



Review of operating expenditure and investment consultation (Annex D)

Mid term Q5

Emerging Findings Presentation

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Civil Aviation Authority

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Steer Davies Gleave was appointed by the Civil Aviation Authority to support its mid-term Q5 (2009/10 to 2013/14) review of Stansted airport covering operating expenditure and Annex D investment consultation.

Operating expenditure

The main tasks were to:

- Review the principal drivers of changes in operating costs.
- A comparison of the levels of changes in operating costs at Stansted airport with other comparable airports.
- Recommendations for constructive engagement discussion in Q6.

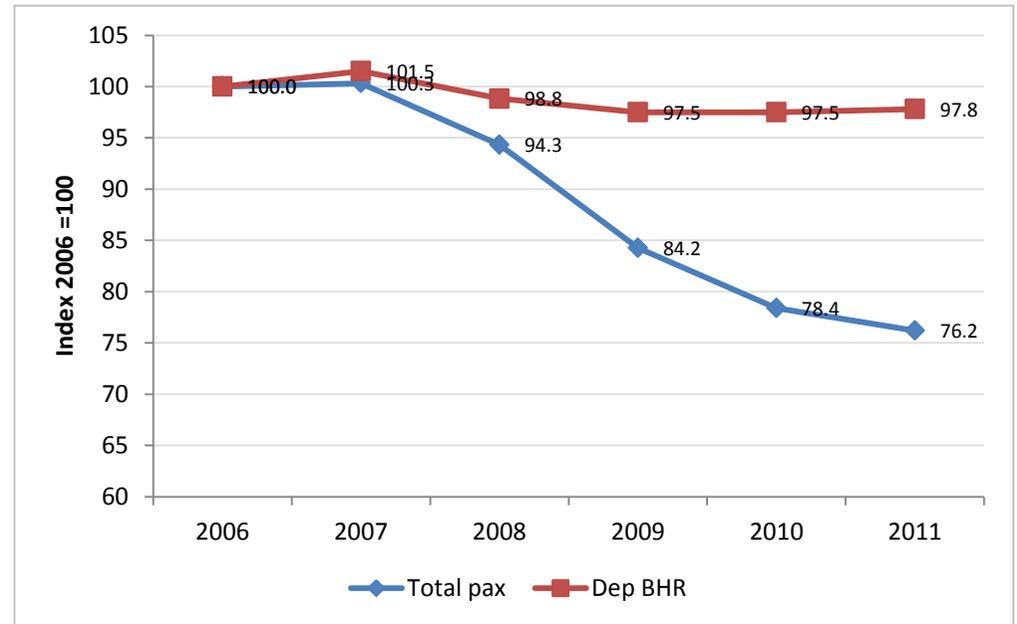
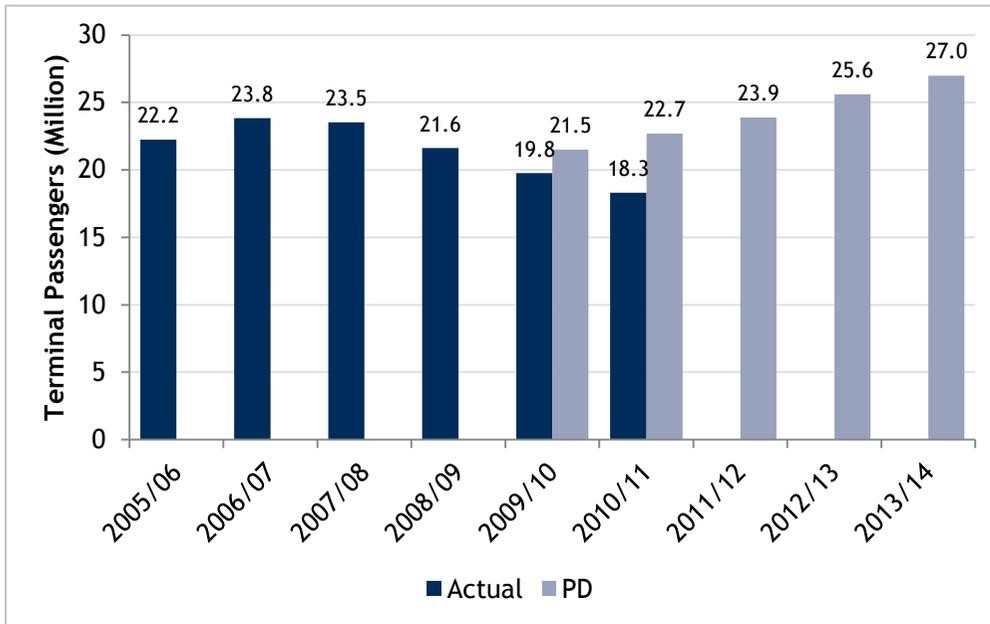
Annex D Investment consultation

The main tasks were to:

- Examine the consultation performance of Stansted Airport against Annex D protocol.
- For a small number of projects, consider whether STAL has acted in a reasonable and consistent manner against the guidelines of Annex D.
- Identify issues with the application of Annex D which will enable constructive engagement to take place positively in preparation for and during Q6.

Work presented today - emerging findings and subject to change before finalisation. Emerging recommendations not yet been discussed with STAL and airlines.

