

MARKET INVESTIGATION INTO THE SUPPLY OF AIRPORT SERVICES BY BAA

Notice of acceptance of Final Undertakings pursuant to section 159 and Schedule 10 of the Enterprise Act 2002

1. On 29 March 2007 the Office of Fair Trading (OFT) made a reference to the Competition Commission (CC) under [section 131](#) of the Enterprise Act 2002 (the Act) concerning the supply of airport services by BAA in the United Kingdom.
2. The CC published its report titled [BAA airports market investigation](#) on 19 March 2009 (the report). In the report, the CC concluded that:
 - (a) there are a number of features of the markets for airport services supplied by BAA, which each (and, in certain circumstances, in combination) prevent, restrict or distort competition, and thereby have an adverse effect on competition (AEC) between airports and airlines:
 - (i) paragraph 5.42 set out the finding that Aberdeen's comparatively isolated geographical position, combined with other general factors that deter entry, are features that restrict airport competition and therefore give rise to an AEC;
 - (b) the CC should take action to remedy, mitigate or prevent the AECs and detrimental effects flowing from them and to that end undertakings should be given to give effect to the CC's decision on remedies specified in the report:
 - (i) Paragraph 10.215(a) concluded that the CC should require undertakings from BAA in relation to the publication of information and consultation comprising, inter alia, a requirement to publish audited accounts and segmental analysis on a depreciated replacement cost basis for Aberdeen together with other relevant information as indicated below. The accounts and other information should be independently audited and published on an annual basis and should include:
 - (1) segmental analysis of the value of tangible assets on a depreciated replacement cost basis split by major categories of aeronautical (ie fixed wing and rotary wing) and non-aeronautical assets;
 - (2) segmental analysis of revenue, operating costs and operating profit for major categories of aeronautical and non-aeronautical activities (as split in (1) above;
 - (3) depreciated replacement cost return on assets employed; and
 - (4) average annual yield for fixed-wing aircraft and rotary aircraft and (for the Civil Aviation Authority (CAA)/OFT only) average yield per airline.

Comparable annual figures should be provided for the last five years.
 - (ii) Paragraph 10.215(b) concluded that the CC should require undertakings from BAA comprising, inter alia, a requirement to consult at least annually with airport users and other relevant stakeholders at Aberdeen regarding its expected capital expenditure programme. This would require the timely publication of information on the airport masterplan, a summary forward programme of capital projects together with forecast costs and details of

individual key projects to the airlines and other interested parties and the creation of a forum for the proposals to be discussed.

3. On 5 May 2010 the CC accepted Final Undertakings in relation to paragraph 10.215(b) of the report (consultation at Aberdeen) from FGP Topco Limited, ADI Finance 1 Limited, ADI Finance 2 Limited, BAA Limited, BAA Airports Limited, BAA (Non Des Topco) Limited, BAA (NDH1) Limited and Aberdeen Airport Limited under [section 159](#) of the Act.
4. On 3 March 2011 the CC published a notice of proposal to accept Final Undertakings in relation to paragraph 10.215(a) of the report (publication of audited accounts, segmental analysis and other information relating to Aberdeen Airport).
5. The CC has decided to make non-material modifications to the Final Undertakings as a result of representations made during the statutory consultation period, and to accept Final Undertakings in the form attached. The Final Undertakings shall come into force immediately.
6. Undertakings accepted by the CC may be varied, superseded or released by the CC in accordance with [section 159](#) of the Act.
7. In accordance with [section 183](#)(4)(d) of the Act the reference is not finally determined until the making of the last decision or the taking of the final action necessary to effect all of the CC's decisions on remedies specified in the report.

(signed) Peter Freeman CBE, QC
Group Chairman
19 April 2011

THE SUPPLY OF AIRPORT SERVICES BY BAA

Final Undertakings in relation to the publication of relevant information for Aberdeen Airport given by FGP Topco Limited, ADI Finance 1 Limited, ADI Finance 2 Limited, BAA Limited, BAA (Non Des Topco) Limited, BAA (NDH1) Limited, Aberdeen Airport Limited under section 159 of the Enterprise Act 2002

On 29 March 2007 the Office of Fair Trading (**OFT**) made a reference to the Competition Commission (**CC**) under section 131 of the Enterprise Act 2002 (**the Act**) concerning the supply of airport services by BAA in the United Kingdom.

The CC published its report titled *BAA airports market investigation: A report on the supply of airport services by BAA in the UK* on 19 March 2009 (**the Report**). In the Report, the CC concluded that:

- (a) there are a number of features of the markets for airport services supplied by BAA, which each (and, in certain circumstances, in combination) prevent, restrict or distort competition, and thereby have an adverse effect on competition (**AEC**) between airports and airlines;
 - (i) paragraph 5.42 set out the finding that Aberdeen's comparatively isolated geographical position, combined with other general factors that deter entry, are features that restrict airport competition and therefore give rise to an AEC;
- (b) the CC should take action to remedy, mitigate or prevent the AECs and detrimental effects flowing from them and to that end undertakings should be given to give effect to the CC's decision on remedies specified in the Report;
 - (i) paragraph 10.215 concluded that the CC should require undertakings from BAA in relation to the publication of information and consultation comprising, inter alia, a requirement to publish audited accounts and segmental analysis on a depreciated replacement cost basis for Aberdeen together with other relevant information as indicated below. The accounts and other information should be independently audited and published on an annual basis and should include:
 - (1) segmental analysis of the value of tangible assets on a depreciated replacement cost basis split by major categories of aeronautical (ie fixed wing and rotary wing) and non-aeronautical assets;
 - (2) segmental analysis of revenue, operating costs and operating profit for major categories of aeronautical and non-aeronautical activities (as split in (1) above);
 - (3) depreciated replacement cost return on assets employed; and
 - (4) average annual yield for fixed-wing aircraft and rotary aircraft and (for the Civil Aviation Authority (CAA)/OFT only) average yield per airline.

Comparable annual figures should be provided for the last five years.

On 5 May 2010 the CC accepted final undertakings from FGP Topco Limited, ADI Finance 1 Limited, ADI Finance 2 Limited, BAA Limited, BAA Airports Limited, BAA (Non Des Topco) Limited, BAA (NDH1) Limited and Aberdeen Airport Limited under section 159 of the Act comprising a requirement to consult at least annually with airport users and other relevant

stakeholders at Aberdeen regarding its expected capital expenditure programme. This was in relation to the remedy set out at paragraph 10.215(b) of the Report.

In accordance with section 183(4)(d) of the Act the reference is not finally determined until the making of the last decision or the taking of the final action necessary to effect all of the CC's decisions on remedies specified in the Report.

Now FGP Topco Limited, ADI Finance 1 Limited, ADI Finance 2 Limited, BAA Limited, BAA (Non Des Topco) Limited, BAA (NDH1) Limited, Aberdeen Airport Limited (**the Aberdeen signatories**) give the CC the following undertakings in relation to Aberdeen Airport pursuant to section 159 of the Act. This relates to the remedy set out at paragraph 10.215(a) of the Report.

