efficiency incentives will have on the risks borne by HAL and consumers and show that this is consistent with an efficient cost of capital (in particular the cost of equity) and financeability. This will involve testing the capital efficiency incentives as part of the overall package of incentives for HAL, so that the overall package is affordable, financeable and works when considered as a whole. The analysis we have undertaken to date on the return on regulatory equity (“RORE”) and set out in the April 2018 Consultation,¹⁵ suggested that it will be possible to design proportionate capital efficiency incentives that are consistent with expansion being financeable.
- 1.24 The way risks are allocated in the regulatory framework and the approach we take to incentives will need to enable relatively low cost financing so that capacity expansion remains affordable and financeable. This will result in HAL taking a level of risk that is appropriate (i.e. that it can reasonably be expected to control) and proportionate to its capital base and allowed returns. An appropriate and proportionate envelope of risk will be developed to be consistent with these aims. Allocating too much risk to HAL would be counterproductive since it will lead to a higher cost of capital.
- 1.25 The regulatory and financial framework are closely intertwined because they provide the key elements of the overall financeability package. So, decisions we take on other elements of the regulatory framework (e.g. traffic risk sharing, approach to other incentives, whether we index the cost of debt finance) will have an impact on the capacity of HAL to take risks in relation to capital efficiency incentives. The details of incentive arrangements can also have an impact on financeability: for instance, capital efficiency incentives may need to allow for timely recognition of efficient spending in HAL’s RAB to support financeability.

¹⁵ See the April 2018 Consultation.