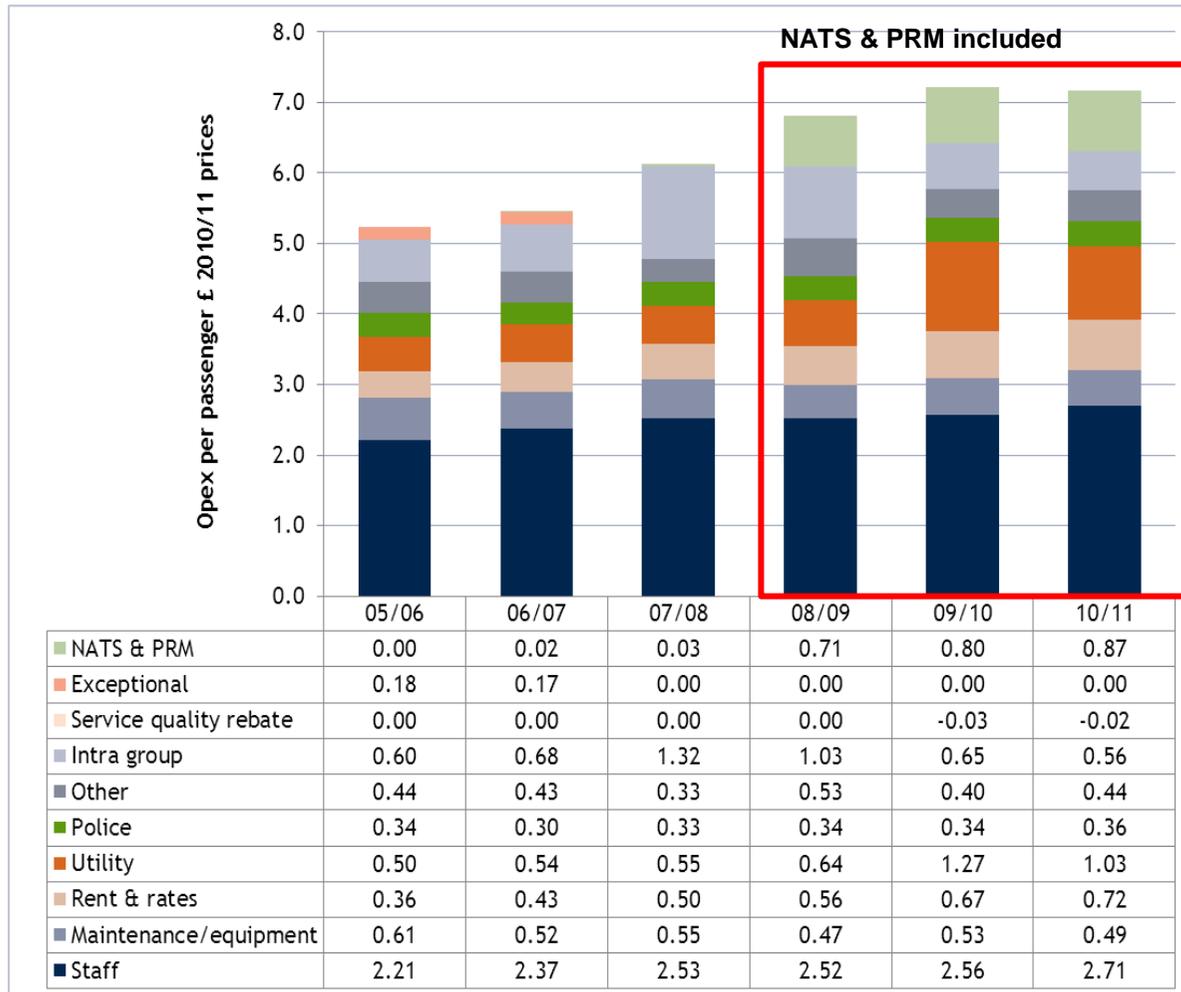
Stansted has experienced a significant decline in passenger numbers, flights and has suffered from the withdrawal of a number of airlines during the first two years of Q5. Peak summer throughput in the early morning has remained at a similar level.



Source: STAL data, CAA data, SDG analysis

- In each of the first two years of Q5, terminal passengers have been significantly less than assumed at the time of the price determination, by 1.7 million (8%) in 2009/10 and 4.4 million (19%) in 2010/11.
- Peak departures busy hour throughput has remained at a similar level to previous years.
- Lower overall traffic means more peaky profile of traffic.

The level of Q5 operational expenditure has been below that expected within the price determination but on a per passenger basis higher.



Operational expenditure per passenger is above the level expected in the price determination (£7.19 in '09/10, £7.16 in '10/11 c.f. £7.15 and £6.89)

Q5 spend is less than in the price determination (£14.6 million below in 2009/10 and £23.1 million in 2010/11, cumulatively £37.6 million).

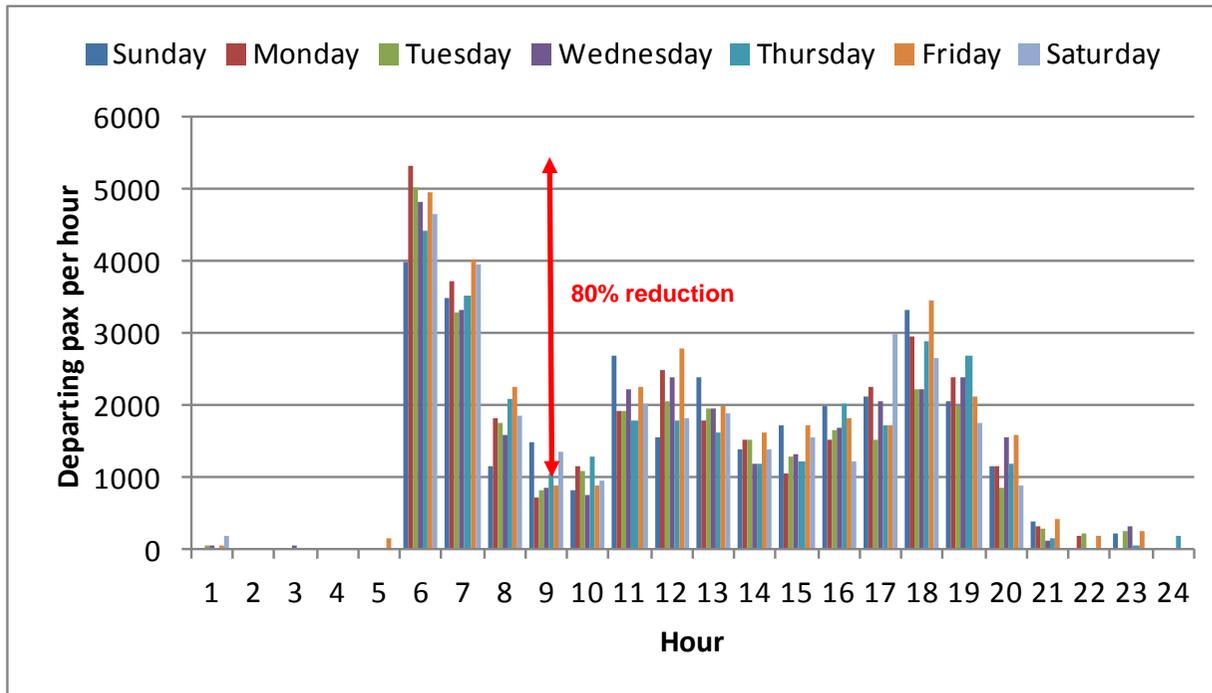
Source: STAL data, CAA data, SDG analysis

Following review of the key drivers, we identified a number of cost areas and functions where further investigation will be required in preparation for Constructive Engagement in Q6.