1. Aberdeen Airport segmental analysis

- 1.1 The Aberdeen signatories undertake to publish, on the relevant section of the Aberdeen Airport website, audited accounts and a separate document which contains the segmental analysis on a depreciated replacement cost basis for Aberdeen Airport together with other relevant information as indicated below.
- 1.2 The accounts and the document containing the segmental analysis and other information must be published on an annual basis no later than when the statutory accounts for Aberdeen Airport are filed at Companies House and shall include:
 - 1.2.1 segmental analysis of the value of tangible assets on a depreciated replacement cost basis split by major categories of aeronautical (ie fixed wing and rotary wing) and non-aeronautical assets;
 - 1.2.2 segmental analysis of revenue, operating costs and operating profit for major categories of aeronautical and non-aeronautical activities (as split in 1.2.1 above);
 - 1.2.3 depreciated replacement cost return on assets employed;
 - 1.2.4 average annual yield for fixed-wing aircraft and rotary aircraft and (for the CAA/OFT only) average yield per airline; and
 - 1.2.5 comparable annual figures for the last five years.
- 1.3 The Aberdeen signatories will send to the CAA and the OFT by email and by post the information specified in paragraph 1.2.4 (ie information that is to be supplied to the CAA/OFT only).
- 1.4 The Aberdeen signatories will prepare and present the accounts and segmental analysis in accordance with the methodology for segmental analysis for Aberdeen Airport (**the Methodology**) as set out in the appendix to these undertakings. The segmental analysis will be independently audited to ensure that the analysis has been prepared in accordance with the Methodology and has been reconciled to the audited statutory accounts.
- 1.5 The Methodology may only be amended with the written consent of the CC.
- 1.6 The Aberdeen signatories will first publish the accounts and other required information (including the Methodology) within twenty business days of the Notification Day or such other day as directed by the CC.

2. Notice

- 2.1 Should the Aberdeen signatories need to give Notice to the CC or the OFT in relation to any matter, including any factor affecting the performance of their obligations in accordance with these undertakings, they will give this Notice in writing.

3. Directions

- 3.1 The Aberdeen signatories will comply with such written directions or requests for information as the CC may from time to time give to take such steps as may be specified or described in the directions for the purpose of carrying out or securing compliance with these undertakings.
- 3.2 The Aberdeen signatories will comply with such written directions or request for information as the OFT may from time to time give to take such steps as may be specified or described in the directions for the purpose of carrying out or securing compliance with these undertakings.
- 3.3 The Aberdeen signatories will comply with such request for information as the CAA may from time to time give in connection with its role in assisting the OFT with the monitoring and enforcement of these undertakings.

4. Commencement

- 4.1 These undertakings shall come into force on the Commencement Day.

5. Termination

- 5.1 The Aberdeen signatories recognize and acknowledge that these undertakings shall be in force until such time as they are varied, released or superseded under the Act.
- 5.2 The variation, termination, release or supersession of these undertakings shall not affect the validity and enforceability of any rights arising prior to such variation, termination, release or supersession.

6. Effect of invalidity

- 6.1 The Aberdeen signatories undertake that should any provision of these undertakings be held by any court or tribunal to be contrary to law or invalid for any reason they will continue to observe the remaining provisions.
- 6.2 The Aberdeen signatories undertake that they shall not rely on any default or want of authority on the part of any BAA signatory or any officer or employee thereof in the execution of these undertakings unless directed to do so by the CC.

7. Interpretation

- 7.1 Words and expressions defined in the recitals to these undertakings shall have the same meaning in these undertakings.
- 7.2 These undertakings are to be interpreted and applied so as to give effect to the conclusions of the CC as to the need for remedies to the AECs stated in paragraphs 10.198 to 10.219 of the Report.

- 7.3 A notification under these undertakings may be given to the CC by giving it to The Remedies Manager, Competition Commission, Victoria House, Southampton Row, London, WC1B 4AD (email tim.oyster@cc.gsi.gov.uk).
- 7.4 A notification under these undertakings may be given to the OFT by giving it to Grahame Horgan, Deputy Director, Policy Group, Office of Fair Trading, Fleetbank House, 2–6 Salisbury Square, London, EC4Y 8JX (email grahame.horgan@oft.gsi.gov.uk).
- 7.5 A notification under these undertakings may be given to BAA by giving it to Carol Hui, General Counsel, Compass Centre, Nelson Road, Hounslow, Middlesex TW6 2GW (email carol.hui@baa.com).
- 7.6 For the purposes of these undertakings:

‘Aberdeen Airport Limited’ means the company of that name incorporated in Scotland with the number SC096622 and having its address for service in the United Kingdom at Aberdeen Airport, Dyce, Aberdeen, Scotland, AB21 7DU;

‘ADI Finance 1 Ltd’ means the company of that name incorporated in England and Wales with the number 05723977 and having its address for service in the United Kingdom at Compass Centre, Nelson Road, Hounslow, Middlesex, TW6 2GW;

‘ADI Finance 2 Ltd’ means the company of that name incorporated in England and Wales with the number 5723973 and having its address for service in the United Kingdom at Compass Centre, Nelson Road, Hounslow, Middlesex, TW6 2GW;

‘BAA Limited’ means the company of that name incorporated in England and Wales with the number 5757218 and having its address for service in the United Kingdom at Compass Centre, Nelson Road, Hounslow, Middlesex TW6 2GW;

‘BAA (NDH1) Limited’ means the company of that name incorporated in England and Wales with the number 06408392 and having its address for service in the United Kingdom at Compass Centre, Nelson Road, Hounslow, Middlesex TW6 2GW;

‘BAA (Non Des Topco) Limited’ means the company of that name incorporated in England and Wales with the number 6636117 and having its address for service in the United Kingdom at Compass Centre, Nelson Road, Hounslow, Middlesex TW6 2GW;

‘business day’ means any day other than a Saturday or Sunday on which banks are open for business in England;

‘CAA’ means the Civil Aviation Authority;

‘CC’ means the Competition Commission;

‘Commencement Day’ means the day on which these undertakings are accepted by the CC;

‘control’ includes the ability directly or indirectly to control or materially to influence the policy of a body corporate or the policy of any person in carrying on an enterprise or activity;

‘FGP Topco Limited’ means the company of that name incorporated in England and Wales with the number 05723961 and having its address for service in the United Kingdom at Compass Centre, Nelson Road, Hounslow, Middlesex TW6 2GW;

'Methodology' means the methodology for segmental analysis for Aberdeen Airport as set out in the appendix to these undertakings which can also be found at www.aberdeenairport.com;

'Notification Day' means the day on which acceptance of these undertakings is notified to BAA;

'OFT' means the Office of Fair Trading;

'Report' means the report of the CC published on 19 March 2009 and titled *BAA airports market investigation: A report on the supply of airport services by BAA in the UK*;

unless the context requires otherwise, the singular shall include the plural and vice versa.

..... Signature

FIDEL LOPEZ
MD Airports Division
BAA Limited
15 April 2011

..... Signature

COLIN MATTHEWS
Chief Executive Officer
BAA Limited
15 April 2011



Methodology for segmental analysis for Aberdeen Airport

BAA Limited
March 2011

1. Introduction

1.1 On 29 March 2007 the Office of Fair Trading made a reference to the Competition Commission (CC) under section 131 of the Enterprise Act 2002 concerning the supply of airport services by BAA in the United Kingdom.

