Civil Aviation Authority

CAA passenger research: satisfaction with the airport experience

Heathrow, Gatwick and Stansted

CAP 1044

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Executive Summary

1. The CAA undertook this piece of passenger research to help inform the CAA's initial proposals for economic regulation of airports for the period from April 2014.[1]

2. This survey differed from the CAA's ongoing Passenger Survey in that:

   - arriving passengers were also targeted;
   - passengers were asked for only a minimal set of demographic and journey-related information;
   - passengers were asked open-ended questions about any sources of dissatisfaction to allow for recording of qualitative data; and
   - passengers were asked about perceived and acceptable queue times for various processes.

3. During October–November 2012, over 2,700 passengers were interviewed across Heathrow, Gatwick and Stansted. In February 2013, this sample was augmented with over 150 qualitative interviews of older passengers[2]. These interviews helped give the CAA assurance that the views of this passenger subgroup on the airport experience were consistent with those of the wider population in terms of current levels of satisfaction.

4. Satisfaction with the airport experience will be influenced by a passenger's expectations as well as the service delivered. Thus the results of this survey should not be interpreted as a direct reflection of service quality, and it may not be appropriate to make comparisons across the airports.

1 CAA, April 2013, Economic Regulation at Heathrow from April 2014: Initial Proposals http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=5521

CAA, April 2013, Economic Regulation at Gatwick from April 2014: Initial Proposals http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=5522

CAA, April 2013, Economic Regulation at Stansted from April 2014: Initial Proposals http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=5523

2 Passenger selection was based on interviewers' judgement, and was intended to target those aged over 65.

5. The key findings from the research were that:

- overall, 87% of all respondents felt positive about their airport experience and nearly all respondents indicated that they would use the same airport again;
- the majority of respondents did not identify any source of dissatisfaction with their airport experience, but for those who did, long waiting times, long walking distances and insufficient staff/ facilities were the most frequently cited source of dissatisfaction across the three airports;
- the majority of all respondents spent no more time queuing than the maximum they thought reasonable; and
- older passengers showed similar response patterns to the wider airport population.

CHAPTER 1

Introduction

Objectives

1.1 The CAA undertook this passenger research to help inform the CAA's initial proposals for economic regulation of airports for the period from April 2014.[3]

1.2 The research was focused on passengers' airport experiences to help the CAA better understand passengers' priorities, requirements and expectations in terms of services provided at airports.

1.3 Satisfaction with the airport experience will be influenced by a passenger's expectations as well as the service delivered. Thus the results of this survey should not be interpreted as a direct reflection of service quality, and it may not be appropriate to make comparisons between airports.

1.4 The methodology of this research is outlined below. Research findings are presented in chapter 2 and weighting methodology in chapter 3. Sample questionnaires used in this study are in appendix A and appendix B.

Methodology

1.5 Interviews were conducted at Heathrow, Gatwick and Stansted airports by the CAA Passenger Survey team from October to November 2012.

1.6 A total of 2,706 arriving, departing and connecting passengers were interviewed at Heathrow Terminals 1, 3, 4 and 5; Gatwick South and North terminals; and Stansted.

3 CAA, April 2013, Economic Regulation at Heathrow from April 2014: Initial Proposals http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=5521

CAA, April 2013, Economic Regulation at Gatwick from April 2014: Initial Proposals http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=5522

CAA, April 2013, Economic Regulation at Stansted from April 2014: Initial Proposals http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=5523

1.7 Departing and connecting passengers were interviewed in gaterooms where they were waiting for their flights, and arriving passengers were interviewed in the Baggage Reclaim hall after they had gone through immigration and collected their baggage.

1.8 Among the respondents, there were a few passengers who had (a) arrived at one airport and travelled by surface to another airport to catch their connecting flight, or (b) bought two (or more) separate air tickets and travelled on a multi-sector journey (self-connectors). These passengers are classified as departing passengers at the second airport, as they have undergone the same security and immigration procedures as other departing passengers.

1.9 A further 157 interviews were conducted in early February 2013 for older departing passengers[4], to capture any specific issues faced by this passenger subgroup. These interviews have been combined with the main sample for the overall weighting and analysis, but have also been weighted separately for consideration in isolation.

1.10 Figure 1 below shows the interview dates at the different airports.

Figure 1: Interview dates by airport

Airport	All ages: (2,706 arriving, departing and connecting passengers)	Targeted interviewing: older passengers (departing only)
Heathrow (T1, T3, T4, T5)	17 Oct to 13 Nov 2012	6 Feb to 7 Feb 2013
Gatwick (South and North)	15 Oct to 26 Nov 2012	8 Feb 2013
Stansted	17 Oct to 10 Nov 2012	5 Feb 2013

Fieldwork

1.11 All interviews were conducted face-to-face by the CAA Survey Team, and interviewers completed questionnaires by hand. Many of the questions were free response to enable qualitative data to be collected from passengers.

4 Passenger selection was based on interviewers' judgement, and was intended to target those aged over 65.

1.12 Interviewing at the airport meant that the time lag between the passengers' experience and their interview was minimised, reducing the potential for recall bias.