- Security costs and manning
- Utilities costs - particularly electricity costs
- Intragroup costs
- NATS costs

Passenger flows through Stansted are highly variable driven by a peak of traffic first thing in the morning with subsequent, lower, peaks later in the day.

Hourly passenger demand, Summer 2011



- There is a large spike in demand at 06:00 and 07:00
- Demand falls by approximately 80% from the 06:00 to the 09:00 hour.
- There are then broader and flatter demand peaks in the middle of the day and early evening.
- Winter peak demand is at a level of approximately 50% of summer peak demand.
- Winter demand shows the same profile as summer with broadly the same relative in-day fluctuations.

Source: STAL data, SDG analysis

The peakiness in demand presents a challenge to STAL's current security rostering system and results in substantial mismatches in supply and demand of typically 10 to 15%.

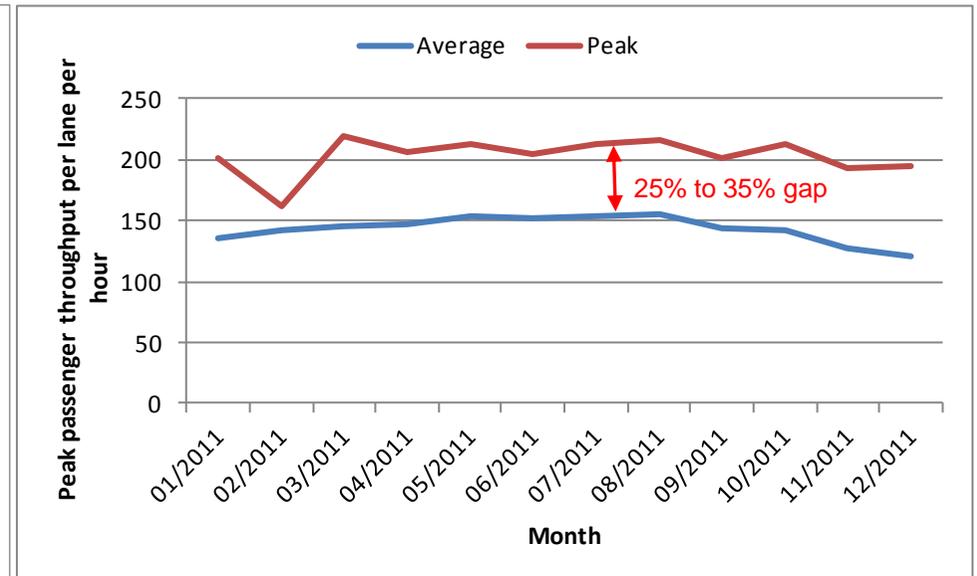
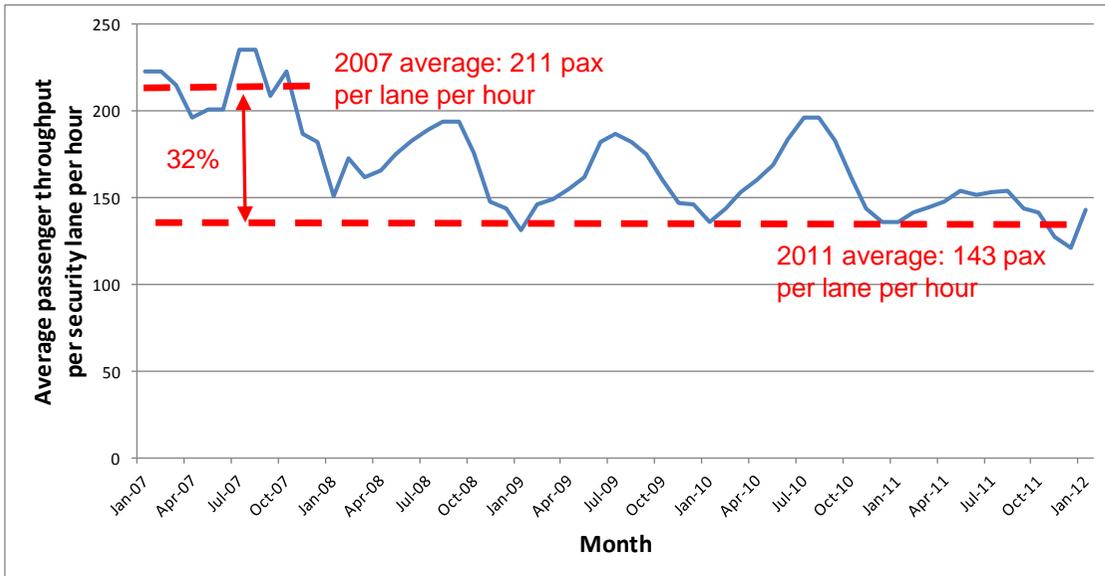
Staff supply

- Realised manning levels are much flatter than the demand profile
- The roster comprises mainly of full-time staff working long (~8 hour shifts) although the airport has successfully recruited part-time staff to work short (~5 hour) shifts particularly in the early morning
- Shifts generally start at a few fixed times during the day, rather than being spread more evenly across the day
- Potentially improvements could be made to the rostering system through:
 - A movement to a greater number of shift start times might increase roster responsiveness.
 - A greater number of short shifts might also be expected to increase rostering flexibility

Passenger and hand baggage processing rates have decreased during Q5 due principally to the x-ray image rejection rate with a smaller contribution from the increased number of x-ray images per passenger