1.2 The CC published its report titled BAA Airports Market Investigation on 19 March 2009 (the Report). In the Report, the CC concluded that:

“In relation to Aberdeen, we have decided to require undertakings from BAA: to require the reporting of accounting data and other relevant information; and to consult at least annually with airlines and other stakeholders regarding the airport’s capital expenditure programme.”¹

1.3 Undertakings from BAA to consult with airlines on the capital expenditure programme were agreed with the CC in May 2010.²

1.4 Paragraph 10.215 of the Report identified the key requirements for the reporting of accounting data and other information at Aberdeen Airport Limited (AAL):

“(a) A requirement to publish audited accounts and segmental analysis on a depreciated replacement cost basis for Aberdeen together with other relevant information as indicated below. The accounts and other information would be independently audited and published on an annual basis and would include:

(i) segmental analysis of the value of tangible assets on a depreciated replacement cost basis split by major categories of aeronautical (ie fixed wing and rotary wing) and non-aeronautical assets;

(ii) segmental analysis of revenue, operating costs and operating profit for major categories of aeronautical and non-aeronautical activities (as split in (i) above);

(iii) depreciated replacement cost return on assets employed; and

(iv) average annual yield for fixed wing aircraft and rotary aircraft and (for the CAA/OFT only) average yield per airline.

Comparable annual figures should be provided for the last five years.”

1.5 This document sets out the methodology for producing segmental analysis for AAL.

¹ Competition Commission (2009), ‘BAA airports market investigation, A report on the supply of airport services by BAA in the UK; Competition Commission’, Paragraph 33; 19th March

² For further details see the ‘About Aberdeen Airport’ page at www.aberdeenairport.com

1.6 The document is structured as follows:

- Section 2 outlines a number of general considerations that are relevant to assessing profitability and carrying out segmental analysis;
- Section 3 identifies the business segments that AAL will use for the purposes of segmental reporting;
- Section 4 sets out the basis for segmental analysis of the asset base and describes the method of allocating assets to the CC's proposed segments, asset valuation, inflation indices and depreciation;
- Section 5 describes the basis for allocating revenues and costs to the CC's proposed segments; and
- Section 6 sets out the method of presentation of the segmental analysis.

2. General issues with profitability analysis

- 2.1 A number of different metrics can be used to measure financial returns. In the context of economic profitability analysis, the conceptually appropriate approach is to use the internal rate of return (IRR) and net present value (NPV) measures.³
- 2.2 The IRR reflects the way in which firms make investment decisions in competitive markets. Specifically, the pattern of cash flows associated with economic activities typically has an initial cash outflow followed by a series of net cash inflows in subsequent periods. The net increase in value of the activity over time can be measured according to the NPV of cash flows. An alternative - and, in most cases, equivalent - measure is to consider what discount rate makes the NPV of the cash flows zero (i.e. the project's IRR) and to proceed with the investment if this IRR is greater than the company's cost of capital or hurdle rate. Moreover, in addition to this being a theoretically robust method of investment appraisal, it is the one most commonly used in the business world.⁴ The IRR and the NPV take into account the inflows and outflows of an activity over time, and reflect the economic principle of the time preference of money.⁵
- 2.3 While the IRR is the conceptually appropriate approach to measuring profitability, a number of measures can be used as proxies for the IRR under certain circumstances, including the return on capital employed (ROCE). However, proxy measures such as ROCE tend to diverge from the IRR in individual years, and in particular are sensitive to the valuation of assets used to estimate capital employed.

Depreciated Replacement Cost

- 2.4 The degree to which ROCEs are reflective of economic profitability can be improved by estimating capital employed based on the depreciated replacement cost (DRC) of assets. Nevertheless, ROCEs will remain proxy measures of economic profitability calculated according to the IRR based on actual cash flows.

³ See, for example, Oxera (2003), 'Assessing profitability in competition policy analysis', a report prepared for the Office of Fair Trading (OFT); and Morris, D. (2003), 'Dominant Firm Behaviour under UK Competition Law', paper presented to the Fordham Corporate Law Institute, October.

⁴ In a survey of 392 chief financial officers of companies in the USA and Canada, Graham and Harvey (2001) found that around 75% always or almost always use the IRR or NPV as their evaluation technique. Graham, J.R. and Harvey, C.R. (2001), 'The Theory and Practice of Corporate Finance: Evidence from the Field' *Journal of Financial Economics*, **60**, 187–243.

⁵ Kay, J.A. (1976), 'Accountants Too, Could be Happy in a Golden Age: The Accountant's Rate of Profit and the Internal Rate of Return', *Oxford Economic Papers*, **28**, 447–60; Edwards, J., Kay, J. and Mayer, C. (1987), *The Economic Analysis of Accounting Profitability*, Clarendon Press: Oxford.

2.5 Calculating DRC asset values raises the following considerations:

- The need to identify an appropriate starting point: DRC asset values can be rolled forwards based on an asset valuation at an appropriate point in time.
- The appropriate treatment of investment properties: What asset values for investment properties should be used for the purposes of the segmental analysis.
- The appropriate inflation indices to use: What inflation indices to apply to inflate historical asset values, and whether to apply different indices to different asset classes.
- The appropriate treatment of depreciation: How to treat depreciation for different asset classes, and whether deviations from the depreciation policies used in statutory, tax and regulatory (for London airports) accounts would be possible and economically justifiable.

Segmental Analysis

2.6 The CC remedy requires AAL to publish a segmental analysis of revenue, operating costs and operating profit for major categories of aeronautical and non-aeronautical activities. The analysis also requires AAL to identify the value of tangible assets on a depreciated replacement cost basis in each of these categories. The segmentation of an integrated business in the way outlined above raises a number of issues which are explored further in the remainder the document:

- The appropriate method for allocating assets to business segments: This is an important issue where assets (e.g. the runway) are used by more than one business segment (e.g. fixed wing and rotary operations).
- The appropriate method for allocating operating costs: This is an important issue where costs are incurred in the operation of assets that are used by more than one business segment, and where there are significant 'indirect costs' to allocate between business segments.
- The economic logic of splitting asset values between different business segments: Where assets are used by more than one activity it may not be economically meaningful to estimate the profitability for different business segments on the basis of only a proportion of the assets that are employed in supplying services.

2.7 The next section explains the approach to segmenting the Aberdeen business for the purposes of the segmental analysis.

Audit

- 2.8 The principal sources of data used in the preparation of the figures are the audited financial statements and unaudited management accounts, in addition to the specific additional calculations as set out in this document. As described in more detail later, the only difference between the operating profit shown in this document and that in the statutory financial accounts is due to the differences in depreciation costs.
- 2.9 As noted in paragraph 1.4 above, the figures will be independently audited and this audit will also cover the reconciliation between the figures and the statutory accounts.

3. Aberdeen Airport Business Segments

3.1 At the top level, the Aberdeen business will be split into two segments for the purposes of segmental reporting:

- **Aeronautical activities:** assets, costs and revenues associated with the provision of airport services to passengers and airlines that are directly related to the aviation side of an airport's business.
- **Non-Aeronautical:** assets, costs and revenues associated with the provision of services to passengers, airlines and other customers that are not directly related to the aviation side of an airport's business, such as retail, duty-free sales, the letting offices and provision of parking facilities.