1.13 The sample sizes achieved are shown in figure 2. Certain passenger groups (e.g. connectors at Gatwick) were over-sampled to allow for robust subset analysis.

Figure 2: Number of interviews

Passenger flow	**LHR**					**LGW**			**STN**	**Total**
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	150	150	152	151	603	141	156	297	152	1,052
Departing	177	168	176	174	695	189	192	381	194	1,270
Connecting	56	82	15	113	266	129	146	275	0	541
Total	383	400	343	438	**1,564**	459	494	**953**	**346**	**2,863**

Note: Due to the low volume of connecting traffic at Stansted, it was not targeted in this survey.

Questionnaire design

1.14 Two questionnaires were used – one for departing and one for arriving passengers. Respondents to the questionnaire for departing passengers were classified into 'departing' and 'connecting' based on their journey. Both questionnaires were divided into three parts:

- Background information on the respondent
- Airport experience and satisfaction questions
- Queue time questions

1.15 A sample questionnaire used by arriving passengers is included in appendix A, and that for departing passengers is shown in appendix B.

Background information on the respondent

1.16 Respondents were initially asked demographic questions such as gender, journey purpose, destination and country of residence. This information has been used to compare with the demographic characteristics of the CAA Passenger Survey for the fourth quarter in 2012 (referred to from this point forwards as "the CAA main survey (Q4 2012)") to provide assurance that the weighted sample was sufficiently representative of the airport population.

Airport experience and satisfaction questions

1.17 The interviewers invited respondents to rate their satisfaction with their airport experience and then to answer open-ended questions on whether there were any sources of dissatisfaction they could identify. These questions were asked without prompting or showcards from the interviewer, with the intention of eliciting unbiased responses.

1.18 Respondents were also asked what single improvement they would like to see at the airport and whether they would use the airport again in future.

Queue time questions

1.19 The interviews also included questions on the perceived queue times for various processes experienced by the respondents, along with the maximum they thought would be reasonable. This latter question should reflect passengers' general expectations and is less likely to be affected by actual events at the airport on the day of interview. It also allows the relationship between passengers' satisfaction and their perceptions of queue times, (both reasonable and experienced), to be explored.

1.20 The processes considered are shown in figure 3 below.

Figure 3: Processes for which queue times are measured

Passenger group	Processes
Arriving passengers	Immigration, baggage reclaim
Departing passengers	Check-in, bag drop, security
Connecting passengers	Security

Weighting

1.21 The sample has been weighted to match the CAA main survey (Q4 2012) results[5]. Weighting was done at an airport level across two dimensions:

- total passenger numbers by terminal at each airport; and
- passenger flow across each airport (terminating and connecting).

1.22 Thus, when aggregated, weighted responses across an individual airport should be a better representation of the airport population.

5 At the time of weighting, provisional results only were available. However these are not materially different from the final 2012 survey for the dimensions used.

1.23 The 157 interviews of older passengers are included in the overall total in the weighting process. When the survey results of older passengers were considered in isolation, the interviews were weighted separately to reflect the passenger flow across each terminal.

1.24 Figure 4 shows the weighted number of interviews. All the results presented in this report are based on weighted numbers of interviews, (which are rounded to the nearest integer), unless specifically noted otherwise.

Figure 4: Weighted number of interviews

Passenger flow	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	110	136	92	160	498	207	230	437	173	1,108
Departing	110	136	92	160	498	207	230	437	173	1,108
Connecting	67	145	41	316	569	32	47	79	0	648
Total	288	417	224	636	**1,564**	446	507	**953**	**346**	**2,863**

Note: numbers are rounded to the nearest integer.

1.25 Chapter 3 gives the detailed calculations behind the weighting.

Potential Limitations

1.26 Interviews were conducted over a short period of time. Some variables, especially the perceived actual queue times, may be dependent on specific incidents on the days of interview.

1.27 Also, as the interviews were conducted during the winter months, any issues which may be seasonal (for example, temperature in the waiting areas) are not captured.

1.28 Some of the sample sizes by flow in each terminal are relatively low, and not sufficient to allow robust analysis at a subgroup level. As indicated in figure 2, the number of interviews was below 200 for each of the sub-groups of arriving, departing and connecting passengers at each terminal. Thus analysis has generally been presented at an airport level by flow, or across all passenger flows in a terminal.

1.29 Given the majority of passengers were found to be satisfied with their airport experience and did not note specific sources of dissatisfaction, there are a relatively small number of responses to some of the

questions asked. However, the responses collected provide useful qualitative information.

1.30 The interviews targeting older passengers took place on the departing flow only, and thus do not include arriving or connecting passengers.

CHAPTER 2

Research findings

Summary of findings

2.1 The results were broadly similar across the three airports, with key findings as follows:

Demographics

- the composition of respondents in this survey is largely similar to that of the CAA main survey (Q4 2012) in terms of gender, residence, destination and journey purpose.