Evolution of passenger processing rates per lane

Peak and average passenger processing rates

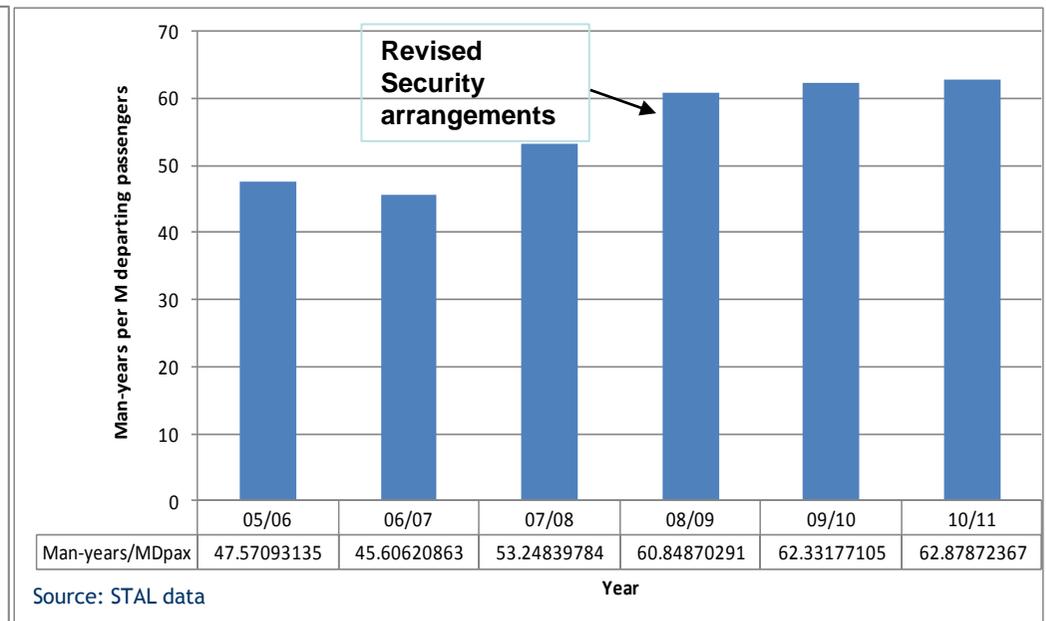
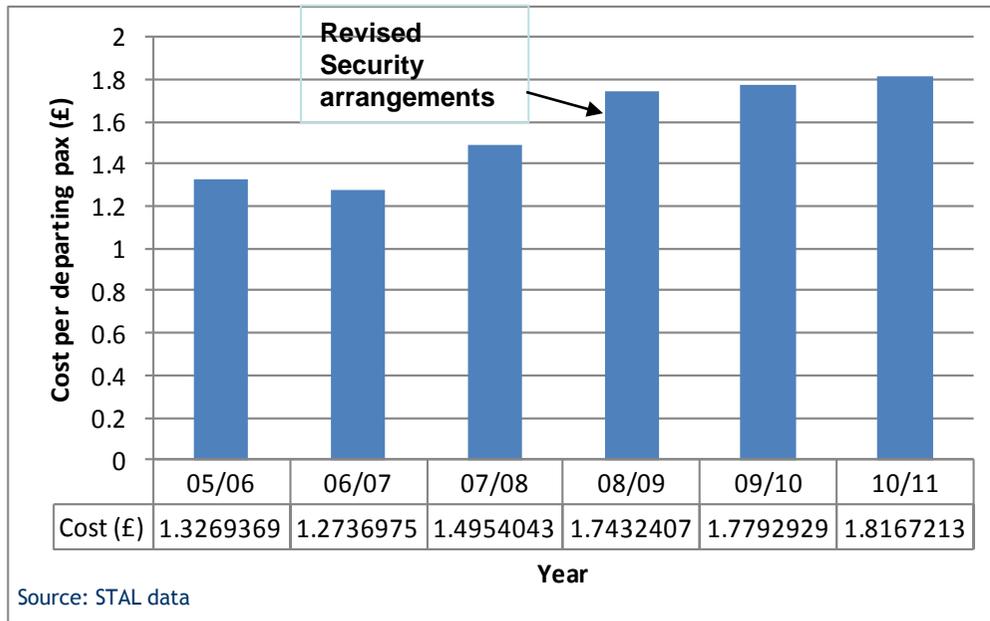


- The number of images per passenger is driven by the need to scan some items separately:
- There are also seasonal variations, more in winter
- Images per passenger peaked in 2010 (1.45) and was lower in 2009 (1.38) and 2011 (1.36)
- The x-ray image rejection rate increased five-fold from 2010 to 2011
- Contributors to the rejection rate are:
 - complexity and density passengers' bags
 - passenger behaviours

To counter the increase in security costs per passenger of 35% to 40% over the 05/06 to 10/11 period, improvements are needed to the security rostering process and security processing itself, particularly to manage rejected x-ray images

Terminal security cost per departing passenger

Man-years worked by terminal security staff per departing passenger



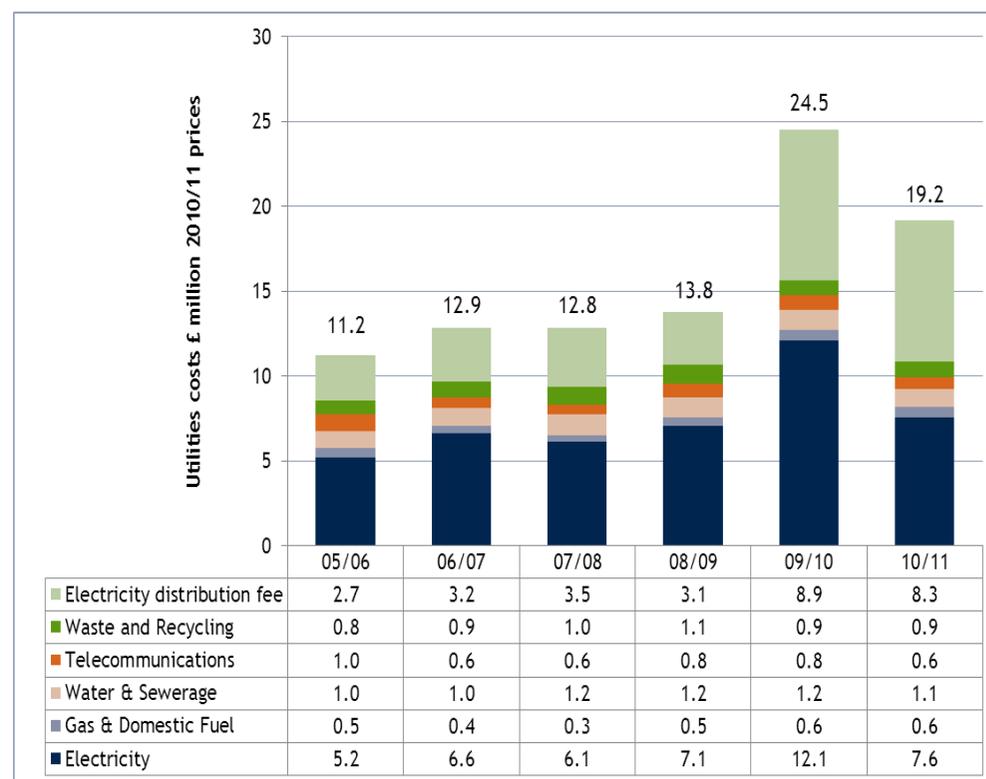
■ Per departing passenger security costs increased by approximately 36% from 2005/2006 to 2010/2011 and 42% from the minimum in 2006/2007.