3.2 Aeronautical activities will be further divided into:

- **Fixed wing operations:** assets, costs and revenues associated with the provision of fixed wing (i.e. non-helicopter) services to passengers and airlines; and
- **Rotary operations:** assets, costs and revenues associated with the provision of rotary (i.e. helicopter) services to passengers and airlines.

3.3 Non-aeronautical activities will be further divided into:

- **Retail:** comprising car-parking, car hire activities and shops in the terminal;
- **Property:** comprising maintenance, catering and cargo operations and staff car parking; and
- **Other:** comprising the fire training department buildings & equipment.

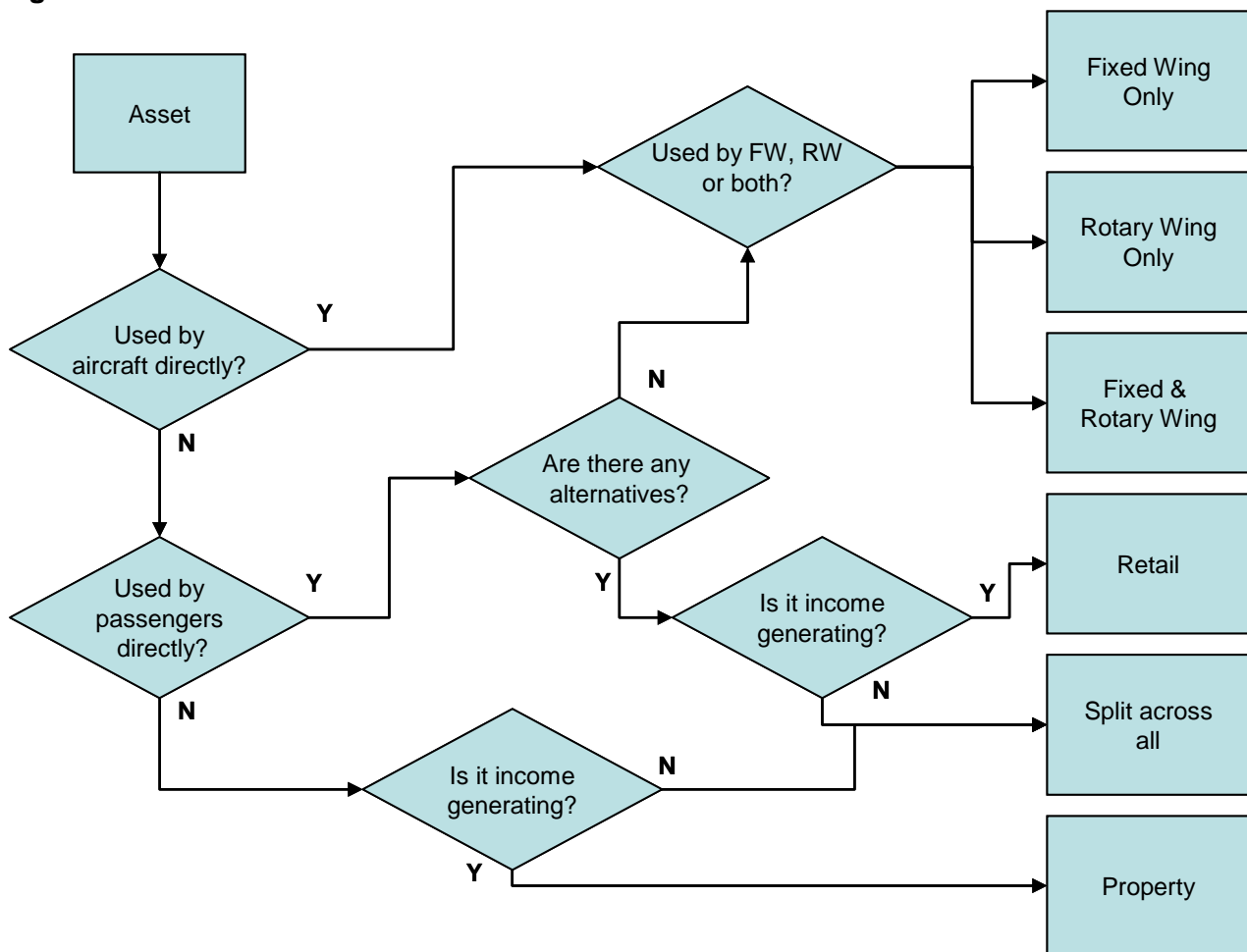
4. Assets

Asset Segmentation

4.2 Tangible assets at AAL have been analysed using the airport's fixed asset register. Where possible the assets have been allocated to one of the following categories: fixed wing, rotary, retail, property and other, consistent with the asset's primary use.

4.3 In undertaking this exercise, the flow chart shown in Figure 1 was used to guide the asset allocation process:

Figure 1 – Asset Allocation Flow Chart



Key:

FW = Fixed wing

RW = Rotary wing

4.4 The following questions were used to inform the allocation of assets, in support of the process outlined in Figure 1:

- Is the asset used by aircraft directly? Qualified by:
 - Is the asset used by aircraft directly to carry out air traffic movements (taxiways, runways, airfield lighting, parking areas)? Or
 - Is the asset used to support the operation of the airfield in order to meet legislative requirements, (predominately CAA CAP 168, which details the facilities, equipment and staff numbers required through categorisation (fire station, parking aids, lighting), but also includes all assets built to meet Scottish Environment Protection Agency (SEPA) surface water discharge consents into the nearby River Don (drainage systems, lagoon to capture and manage de-cant off airfield surfaces)?
- Is the asset used by fixed wing, rotary or both?
 - Depending where the asset is located on the airfield, the asset can be allocated to either category based on a plan of the airfield that shows actual takeoff, landing and ground movement data captured by the Airside Operations Team.
- Is the asset used directly by passengers? Qualified by:
 - Are the assets available for use by passengers? (terminal buildings, baggage system, shops, roads, car parks)? Or
 - Are the assets not available for passengers to use (typically support activities such as aircraft maintenance, cargo, offices etc).
- For assets used directly by passengers, do passengers have a choice in whether to use the asset?
 - This question is primarily to separate out those assets that are an inherent part of the passenger journey and those that are provided by AAL by way of choice for the passenger; this primarily separates security search and departure lounge assets from shops, car parking, etc.
- For assets that are not used directly by aircraft or passengers, is the asset income generating?
 - If it is income generating then it will either be Retail or Property dependent on the previous passenger use and choice questions. If not, then these are typically assets such as utilities and maintenance buildings.

4.5 Table 1 below summarises the key assets in each category to illustrate (at a high level) how assets will be allocated.

Table 1 Summary of allocation of assets

Segment	Assets
Fixed Wing	Aircraft parking stands (apron) Parking aids Apron lighting Other aircraft parking areas Southern taxiway Flying club & taxiway Terminal building Northern walkway
Rotary	H 36 runway H 14 runway H 23 runway Taxiway from heli aprons Leased apron areas Leased landside buildings
Retail	Short stay car parking Long stay car parking Car hire areas Shops in terminal
Property	Catering building Staff car parking Maintenance hangars Cargo buildings Leased hangars
Other	Fire training buildings & equipment
Common Assets	Road network Utilities distribution network Grass land

4.6 A proportion of assets at the airport are used by both fixed wing and helicopter operations. These assets typically consist of the various components of the airfield where both helicopters and fixed wing aircraft manoeuvre and the services and equipment that are commonly used for arriving and departing aircraft. These are detailed in Table 2 below.