Satisfaction

- overall, 87% of all respondents felt positive about their airport experience and nearly all respondents indicated that they will use the same airport again in the future;
- among those who had used the same airport within the last four weeks, the majority were equally satisfied as compared with their previous experience (indicating no material difference in passenger satisfaction by direction of travel);
- most respondents did not identify any source of dissatisfaction with their airport experience. For those who did, long waiting times, long walking distances and insufficient staff/facilities were the most frequently cited sources of dissatisfaction.

Queue times

- across all the three airports, the majority of respondents spent no more time queuing than the maximum they thought reasonable.

Airport choice

- airlines' route network, location/accessibility of the airport and price were the primary reasons for terminating passengers choosing to fly at a certain airport.

Passenger subgroups

- older passengers showed similar response patterns to the wider airport population;
- connecting passengers at Heathrow[6] were less satisfied than the terminating (arriving and departing) passengers with their airport experience. The average perceived actual queuing time for security checking was 5 minutes longer for these connecting passengers (12 minutes) than for departing passengers.

Detailed results

2.2 As noted previously, satisfaction with the airport experience will be influenced by a passenger's expectations as well as the service delivered. Thus the results of this survey should not be interpreted as a direct reflection of service quality, and it may not be appropriate to make comparisons across airports. The results have been presented separately for each airport under each area.

2.3 All the results presented are based on weighted numbers of interviews, (which are rounded to the nearest integer, unless specifically noted otherwise)[7]. Detailed weighting methodology is described in chapter 3.

2.4 In the calculation of percentages, nil responses (don't know, no answer and refusals) are removed from the total unless specifically noted otherwise.

2.5 The results are presented as follows:

- Demographics
- Passenger satisfaction
- Sources of dissatisfaction
- Improvements identified
- Queue times
- Airport choice
- Older passengers

6 Heathrow has the largest proportion of connectors of the 3 airports, approximately 36% in Q4 2012.

7 Due to rounding of weighted numbers of interviews and percentages, column and row percentages may not add to 100%.

Demographics

2.6 The composition of respondents in this survey and that of the CAA main survey (Q4 2012) have been compared, in order to identify any material differences between the two. The dimensions considered were gender, residence, destination and journey purpose.

2.7 The composition of respondents in this survey was found to be broadly similar to that of the CAA main survey (Q4 2012) results, except that this survey saw a slightly higher proportion of leisure passengers and a lower proportion of passengers visiting friends and relatives across the three airports. This difference is not considered material to the results of the analysis, and the weighting procedure has not attempted to correct for this.

2.8 Figure 5 to figure 8 below show the comparisons between the demographics of the respondents to this survey compared with those to the CAA main survey (Q4 2012).

Figure 5: Demographic comparison: gender

Gender	**This survey**				**CAA main survey (Q4 2012)**			
	LHR	LGW	STN	**Total**	LHR	LGW	STN	**Total**
Male	56%	53%	52%	**55%**	55%	52%	52%	**54%**
Female	44%	46%	47%	**45%**	45%	47%	47%	**46%**

Figure 6: Demographic comparison: residence

Residence	**This survey**				**CAA main survey (Q4 2012)**			
	LHR	LGW	STN	**Total**	LHR	LGW	STN	**Total**
UK	47%	70%	52%	**55%**	43%	71%	52%	**51%**
non-UK	53%	28%	48%	**44%**	57%	29%	48%	**49%**

Figure 7: Demographic comparison: destination

Destination	This survey				CAA main survey (Q4 2012)			
	LHR	LGW	STN	**Total**	LHR	LGW	STN	**Total**
International	91%	91%	100%	**92%**	93%	87%	93%	**92%**
Domestic	9%	9%	0%	**8%**	7%	13%	7%	**8%**

Figure 8: Demographic comparison: journey purpose

Journey purpose	This survey				CAA main survey (Q4 2012)			
	LHR	LGW	STN	**Total**	LHR	LGW	STN	**Total**
Business	26%	19%	18%	**23%**	30%	18%	14%	**25%**
Leisure	38%	56%	45%	**45%**	31%	48%	34%	**36%**
Visiting friends and relatives	36%	25%	36%	**32%**	39%	34%	51%	**39%**

Passenger satisfaction

Overall experience in the airport terminal

2.9 Using a scale matched to the Quality of Service Monitor (QSM) survey in operation at Heathrow, Gatwick and Stansted, and consistent with the CAA main survey (Q4 2012), the question: "How would you rate your overall experience in the airport terminal today?" was asked, with an answer scale ranging from 1-5, where:

- 1 = Extremely poor
- 2 = Poor
- 3 = Average
- 4 = Good
- 5 = Excellent

2.10 For these purposes, answers 4 and 5 have been classed as "positive", 3 as "neutral" and 1 and 2 as "negative". Across the three airports, the majority (87%) of respondents felt positive about their airport experience. Full results by flow (figure 9) and by terminal (figure 10) indicate that these results are fairly consistent across the subgroups, with a very lower proportion of negative responses at each airport.