■ Man-years worked by terminal security staff per departing passenger has increased by approximately 32% since 2005/2006.

Utilities costs peaked in 2009/10 and have been well above the levels expected in the Q5 settlement for both 2009/10 and 2010/11. Electricity costs dominate.

- Overall utilities costs to date are £43.7M of which 84.4% are electricity costs.
- Electricity usage over Q5 has declined by 9.3% to 84,466 MWh, demonstrating some variability with passenger numbers.
- Q5 costs impacted by corporate electricity fixed volume and price arrangements and a change in the cost allocation basis for electricity distribution infrastructure lease fees both of which are a result of corporate (BAA group) decisions.
- Prior to Q5 costs increased largely in line with national electricity price trends.

Utilities costs

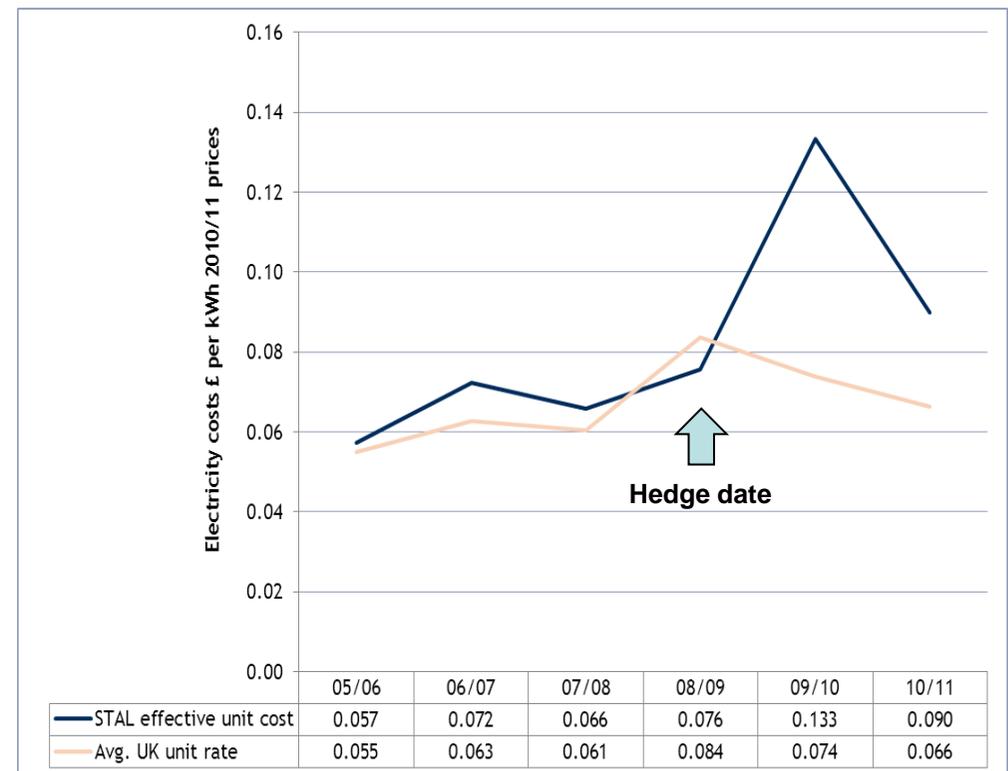


Source: STAL data, SDG analysis

Electricity costs in '09/10 were increased by a write-down for the fixed contract entered into as electricity prices peaked, resulting in much higher unit costs than the average UK unit rate

- The contract required the purchase of a fixed number of kWh at a rate set for the initial three years.
- When usage dropped due to demand the excess units were sold back to the market at below cost. £2.5M write down taken in 2009/10 by STAL.
- This contract will unwind from 2012/13 onwards as BAA Corporate moves to new electricity contract arrangements.
- The additional costs (above those allowed in the settlement) have been absorbed by STAL and not charged to airlines.

Electricity unit rate per kWh (Actual *c.f.* UK average for moderately heavy industrial user)



Source: STAL data, DECC data, SDG analysis

Electricity costs throughout Q5 have significantly increased, caused in part by an unexplained change in the cost allocation base for the electricity distribution assets. This change was initiated by the sale of Gatwick airport.

- Electricity distribution infrastructure for Heathrow, Gatwick and Stansted sold by BAA in 1993 and leased back.
- 1993 cost allocation basis used is not known: resulted in STAL around 9% of the total.
- In 2009/10 due to the Gatwick sale the cost allocation changed as a function of asset value at each airport including land, buildings and equipment transferred such that 31.1% of the total was allocated to STAL.
- Gatwick pre to post sale distribution costs have not changed substantially. This points to the cost base change reallocating cost from Heathrow to Stansted. (Heathrow stopped reporting on the distribution fee in their regulatory accounts in 2008/09 therefore this has not been confirmed).
- We have not had sufficient visibility of the original or updated cost allocation agreement to be able to explain this cost increase. Charges to airlines have not been impacted in Q5

The airport entered into a [X] arrangement for the provision of Tower ANS in 2008. Under these contractual arrangements, the decline in traffic has resulted in an increase in the Tower ANS cost per movement by [X] across Q5.

- Stansted contracted with NATS for ANS in [X].
 - [X].
 - Trend to more open competition for provision of ATM tower services (Spain, Sweden).
 - We understand STAL has renegotiated, at the back end of 2011, a new long term NATS contract which has reset the level and conditions of the contract.
- NATS costs versus flights per annum [X]