Table 2 Summary of shared assets

Segment	Assets
Fixed & Rotary	Main runway East side taxiway Northern taxiway system Surface water quality system Approach lighting Airfield ground lighting & control system Winter maintenance equipment & buildings Fire station and vehicles Assets for NATS nav aids Control tower

Allocating the value of shared assets

4.7 AAL has identified three possible methods for allocating the value of assets that are used by both the fixed wing and rotary services, namely:

- Passenger numbers: allocate the value of the shared assets according to the relative number of passengers using fixed wing and rotary wing services - in 2008 this would have resulted in a 84% split to fixed wing and a 16% split to rotary;⁶
- Income generation: allocate the value of the shared assets according to the share of income generated by fixed wing and rotary services - in 2008 this would have resulted in a 81% split to fixed wing and 19% split to rotary;⁷ or
- Air traffic movements: allocate the value of the shared assets according to the relative number of air traffic movements by fixed wing and rotary wing services - in 2008 this would have resulted in a 67% split to fixed wing and a 33% split to rotary.⁸

4.8 The objective of the segmental analysis is to estimate as accurately as possible the replacement cost of assets used by each of the business segments. The method for allocating shared assets should, therefore, be reflective of the relative wear and tear on the assets caused by each category of use.

4.9 While rotary services generate a smaller proportion of passenger numbers, each helicopter movement has a similar impact to a fixed wing aircraft on the wear and tear of the runway and associated assets due to the downward force of the rotor wash. Therefore, allocating

⁶ Indicative values only

⁷ Indicative values only

⁸ Indicative values only

the shared assets on the basis of passenger numbers would tend to understate the value of assets employed in providing rotary services, relative to fixed wing services, which could lead to overstatement of profitability if this approach was adopted.

- 4.10 Allocating the shared assets on the basis of the relative share of income generated by fixed wing and rotary services would not necessarily reflect the extent to which assets were employed in the provision of these services, or the wear and tear on the assets created by aircraft movements. There is also a risk that allocating costs according to the share of income generated by the different services could introduce an element of circularity into the profitability analysis.
- 4.11 Given these considerations, AAL will allocate the proportion of shared assets between fixed and rotary segments based on their relative share of air traffic movements. This basis for allocating of costs is likely to be the most reflective of the value of assets used in the provision of services, and reflective of the general wear and tear caused by different aircraft types.
- 4.12 A proportion of assets at the airport are common to all business segments. As highlighted in Table 1, these assets include the road network, the utilities distribution network, and grass land. We have allocated these assets on the basis of revenue. While this is not a method typically applied in profitability analysis there is no alternative cost or activity based allocation that would fairly distribute the costs between the business segments.

Asset valuation

- 4.13 There are three possible options for valuing the AAL asset base on a DRC basis for the purposes of the CC segmental analysis:
- Depreciated 1996 current cost;
 - Depreciated full market valuation; and
 - Depreciated indexed historical cost.

The advantages and disadvantages of each are discussed in turn below.

Depreciated 1996 current cost (based on 1996 valuations)

- 4.14 The first option is to calculate the current replacement cost with reference to AAL's 1996 accounts which were prepared at an aggregate level under a current cost accounting basis.

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- 4.15 Nationalised industries were early adopters of current cost accounting (i.e. inflation accounting) as the government encouraged companies to apply this approach during the years when high inflation had a major impact on the UK economy. Statutory accounts were prepared on this basis for AAL until 1996.
- 4.16 In subsequent years inflation became less of an issue for the UK economy, and following privatisation AAL took the decision to conform with the majority of public limited companies at the time and prepare accounts under the historical cost accounting convention. Since 1997, AAL has prepared statutory accounts under the historical cost convention.
- 4.17 In endeavouring to retrieve the underlying fixed asset register for 1996, AAL has established that whilst the accounts were prepared under current cost accounting principles, the individual assets for AAL were recorded at historic costs in the sub-ledger. Assets were subsequently split into categories (e.g. property, plant and equipment), and re-valued to current cost at category level in the general ledger. The general ledger was then used as the basis for creating the published accounts.
- 4.18 Without the value of each asset at current cost in 1996, it would not be possible to apply the inflation indices to each asset and analyse the asset register between the segments of fixed wing, rotary, retail, property and other. AAL has therefore considered two further methodologies for establishing the depreciated replacement costs for AAL's assets.

Depreciated Full Market Valuation (based on 2009 valuations)

- 4.19 The second option is to undertake a full market valuation of the assets as at the year end (or any other appropriate date) for all assets. The one exception would be the category of plant, equipment and other, as these assets have shorter life cycles and lower valuations, hence a market valuation would be less meaningful. Instead these assets would have an inflation index applied.
- 4.20 Assets would be re-valued every five years by way of a full market valuation (Investment Properties and Land Held for Development would continue to be re-valued annually), and chosen inflation indices (see below for an explanation of appropriate inflation indices) would be applied for those years in between market valuations.
- 4.21 For the 'clean surplus relation' to hold, any movement in the valuation of assets between the current year and prior year (and hence changes in shareholder value) would flow through the profit and loss account in addition to being recognised in the balance sheet.
- 4.22 Assets would be depreciated in line with their asset lives used for statutory reporting (see below for an explanation of the approach to applying inflation indices).

4.23 This option can be implemented for accounts prepared from 2009 onwards, but does not allow for the calculation of comparable figures for the past five years. Inflation indices could be applied to re-state asset values as at 2009 in terms of previous years' prices. However, this would create an inconsistency with the accounts prepared from 2009 onwards. Specifically, asset values in future years where there is a full market valuation will not strictly be reconcilable by inflation indices to asset values in the year immediately prior to the market valuation.

Depreciated Indexed Historical Cost

4.24 The third option approximates the DRC value of operational assets with reference to their original historic cost, subsequent movements in prices (i.e. inflation indices) and an estimate of depreciation in line with asset lives used for statutory reporting.

4.25 Investment Properties and Land Held for Development on AAL's balance sheet in 1988/89 have been valued with reference to their open market value in 1988/89, subsequent movements in prices (i.e. inflation indices) and an estimate of depreciation.

4.26 Investment Properties and Land Held for Development coming on to AAL's balance sheet after 1988/89 have been valued with reference to their historic cost, subsequent movements in prices (i.e. inflation indices) and an estimate of depreciation.

4.27 For the 'clean surplus relation' to hold, any movement in the valuation of assets between the current year and prior year (and hence changes in shareholder value) would flow through the profit and loss account in addition to being recognised in the balance sheet. As these movements are not operating profits or losses, they do not flow through to the operating profit or loss figure shown.

4.28 This approach is preferred by the CC because it allows valuations to be maintained without recourse to periodic external valuations, and it also allows accounts for the five years prior to 2009 to be reported on a comparable basis to future accounts.