Figure 9: Passenger satisfaction by airport and by flow

%	LHR				LGW				STN			Total
	Arr	Dep	Con	**Total**	Arr	Dep	Con	**Total**	Arr	Dep	**Total**	
Positive	90	88	83	**87**	83	88	82	**85**	94	90	**92**	**87**
Neutral	8	10	13	**11**	14	11	15	**12**	4	8	**6**	**11**
Negative	2	2	3	**3**	3	2	3	**3**	2	2	**2**	**2**
N	495	495	565	**1,555**	422	427	75	**924**	173	169	**342**	**2,821**

Note: N = weighted sample sizes.

Figure 10: Passenger satisfaction by terminal

%	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Positive	86	89	83	87	**87**	86	85	**85**	**92**	**87**
Neutral	11	9	15	10	**11**	13	12	**12**	**6**	**11**
Negative	3	2	3	3	**3**	2	3	**3**	**2**	**2**
N	286	411	222	636	**1,555**	430	494	**924**	**342**	**2,821**

Note: N = weighted sample sizes.

Comparison with previous journey through the airport

2.11 Respondents were asked the question "if you have departed/arrived at this airport within the last four weeks, how would you compare your departing/arriving experience to today's arrival/departure?". This question was put in place to compare satisfaction with the airport on arrival to departure by the same passenger (and vice versa).

2.12 This question is applicable only to respondents who were completing a round trip at the same airport within four weeks, and therefore the non-response rate is relatively high (57%) compared with other questions in the survey. The proportion of non-responses is shown in figure 11. This will include those passengers who:

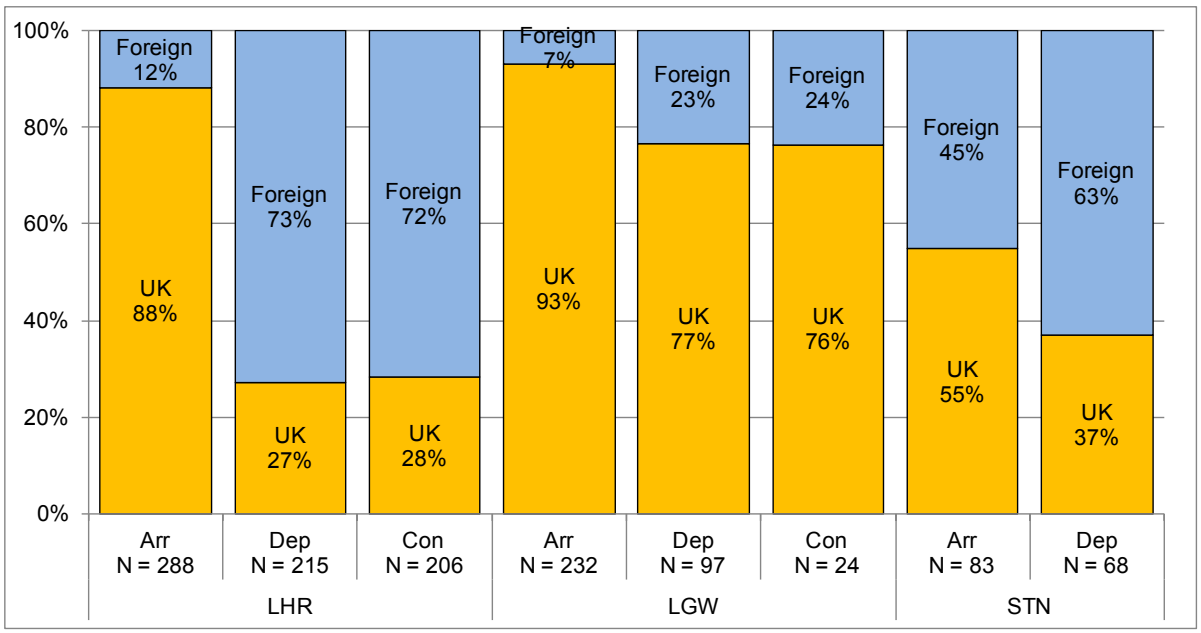
1. were on the first leg of their trip;
2. have not flown to/from the airport in the last four weeks on another trip; or
3. have not responded for any other reason.

Figure 11: Percentage of no responses

%	LHR				LGW				STN			Total
	Arr	Dep	Con	**Total**	Arr	Dep	Con	**Total**	Arr	Dep	**Total**	
Non-response	42	57	64	**54**	47	77	70	**63**	52	61	**56**	**57**

2.13 Figure 12 shows the residency of respondents who were completing a round trip. This figure also highlights the small sample sizes for some of these passenger subgroups.