Source: STAL data, CAA data, SDG analysis

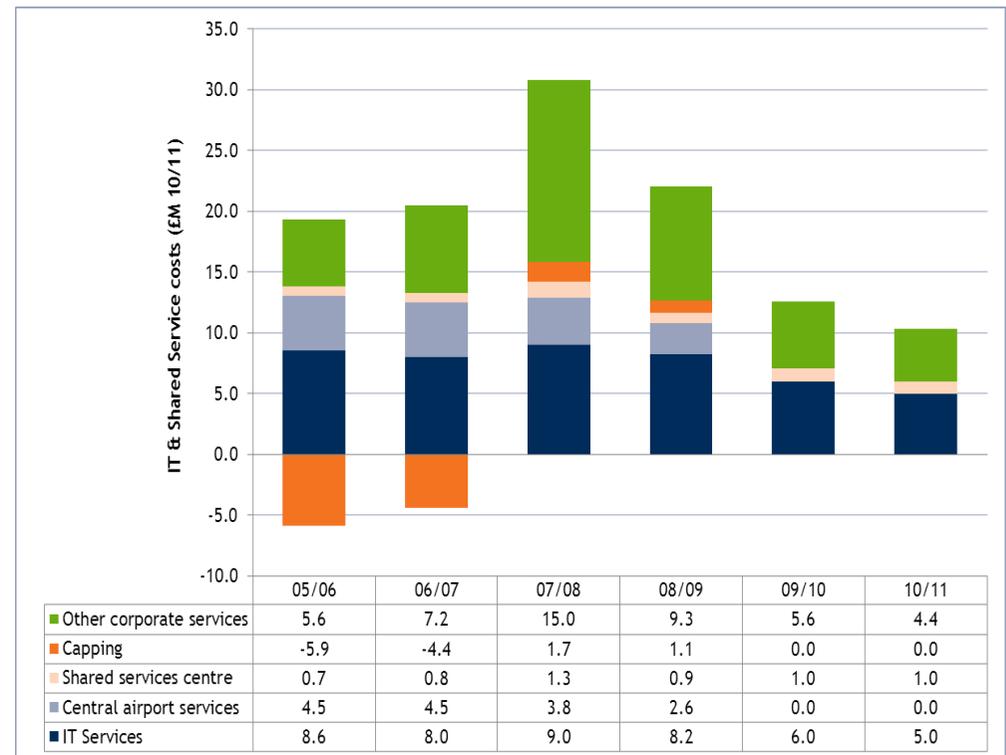
The costs associated with intra-group transfers have reduced significantly since 2007/08 and continued to do so through 2009/10 and 2010/11.

- Intra-group costs have declined by 52.9% or £11.6M over Q5 to date.

- The decrease is driven by decentralisation of corporate activities, reduction in use of shared services sweating of existing IT assets. Also some cost allocated by EBITDA, which over last two years have been low.

- Comparison with Gatwick, post-sale indicates further potential improvements
 - e.g. In 2008 Gatwick were allocated £18.3M (outturn) of costs for IT services, post sale this is £3.8M (2010/11).
 - In the same period Stansted's IT costs have reduced from £8.2M to £5.0M.

Intra-group costs

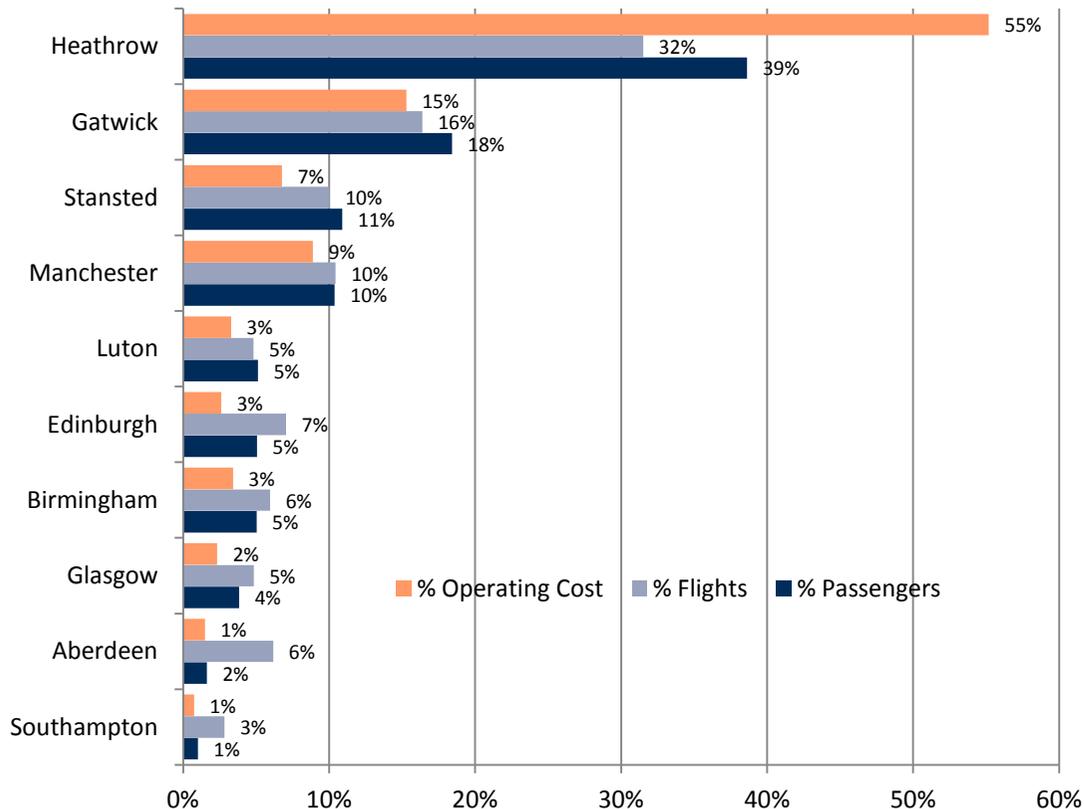


Source: STAL data, SDG analysis

COMPARISONS TO OTHER AIRPORTS: METHODOLOGY

In 2010, Stansted was the third largest UK airport by passenger numbers, accounting for 11% of passengers, 10% of flights and 7% of operating costs in the sample group. How does its performance compare with other airports?

Airport Opex, Flights and Passengers 2010 (% of sample)