4.29 The following sections explain the approach to estimating Depreciated Indexed Historical Cost asset values for the purposes of the segmental analysis.

Implementation of the Depreciated Indexed Historical Cost approach

4.30 Table 3 provides a step-by-step explanation of the approach to estimating depreciated indexed historical values for operational assets and investment properties (including land held for development).

Table 3 Method statement for the preparation of Depreciated Indexed Historical Costs

Operational Assets	Investment Properties
<p><i>All operational assets</i></p> <ol style="list-style-type: none"> 1. For each asset, identify the date of addition to the asset register and its historical cost 2. Apply relevant indexation (see below) to the historical cost to revalue the asset to an indexed historical cost 3. Recalculate depreciation charge in the P&L using indexed historical cost values from above and statutory asset lives 4. Value additions to the asset base at historical cost, and then revalue in the same way outlined above 5. Deduct disposals from the asset base at their depreciated indexed historical cost 	<p><i>Assets added before 1988/89</i></p> <ol style="list-style-type: none"> 1. Take the asset value for investment properties reported in the 1988/89 AAL statutory accounts 2. Apply RPI indexation to the 1988/89 asset value to revalue the assets to a indexed 1988/89 value 3. Calculate depreciation charge for investment properties using indexed values from above and assuming a 50-year asset life (Note: Land held separately for development is not depreciated) 4. Include a depreciation charge for investment properties in the P&L 5. Deduct disposals from the asset base using the disposal value recorded in the statutory accounts <p><i>Assets added after 1988/89</i></p> <ol style="list-style-type: none"> 1. For each asset, identify the date of addition to the asset register and its historical cost 2. Apply relevant indexation to the historical cost to revalue the asset to an indexed historical cost 3. Calculate depreciation charge for investment properties using indexed values from above based on statutory asset lives (Note: Land held separately for development is not depreciated) 4. Add depreciation charge for investment properties to P&L 5. Deduct disposals from the asset base at their depreciated indexed historical cost

Calculation of indexed historical costs

4.31 To the extent that inflation indices will be used to implement an indexed historical cost approach, the asset base would be re-valued according to specific inflation indices, increased by the value of additions, and decreased by the value of disposals and depreciation. The revaluation formula would be:

$$V_{t+1} = V_t * \frac{I_{t+1}}{I_t} + A_{t+1} - D_{t+1} - Y_{t+1}$$

- Where:
- V = value of asset base
 - I = inflation index
 - A = new capital expenditure and additions to the asset base
 - D = asset disposals
 - Y = depreciation
 - t = year index

4.32 Additions to the asset base would be valued at book cost in the year they were acquired, and then re-valued as part of the asset base in subsequent years according to the equation above. As indicated in Table 3, disposals of operational assets (and investment properties added after 1998/89) from the asset base would be valued at depreciated indexed historical cost values. Disposal of investment properties added before 1988/89 would be at the disposal value recorded in the statutory accounts.

4.33 To ensure consistency between the balance sheet and the profit and loss account, statutory depreciation is replaced by replacement cost depreciation. Calculation of replacement cost depreciation entails replacing the gross book values of assets with indexed historical cost values and then applying the depreciation policy outlined below.

Application of inflation indices

4.34 Inflation indices that provide the closest proxies to changes in asset prices in each category should be used to capture movements in relative prices of different assets, as required by a replacement cost approach.

4.35 A range of indices could be considered to revalue terminal complexes, airfields, and group occupied properties, including the infrastructure, private industrial, and private commercial price indices published by the Office for National Statistics (ONS). These indices are constructed from tender price indices that reflect the prices paid by clients of construction

companies for new construction contracts.⁹ The ONS also produces the Construction Output Price Index (COPI) that is a weighted average of the underlying tender price indices.¹⁰

- 4.36 The selection of more specific rather than general price indices could provide more accurate current cost asset values but the increased specificity also increases the sensitivity of the index to the underlying sample of construction projects and hence increases the risk that the index is unrepresentative of the particular assets at AAL. The potential bias from using more specific indices has previously been recognised by the CC:

“We consider that although the infrastructure COPI (as measured by DBERR [Department for Business, Enterprise and Regulatory Reform]) captures all categories of airport investment including building, it may be [too] biased towards civil engineering projects (due to the inclusion of sectors such as water, railways, harbours, road and electricity in the DBERR index) to be fully representative of BAA’s construction activities.”¹¹

- 4.37 Measurement of trends in construction prices at a more aggregate level helps to mitigate the risk that price indices specific to infrastructure or private commercial construction are unrepresentative of trends in the replacement costs of AAL’s assets. COPI is the official measure of output price inflation in the construction industry - as recognised by the Competition Commission¹² - and ‘encompasses the utilities and transport-related construction activities including all types of airport construction activities (i.e. building and non-building).’¹³ AAL will therefore use COPI to revalue terminal complexes, airfields, and group occupied properties.

- 4.38 To the extent that plant, equipment and other assets are installed as part of the construction of airfield, terminal, and property assets, and the installation costs of these assets constitute a significant proportion of the overall asset values, it might be appropriate to apply the COPI to revalue plant, equipment and other assets. However, as this asset class consists primarily of manufactured products, it might be considered more appropriate to apply an index that reflects the cost of purchasing these assets rather than the installation costs. The Producer Price Index (PPI) of output prices published by the Office for National Statistics

⁹ Office for National Statistics (2009), ‘Construction Statistics Annual’.

¹⁰ The underlying indices are: public housing; private housing; infrastructure; public building; private industrial; private commercial. COPI was updated by the ONS in September 2010 as set out in Table A2.

¹¹ Competition Commission (2007), ‘BAA Ltd—A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd)’, report presented to the CAA, Appendix D, paragraph 161, September 28th.

¹² Competition Commission (2007), ‘BAA Ltd—A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd)’, report presented to the CAA, Appendix D, paragraph 176, September 28th.

¹³ Competition Commission (2007), ‘BAA Ltd—A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd)’, report presented to the CAA, Appendix D, paragraph 158, September 28th.

measures the price of goods sold by UK manufacturers or ‘factory gate’ prices. AAL will therefore use the PPI to revalue plant, equipment and other assets.

4.39 Operational land is not regularly re-valued and hence open market values are not readily available. Although a number of price indices might be considered, including residential development land and farmland price indices,¹⁴ no specific price index is available for operational land. Therefore, the value of operational land is assumed to be constant in real terms and as such AAL will index these assets by the Retail Prices Index (RPI).

4.40 AAL’s mapping of indices to asset categories is presented in Table 4 below, and the values of the inflation indices are presented in Table A2 in Appendix A.

Table 4 Mapping of inflation indices

Asset category	Inflation index	Notes
Investment properties	RPI	See Table 3
Land held for development	RPI	See Table 3
Terminal complexes	Construction Output Price Index (COPI)	n.a.
Airfields	Construction Output Price Index (COPI)	n.a.
Group occupied properties	Construction Output Price Index (COPI)	n.a.
Plant equipment and other assets	Producer Price Index (PPI)	n.a.
Assets in the course of construction	Dependent on intended use	Assets would be indexed according to the asset category they will belong to once constructed
Operational land	RPI	Although no value for operational land was reported in the 2008 accounts, it comprises part of the opening asset value as it was reported in the 1996 CCA accounts.