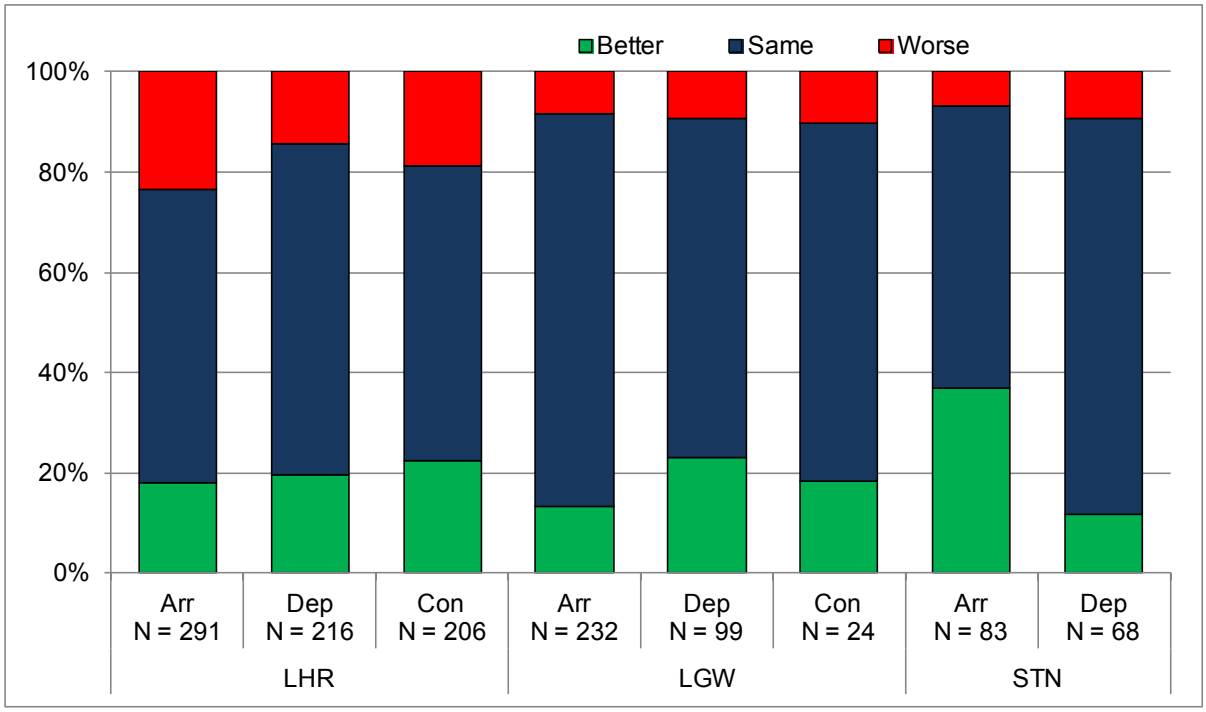
Figure 12: Residence of those interviewed who had completed a round trip in four weeks



Note: N = weighted sample sizes.

2.14 As figure 13 shows, among those who answered this question, the majority thought that airport experience was the same as that for the last time they used the airport. These results should be considered in the context of the sample sizes achieved.

Figure 13: Change in perception of service quality among those who completed a round trip in four weeks



Note: N = weighted sample sizes.

Likelihood of using the same airport again

2.15 Nearly all (99%) of respondents indicated that they would use the same airport again in the future.

Figure 14: Future use of airport by airport and by flow

%	LHR				LGW				STN			Total
	Arr	Dep	Con	**Total**	Arr	Dep	Con	**Total**	Arr	Dep	**Total**	
Yes	100	100	98	**99**	100	98	98	**99**	99	100	**99**	99
No	0	0	2	**1**	–	2	2	**1**	1	–	**1**	1
N	491	497	563	**1,550**	434	434	79	**946**	171	172	**343**	**2,840**

Notes: N = weighted sample sizes, "0" indicates small non-zero responses with percentages rounded to zero, "–" indicates zero responses.

Sources of dissatisfaction

2.16 Passengers were asked an open-ended question to identify any sources of dissatisfaction with their airport experience, rather than being presented with a list of options. These questions were asked without

prompting or showcards from the interviewer, with the intention of eliciting unbiased responses.

2.17 The majority of passengers did not raise any sources of dissatisfaction (two-thirds to three-quarters, varying by airport); however this proportion was lower for connecting passengers than terminating passengers at both Heathrow and Gatwick.

2.18 Analysis of these responses is constrained due to the relatively small number of answers given to the question; however it is useful to identify the most common themes.

2.19 Figures 15 to 17 give the total sample size for those asked these questions, and the number of respondents who didn't give any sources of dissatisfaction. Where respondents did give an answer, they could identify more than one source of dissatisfaction, thus the total number of responses will be greater than the number of respondents (and percentages may total more than100%).

2.20 For those passengers who did identify one or more areas of dissatisfaction, the most common complaints related to long waiting times for various procedures (security checking, baggage reclaim, immigration counter) and long walking distances at the airport.

2.21 On the airport facilities, where responses were given, a wide range of sources of dissatisfaction were mentioned, and these are arranged in groups for analysis. While most of the group names for major sources of dissatisfaction are self-explanatory, "Insufficient staff/facilities" and "Insufficient/untidy facilities in the lounge" include responses covering many different aspects of the airport experience:

- "Insufficient staff/facilities" includes specific facilities such as electronic scanners, luggage belt, boarding pass bar-code readers, pay phones, luggage trolleys, refuse bins, and designated areas such as space to rearrange clothing/luggage after security check, restaurants, children's play areas and smoking areas. Respondents also wanted to see higher staffing levels at check-in counters, restaurants, gate-rooms and immigration counters.
- "Insufficient/untidy facilities in the lounge" includes seating, baby changing facilities, free wifi, catering choices and working areas for business passengers.