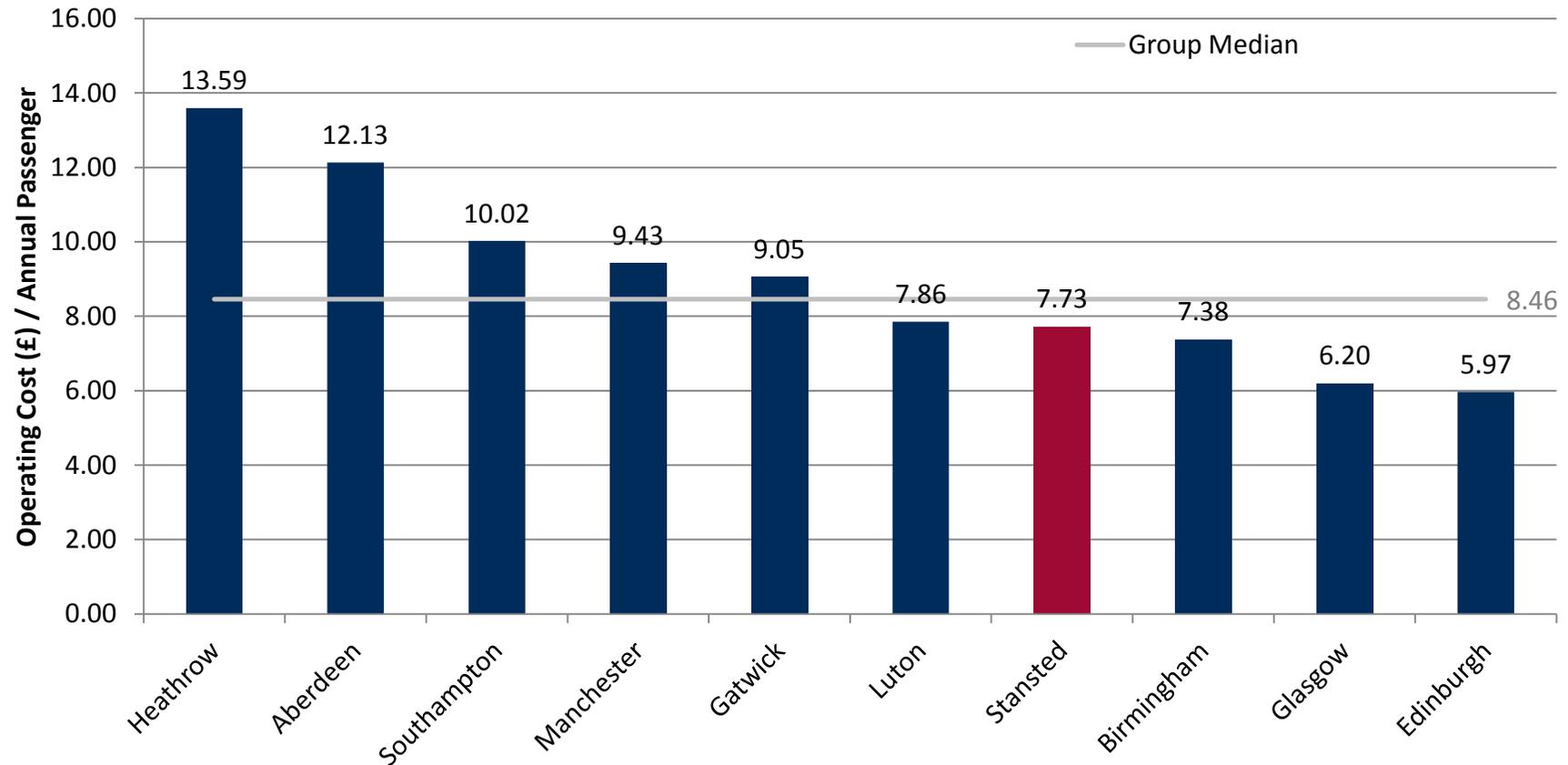
Methodology

- Collect company account data from 2000/01 to 2010/11 across 10 sample airports
- Use annual accounts data sometimes the data is in FY (ending 31 March) and sometimes calendar year.
- Common price base (2010/11).
- Calculate an 'adjusted' operating cost - removing depreciation and exceptional items from accounts.
- KPI indicators
- Econometric modelling of cost data to compare with previous Competition Commission estimates.

COMPARISON TO OTHER AIRPORTS: OPERATING COST PER PASSENGER

In 2010, operating costs per passenger at Stansted were mid range in comparison to most UK airports and airports of similar size. They were lower than Manchester, Gatwick and Luton.