Depreciation

4.41 To apply a depreciated replacement cost approach it is conceptually appropriate for the depreciation policy to reflect the profile of decline in economic value of assets over time. Asset lives used for the purpose of statutory depreciation are intended to approximate economic asset lives. The ‘straight-line’ depreciation profile generally applied in statutory

¹⁴ For example, Knight Frank (2009), ‘Knight Frank Residential Development Land Index, Q3 2009 results—news release’, September 26th, and Knight Frank (2009), ‘Farmland prices rise for second quarter in succession, according to Knight Frank Farmland Index—news release’, September 30th.

accounts provides a reasonable approximation to the profile of economic depreciation, provided demand is evenly distributed over the lifetime of the assets.

4.42 Freehold and long leasehold investment properties are not depreciated for the purposes of statutory financial reporting, as these assets are held for investment rather than consumption.¹⁵ Depreciation is considered in the annual revaluation of investment properties but cannot be identified or quantified separately from other factors that enter into the revaluation process. However, for the purposes of estimating indexed historical cost AAL will use an asset life of 50 years for assets added in/before 1988/89; for assets added after 1988/89 AAL will use the asset lives used for statutory reporting purposes.

4.43 Operational assets (other than land and assets in the course of construction) are depreciated in equal instalments for the purposes of statutory financial reporting, over the course of their expected useful lives. The expected useful lives are shown in Table 5.

Table 5 Asset lives used for statutory reporting

Asset	Asset life (years)
Terminal building, pier and satellite structures	20–60 years
Terminal fixtures and fittings	5 –20 years
Airport plant and equipment:	15 years
baggage systems	7 years
lifts, escalators, travelators	20 years
other plant and equipment including runway lighting and building plant	5 –20 years
Airport tunnels, bridges and subways	50 –100 years
Runway surfaces	10 –15 years
Runway bases	100 years
Taxiways and aprons	50 years
Motor vehicles	4–8 years
Office equipment	5 –10 years
Computer equipment	4 –5 years
Computer software	3 –7 years
Short leasehold properties	over period of lease

4.44 There is evidence to suggest that AAL net book values understate the depreciated replacement cost of operational assets, because some assets that are still in use have been fully depreciated for statutory reporting purposes. This suggests that the application of statutory depreciation policies may understate the value of assets employed and overstate returns on assets employed.

¹⁵ In accordance with Statement of Standard Accounting Practice (SSAP) 19 'Accounting for Investment Properties'.

- 4.45 However, to implement economic depreciation would require a comprehensive reassessment of the remaining economic lives across all assets currently in use. The issues of how to treat assets that are currently fully depreciated and hence do not contribute to the value of the asset base on a historical cost basis, and how to manage the transition between statutory and economic depreciation for these assets would also need to be addressed.
- 4.46 Therefore, to avoid introducing additional complexity and potentially reducing the transparency of the process, AAL will depreciate assets in equal instalments over the expected useful lives used for statutory financial reporting. This is expected to provide a close approximation to economic depreciation. To the extent that there is a divergence between depreciation calculated under economic analysis compared to statutory depreciation policies, the application of statutory depreciation policies is expected to understate asset values and overstate returns on assets employed.

5. Revenues and costs

- 5.1 Segmental analysis will be prepared by allocating revenues and costs to the five headings of fixed wing, rotary, property, retail and other.
- 5.2 In the case of revenues, this will be relatively straightforward as invoices are largely specific to one or other segment. Aeronautical income is already split between fixed wing and rotary segments based on the invoices sent out each month. Similarly, retail and property income is separately identified on a monthly basis. Utilities income for electricity, telecoms etc is separately metered, and thus it is possible to allocate this income accurately across the five segments based on invoices. Income from terminal operations such as check-in desks and bag-screening has been allocated to the fixed wing segment as the helicopter operators have their own check-in facilities within their own campuses.
- 5.3 Direct costs can similarly be allocated to a specific business segment given that they typically relate to a specific segment.
- 5.4 Indirect costs are difficult to allocate as they generally relate to costs incurred in providing services to more than one business segment. There are two potential methods for allocating indirect costs between the five segments:
- cost drivers such as air traffic movements, passenger numbers, metered usage of utilities or utilisation of a service; or
 - income generation.
- 5.5 AAL will use the underlying cost driver methodology where possible, i.e. where utilisation data is available, costs will be allocated according to the cost driver on the basis that this is the most accurate reflection of the generation of the expenditure. An example of this would be the allocation of the payroll costs associated with the airport fire service. Each of the business segments benefits from the services provided by the airport fire service, and the underlying cost driver is the number of call outs made by the business. Data recorded by the fire service on the distribution of call outs would be used to allocate the fixed cost of the airport fire service to the five business segments: fixed wing, rotary, property, retail and other.
- 5.6 If the indirect costs relate solely to aeronautical activities, AAL will allocate costs on the basis of air traffic movements. For example, the payroll costs for the airside operations team will be allocated on the basis of air traffic movements as their work is largely centred on the manoeuvring of aircraft.

- 5.7 Where such information is not available or there is no alternative cost driver information, (for example on the allocation of payroll costs associated with the finance department), costs will be allocated on the basis of income.
- 5.8 A small number of costs will need to be allocated using judgements about the most appropriate approach to adopt. To ensure that the results give the most accurate reflection of profitability under each business segment, these costs will be allocated in consultation with Operational Management at the airport. For example, while security costs are predominantly associated with fixed wing processing, there is a small element attributable to retail staff and supplies passing through security, and a small element attributable to rotary due to patrols of the restricted zone around the rotary campus and auditing of security compliance. In this scenario Security Management will advise on the actual percentage split, as there is currently no measurable basis for allocating these costs.
- 5.9 In practice this will require taking the trial balance at the lowest level of detail in terms of income and expenditure. Each individual line will be assessed to ascertain which revenue or cost category it falls into and therefore the most appropriate method of allocation. A summary of each of the cost lines, and the basis for allocating the costs between the different business segments with indicative allocation percentages are provided in Table 6.

Table 6 Basis for allocation of costs

Basis of allocation	Cost Category	Resulting percentage allocation				
		Fixed Wing	Rotary	Retail	Property	Other
Based on level of staffing in security in central search, control posts and patrolling the airside area. Majority of cost in central search - (90% fixed wing, 10% retail), control post (75% fixed wing, 25% retail), airside patrol (75% fixed wing, 25% helicopters)	Security Cost	85%	8%	8%	0%	0%
Based on metered consumption by tenants	Electricity	29%	17%	17%	35%	2%
Based on actual usage per phone number	Telecoms	39%	46%	3%	9%	3%
Based on metered consumption by tenants	Water Charges	9%	30%	23%	24%	14%
Based on actual rental per tenant	Property	39%	46%	3%	9%	3%
All fixed wing, as helicopter operators use their own terminals for checking in their passengers	Check-in, bag-screening	100%	0%	0%	0%	0%
All coded to retail	Retail (car parking etc)	0%	0%	100%	0%	0%
Split based on portion of assets held in each segment	Maintenance	31%	26%	27%	16%	1%
Areas such as finance, HR, marketing, health and safety and general management have been allocated across the 5 headings based on the percentage of income generated from each heading.	Indirect Costs	57%	13%	23%	3%	5%
Split based on call out ratio which is monitored in fire service database of call-outs.	Fire Service Costs	61%	38%	0%	1%	0%
These have been allocated based on number of air traffic movements split between fixed wing and rotary	Airside Operations costs	67%	33%	0%	0%	0%
Based on number of passes issues during the year	ID unit costs	65%	20%	15%	0%	0%

6. Segmental Analysis

6.1 The average yield figure is based on the total aeronautical income (the sum of passenger, landing and parking charges) divided by the total number of passengers. The average yields in each sub-category (i.e. fixed-wing and rotary) have been calculated with reference to the relevant income from that activity, divided by the number of passengers in that category.