2.22 At Heathrow, for the minority of passengers who did identify areas of dissatisfaction, long waiting times and long walking distances were

common themes. It is important to emphasise that, as shown in figures 15 to 17, most of the passengers interviewed did not raise any sources of dissatisfaction, and hence the absolute number of responses by area identified is low.

Figure 15: Top five sources of dissatisfaction at Heathrow

	Arriving (N = 498)	**N**	**%**	**Departing (N = 498)**	**N**	**%**	**Connecting (N = 569)**	**N**	**%**
1	Long walk at the airport	35	7	Long wait for security checking	21	4	Long wait for security checking	46	8
2	Insufficient staff/facilities	13	3	Long wait at check-in counter	8	2	Lack of timely and clear information at departure gates	22	4
3	Long wait at immigration counter	12	2	Security check too thorough	8	2	Insufficient/ untidy facilities in the lounge	19	3
4	Long wait for baggage reclaim	11	2	Problem with check-in procedure	8	2	Flight delay/ cancellation	19	3
5	Long walk after getting off plane	8	2	Flight delay/ cancellation	6	1	Poor signage at transfer terminals	17	3
	Nothing	370	74	Nothing	374	75	Nothing	325	57

Notes: N = weighted sample sizes. Respondents could give more than one answer, thus the percentages may total more than 100%.

2.23 Figure 16 shows the findings for Gatwick — again, most passengers did not specify an area of dissatisfaction, but where they did, long waiting times and long walking distances were most commonly identified.

Figure 16: Top five sources of dissatisfaction at Gatwick

	Arriving (N = 437)	N	%	Departing (N = 437)	N	%	Connecting (N = 79)	N	%
1	Long walk to baggage reclaim	32	7	Insufficient/dirty toilets	20	5	Insufficient staff/ facilities	5	6
2	Long wait at baggage reclaim	27	6	Long wait for security checking	19	4	Insufficient/dirty toilets	5	6
3	Long walk to immigration counter	12	3	Long wait at check-in counter	14	3	Poor signage at transfer terminals	4	5
4	Insufficient/ dirty toilets	12	3	Lack of choice of airside shops/ restaurants	10	2	Long walking distance	2	3
5	Long wait at immigration counter	10	2	Insufficient/ untidy facilities in the lounge	6	1	Long wait at immigration counter	2	3
	Nothing	309	71	Nothing	287	66	Nothing	42	53

Notes: N = weighted sample sizes. Respondents could give more than one answer, thus the percentages may total more than 100%.

2.24 Figure 17 shows that passengers at Stansted identifying at least one source of dissatisfaction mostly note long waiting times and insufficient staff/facilities.

Figure 17: Top five sources of dissatisfaction at Stansted

	Arriving (N = 173)	N	%	Departing (N = 173)	N	%
1	Insufficient staff/facilities	10	6	Long wait for security checking	7	4
2	Long wait at immigration counter	3	2	Long wait at check-in counter	6	4
3	Long wait for baggage reclaim	3	2	Insufficient staff/facilities	5	3
4	Long wait for getting off the plane	3	2	Surface access to airport was expensive	4	3
5	Long walk after getting off the plane/poor signage at immigration counter	2	1	The lounge was too busy	4	3
	Nothing	140	81	Nothing	118	68

Notes: N = weighted sample sizes. Respondents could give more than one answer, thus the percentages may total more than 100%.

Improvements identified

2.25 In line with the responses to the question around dissatisfaction with their airport experience, over half of the respondents at Heathrow and Gatwick, and 45% at Stansted, did not suggest any improvement at the airport when asked "what single improvement would you like to see at this airport?". Across all three airports, arriving passengers had the highest proportion making no suggestions for improvements.

2.26 Passengers were also asked how much they would be willing to pay for any improvements they suggested. However, these responses were collected as free text and it has not proved possible to analyse the answers in a useful manner given the variation in currencies, explanations and caveats provided.

2.27 The improvement areas that were suggested varied and have been grouped together for analysis. The item "General facilities" includes seating, disabled facilities, telephones, rubbish bins, trolleys, covered walkways, water fountain, power points, post box, moving walkways, escalators and television. "Airport environment" include areas such as air conditioning, heating, space, general cleanliness and noise level.

2.28 As shown in figure 18 below, where improvements were identified, the most frequently cited areas at Heathrow were immigration counters and long walking distances (for arriving passengers); security and airport environment (for departing passengers); and security and information/ signage (for connecting passengers).