Operating cost per passenger 2010

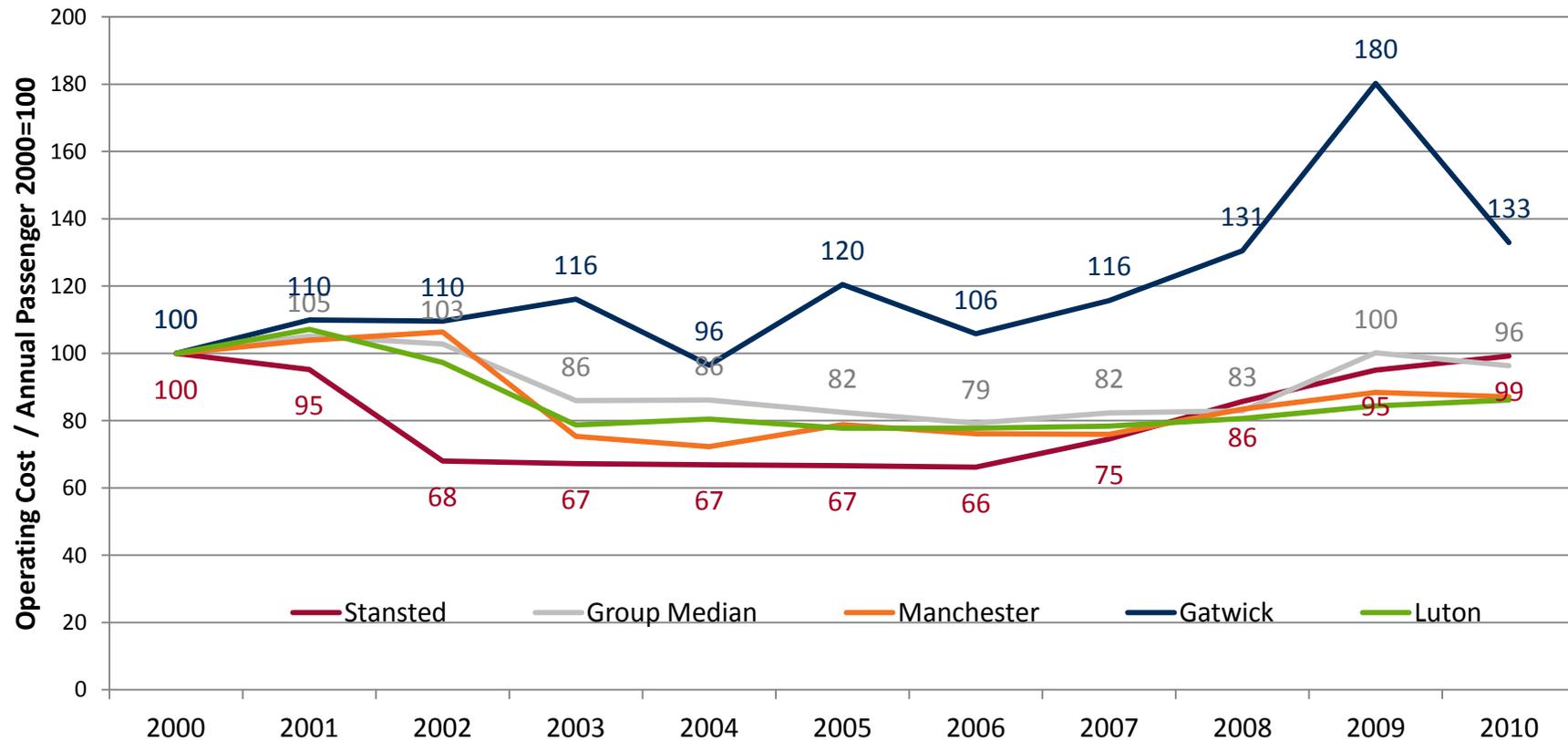


Note includes NATS contract costs for BAA and former BAA airports

COMPARISON TO OTHER AIRPOORTS: OPERATING COST PER PASSENGER OVER TIME

Between 2006 and 2010, operating costs per passenger at Stansted have grown more rapidly than Manchester, Gatwick and Luton, from a lower base. Over the 2000 to 2010 period following decline it has returned to a similar level.

Adjusted operating cost per passenger 2000-2010 Index (2000=100)



Note includes NATS contract costs for BAA and former BAA airports

Panel Econometric Analysis of Operating Costs and Passenger Numbers

Aim of the exercise was to recreate work done by Competition Commission with longer time series and more airports.

Sample	Findings
Competition Commission(Sample 2001-2006) 7 BAA Airports (as then)	0.3 cost elasticity to passenger growth
Recreation of sample	0.25 cost elasticity to passenger growth
Extension of data points to 2011	0.45 cost elasticity to passenger growth
Extension by adding Manchester, Luton and Birmingham	0.47 cost elasticity to passenger growth

- The model is sensitive to time periods, which may be related to the recession
- T5 dummy tested but not significant
- In years of declining traffic the cost elasticity estimate increases by 0.06
- This suggests that operating costs are more sensitive to passenger numbers in years of falling traffic - the relationship between passengers and costs is asymmetric

- Examine Stansted's consultation performance against the Annex D protocol
- For up to three projects, consider whether STAL has acted in a reasonable and consistent manner against the Annex D guidelines
- Identify issues with the application of Annex D which will enable constructive engagement to take place positively in preparation for and during Q6
- Our approach to “scoring” Annex D compliance:

Significant non-compliance

Minor non-compliance or mitigating circumstances

Complies to Annex D (or not applicable)

General process

- Appropriate procedures were generally followed and consultation was undertaken via existing bodies by agreement of both parties

The Strategic Business Plan

- STAL provided information at the strategic and project level, but was unable to agree on the form of the SBP with the airlines. Airlines did not object to the form of early plans, but rejected the 2011 SBP as a basis for meaningful strategic consultation

Information provided in the SBP

- **STAL should have provided more information on assumptions underlying traffic projections, risks and sensitivity analysis and strategic options for how operational outcomes could be achieved.** However, Annex D does not require presentation of operating costs and revenues as requested by the airlines

- The majority of projects are relatively minor and focused on maintenance and renewal. Most were below the agreed £2m threshold
- Our criteria for selection were:
 - Underway during Q5?
 - Meaningful consultation on project held?
 - Illustrates the effectiveness or otherwise of the consultation process?
- We selected
 - Automatic Tray Return System (ATRS)
 - Departures Out of Gauge System (DOOG)
 - Code F Cargo Stands
- The Baggage Refurbishment and Code F Passenger projects influenced the level of the price cap in Q5 but have not been progressed, therefore there was no consultation process during Q5 to review

- Consultation processes were simplified to reflect the low capital budget of Q5 projects. Airlines generally satisfied, except on the DOOG system
- The disagreement on the strategic level of consultation has not spilled over into the project level consultation
- STAL has not followed the full requirements on the projects reviewed
 - No evidence of cost benefit analysis
 - No benchmarking of costs
 - No clear gateway process and approvals timetable
- Has STAL's approach been consistent and reasonable? We conclude:
 - STAL has not followed a consistent process, but has tailored the process depending on the scale and impact of the project
 - Given the relatively small size and nature of the projects, STAL's approach to consultation has been reasonable except for these red marked areas

- Fundamental disagreement about the appropriate content and scope of the SBP. Airlines want visibility of forecast operating costs and airport charges
- Annex D focuses on the capex programme and the incremental impacts on airport charges and operating costs. No requirement to include the total level of costs and charges in the SBP
- Annex D seems better suited to airport expansion. In a stable or declining market, capex is minimal and the airlines' key objective is to reduced operating costs and, ultimately, airport charges
- The project consultation process appears to be tailored to larger projects relating to airport expansion, rather than smaller maintenance and renewal projects
- The airlines consider that a facilitator was helpful in the run up to the Q5 settlement (but was not needed during Q5)

- Consider adapting Annex D to support consultation on achieving enhanced efficiency of operation as well as on capex for expansion
- Consider requiring SBP to include 10-year forecasts of:
 - Total opex as well as capital expenditure
 - Incremental/ decremental impact on charges
 - ...but not revenue lines
- Consider expanding the scope of consultation to include changing the range and quality of the facilities provided
- Require the airport and airlines to agree tailored project consultation processes to reflect the scale and nature of impact of the project concerned
- Use either CAA or an external appointee to facilitate:
 - The Q6 constructive engagement process
 - Achieving consensus on the consultation process within the quinquennium

- The analysis of opex drivers identify where potential cost improvements should be further investigated for Q6(scale indicated in final report):
 - Security costs (rostering)
 - Utility costs (electricity)
 - NATS costs (opportunities through competition for provision)
 - Intragroup costs (opportunity from potential change in ownership structure)
- The benchmarking analysis shows:
 - that unit costs per passenger are in the mid range and lowest of London airports.
 - but the level has grown over the period 2005 to 2010.
- The Competition Commission regression results show:
 - Elasticity significantly higher than CC work in 2008.
 - Structural differences between 2000-2006 and 2006-2011.
 - There is a different elasticity when traffic is declining vs growing.
- Consultation issues - we recommend that consideration should be given to:
 - Increasing the flexibility of the consultation process to accommodate different circumstances.
 - Widening the scope of the SBP to include operating costs.
 - Using a facilitator for CE before and during Q6.