Template 1 – Segmental analysis of asset costs

	Indexed depreciated historical cost
Aeronautical assets	
Fixed wing	
Rotary	
Non-aeronautical assets	
Retail	
Property	
Other	

Template 2 – Segmental analysis of operating costs and revenues

	Revenue	Operating costs	Operating profit
Aeronautical activities			
Fixed wing			
Rotary wing			
Non-aeronautical activities			
Retail			
Property			
Other			

Template 3 – Key ratios

	Return on Indexed depreciated historical cost
Aeronautical activities	
Fixed wing	
Rotary wing	
Non-aeronautical activities	
Retail	
Property	
Other	

Template 4 – Depreciated replacement cost: 5 year trend

	2005/06	2006 9 months	2007	2008	2009
Aeronautical assets					
Fixed wing					
Rotary wing					
Non-aeronautical assets					
Retail					
Property					
Other					

Template 5 – Revenue: 5 year trend

	2005/06	2006 9 months	2007	2008	2009
Aeronautical revenue					
Fixed wing					
Rotary wing					
Non-aeronautical revenue					
Retail					
Property					
Other					

Template 6 – Operating profit: 5 year trend

	2005/06	2006 9 months	2007	2008	2009
Aeronautical profit					
Fixed wing					
Rotary wing					
Non-aeronautical profit					
Retail					
Property					
Other					
Total					
Reconciliation of operating profit					
Operating profit per underlying accounts					
Statutory depreciation					
Indexed historical cost depreciation					
Operating profit					

Template 7 – Return on depreciated replacement cost of assets employed: 5 year trend

	2005/06	2006 9 months	2007	2008	2009
Return on aeronautical activities					
Fixed wing					
Rotary wing					
Return on non-aeronautical activities					
Retail					
Property					
Other					

Template 8 – Average annual yield per passenger

	2005/06	2006 9 months	2007	2008	2009
Airline A					
Airline B					
Airline C					
Etc ...					
Average aeronautical yield - all airlines					
Operator A					
Operator B					
Operator C					
Etc...					
Average aeronautical yield all helicopter operators					
Non-aeronautical yield per passenger					

NATS charging will be shown separately due to the change in charging from 1st April 2008.

Template 9 – Number of passengers per airline

	2005/06	2006 9 months	2007	2008	2009
Airline A					
Airline B					
Airline C					
Etc ...					
Total all airlines					
Operator A					
Operator B					
Operator C					
Etc...					
Total all helicopter operators					

Note: individual customer information to be provided to the OFT/CAA only

7. Appendix A

Table A1 Mapping of historic to current asset categories

Current category	Historic categories
Investment properties	Freehold properties; Investment Properties; Other freehold properties.
Land held for development	Development land; Land for development.
Terminal complexes	Terminals; Owner Occupied Properties; Other properties.
Airfields	Runways and lighting; Airfields.
Group occupied properties	Group occupied properties.
Plant and equipment and other assets	Plant and equipment; Plant and equipment and other assets; Motor vehicles; Office equipment.
Assets in the course of construction	Assets under construction; Other assets.

Source: AAL annual accounts.

Table A2 Inflation indices (1996—2010)

	COPI ¹	PPI ²	RPI
Q1 1996	102.0	93.6	150.9
Q2 1996	102.0	94.1	152.8
Q3 1996	103.0	94.0	153.1
Q4 1996	103.0	94.5	154.0
Q1 1997	104.0	94.7	154.9
Q2 1997	105.0	94.7	156.9
Q3 1997	106.0	95.1	158.4
Q4 1997	107.0	95.3	159.7
Q1 1998	108.0	95.1	160.2
Q2 1998	109.0	95.2	163.2
Q3 1998	111.0	95.0	163.7
Q4 1998	112.0	94.8	164.4
Q1 1999	113.0	94.9	163.7
Q2 1999	114.0	95.7	165.5
Q3 1999	116.0	95.7	165.6
Q4 1999	117.0	95.9	166.8
Q1 2000	118.0	96.1	167.5
Q2 2000	119.0	97.0	170.6
Q3 2000	121.0	97.2	170.9
Q4 2000	122.0	97.3	172.0
Q1 2001	123.0	96.6	171.8
Q2 2001	124.0	97.0	173.9
Q3 2001	125.0	96.7	174.0
Q4 2001	126.0	96.1	173.8
Q1 2002	127.0	96.0	173.9
Q2 2002	127.0	96.6	176.0
Q3 2002	128.0	96.6	176.6
Q4 2002	129.0	96.7	178.2
Q1 2003	129.0	97.2	179.2
Q2 2003	130.0	97.1	181.3
Q3 2003	134.0	97.0	181.8
Q4 2003	138.0	97.2	182.9
Q1 2004	139.0	97.2	183.8
Q2 2004	141.0	97.9	186.3

Q3 2004	144.0	98.3	187.4
Q4 2004	147.0	98.8	189.2
Q1 2005	148.0	98.8	189.7
Q2 2005	149.0	99.8	191.9
Q3 2005	151.0	100.6	192.6
Q4 2005	151.0	100.8	193.7
Q1 2006	153.0	101.2	194.2
Q2 2006	154.0	102.2	197.6
Q3 2006	156.0	102.6	199.3
Q4 2006	157.0	102.1	201.4
Q1 2007	161.0	102.7	203.0
Q2 2007	162.0	103.9	206.3
Q3 2007	163.0	104.6	207.1
Q4 2007	163.0	106.3	209.8
Q1 2008	162.0	108.4	211.1
Q2 2008	162.0	111.7	215.3
Q3 2008	162.0	113.5	217.4
Q4 2008	160.0	112.0	215.5
Q1 2009	160.0	111.6	210.9
Q2 2009	160.0	112.7	212.6
Q3 2009	151.0	113.5	214.4
Q4 2009	148.1	114.7	216.9
Q1 2010	146.6	116.0	219.3
Q2 2010	145.1	118.1	223.5
Q3 2010	145.1	118.2	224.5
Q4 2010	145.1	119.4	227.0

Source: Office for National Statistics.

Notes

1. *The COPI series (2005 = 100) has been superseded. A linking conversion factor of 1.466 has been applied to the linking quarter (Q2 2009) to convert the new series to the old superseded one.*
2. *The ONS changed the methodology for calculating PPI in October 2010, backdated at least as far as 1996. For example, the changes included reclassifying publishing and recycling as services rather than manufacturing.*