Figure 18: Top five single improvement areas identified at Heathrow

	Arriving (N = 480)	N	%	Departing (N = 455)	N	%	Connecting (N = 551)	N	%
1	Immigration counter	25	5	Security	36	8	Security	62	11
2	Long walk	23	5	Airport environment	24	5	Information/ signage	50	9
3	Airport environment	18	4	Information/ signage	19	4	Free wifi	27	5
4	Information/ signage	12	2	General facilities	19	4	Lack of designated areas	26	5

	Arriving (N = 480)	N	%	Departing (N = 455)	N	%	Connecting (N = 551)	N	%
5	General facilities	11	2	Catering	15	3	General facilities	24	4
	Others	68	14	Others	92	20	Others	77	14
	No improvements required	323	67	No improvements required	251	55	No improvements required	286	52

Note: N = weighted sample sizes.

2.29 As shown in figure 19 below, where improvements were identified, the most frequently cited areas at Gatwick were toilet/shower facilities and reducing baggage queuing time (for arriving passengers); security process and catering facilities (for departing passengers); and better toilet/showers and signage (for connecting passengers).

Figure 19: Top five single improvement areas identified at Gatwick

	Arriving (N = 403)	N	%	Departing (N = 375)	N	%	Connecting (N = 74)	N	%
1	Toilets/shower	25	6	Security	27	7	Toilets/shower	5	7
2	Baggage queue time	19	5	Catering	23	6	Information/ signage	5	7
3	General facilities	15	4	Information/ signage	19	5	General facilities	5	6
4	Long walk	13	3	General facilities	19	5	Lack of designated areas	4	5
5	Airport environment	9	2	Long walk	17	4	Shops	3	5
	Others	34	8	Others	85	23	Others	18	24
	No improvements required	288	72	No improvements required	186	50	No improvements required	34	45

Note: N = weighted sample sizes.

2.30 As shown in figure 20 below, where improvements were identified at Stansted, the most frequently cited areas were general facilities

and airport environment (for arriving passengers); and faster security process and better catering facilities (for departing passengers).

Figure 20: Top five single improvement areas identified at Stansted

	Arriving (N = 122)	N	%	Departing (N = 145)	N	%
1	General facilities	14	11	Security	12	8
2	Airport environment	8	7	Catering	11	7
3	Long walk	6	5	General facilities	11	7
4	Toilets/shower	5	4	Surface access	8	6
5	Immigration counter	5	4	Waiting time	6	4
	Others	22	18	Others	41	28
	No improvements required	64	52	No improvements required	57	39

Note: N = weighted sample sizes.

Queue times

2.31 The purpose of these questions in the survey was to gain an understanding of what passengers considered to be reasonable queue times, and how their perceived experience compared with these.

2.32 In general, the majority (around 90%) of respondents spend no more time queuing than the maximum time they thought reasonable. About 80% spent no more than 15 minutes in the queue for all the processes they experienced (which depended on the flow in which the passenger was interviewed). Average queue times estimated from the survey for various processes are listed in figure 21.

2.33 Given the survey took place on a limited number of days, the queue times experienced by the respondents will not necessarily be reflective of the average passenger experience over a longer period.

2.34 It is also important to recognise that these are passengers' perceived (rather than actual) queue times for the various airport processes, and that they were interviewed after the event.

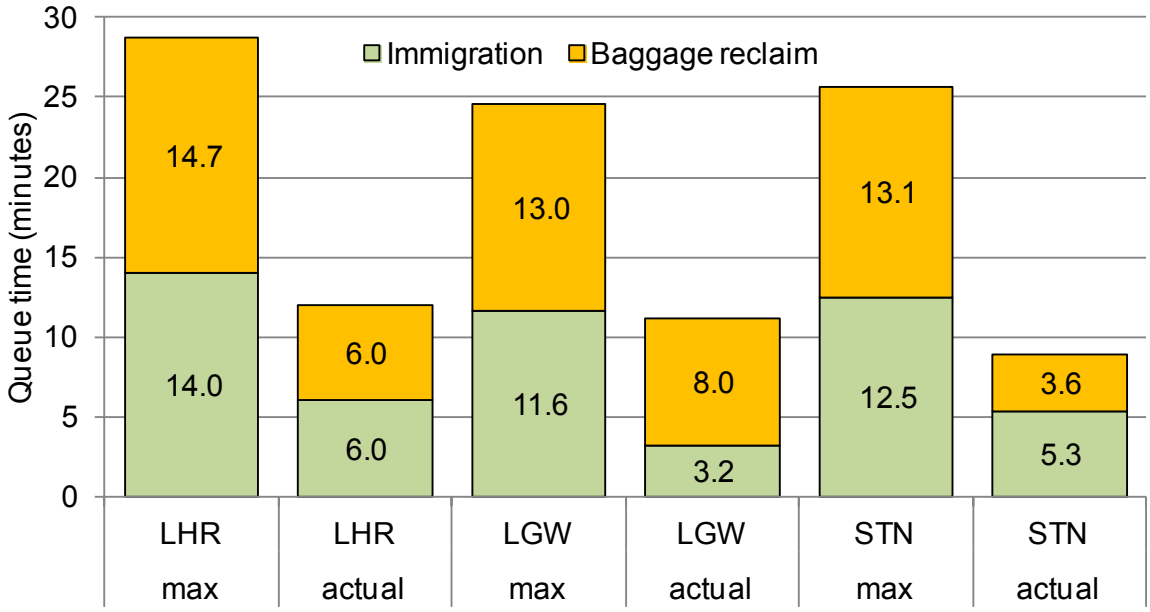
Figure 21: Queue times at Heathrow, Gatwick and Stansted

Airport	Passenger flow	Process	Perceived Actual (mins)	Max reasonable (mins)	Actual < 15 mins (%)	Actual <= Max (%)
LHR	Arriving	Immigration (N = 490)	6.0	14.0	92.6%	92.0%
		Baggage reclaim (N = 490)	6.0	14.7	92.8%	93.1%
	Departing	Check-in (N = 261)	7.6	17.2	88.2%	92.1%
		Bag drop (N = 178)	5.0	13.0	95.0%	91.9%
		Security (N = 491)	7.1	15.2	93.1%	92.9%
	Connecting	Security (N = 557)	12.2	15.9	78.9%	82.2%
LGW	Arriving	Immigration (N = 431)	3.2	11.6	99.3%	96.9%
		Baggage reclaim (N = 437)	8.0	13.0	87.3%	86.0%
	Departing	Check-in (N = 217)	5.6	16.5	92.7%	95.1%
		Bag drop (N = 118)	7.4	13.6	85.2%	87.1%
		Security (N = 413)	5.7	13.7	95.0%	92.6%
	Connecting	Security (N = 74)	5.8	13.9	95.0%	92.8%
STN	Arriving	Immigration (N = 170)	5.3	12.5	96.1%	93.3%
		Baggage reclaim (N = 167)	3.6	13.1	96.6%	96.6%
	Departing	Check-in (N = 44)	9.5	22.3	84.0%	93.9%
		Bag drop (N = 33)	10.6	17.8	78.9%	83.8%
		Security (N = 161)	7.8	18.6	91.8%	96.7%

Notes: N = weighted sample sizes. Sample sizes are smaller than the total number of respondents because some respondents did not go through some of the processes.
Perceived actual = Average perceived queuing time (mins)
Max reasonable = Average maximum reasonable queuing time (mins)
Actual < 15 mins = % of respondents who spent 15 minutes or less in the queue
Actual <= Max = % of respondents who spent no more time queuing than the maximum time they think reasonable

2.35 As shown in figure 22, on average, arriving passengers queued for less than half of the time they thought would be reasonable.

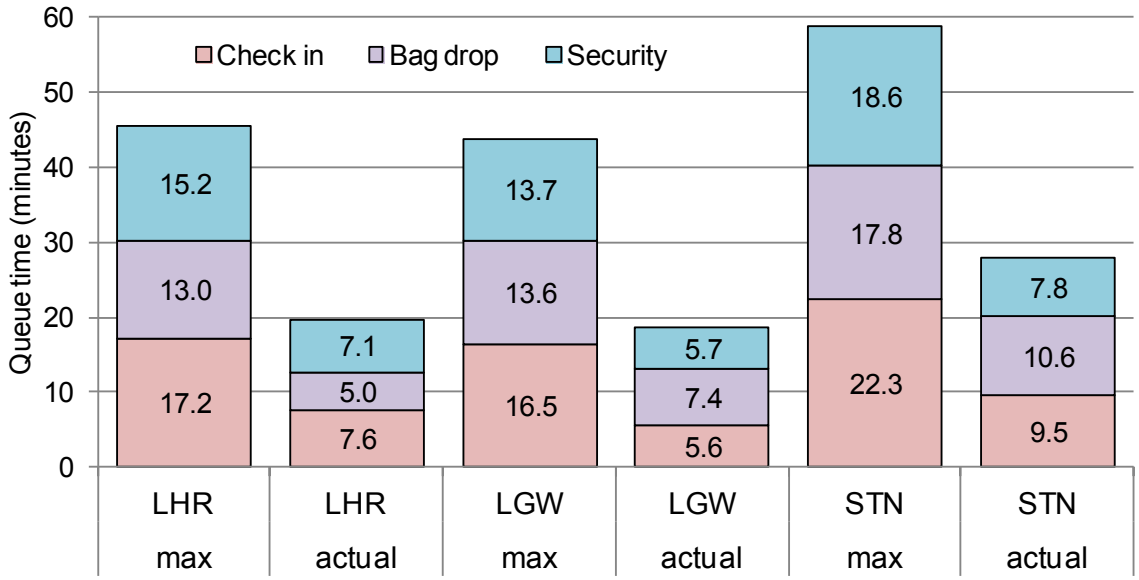
Figure 22: Arriving passengers: perceived actual and maximum reasonable queue times



Note: weighted sample sizes as shown in figure 21.

2.36 As shown in figure 23, respondents at Stansted appear to have a higher maximum reasonable queue time on departure. The sample sizes of Stansted indicate that there was a reduced response rate for these questions, which could be due to a greater proportion of passengers travelling with hand luggage only at the airport.

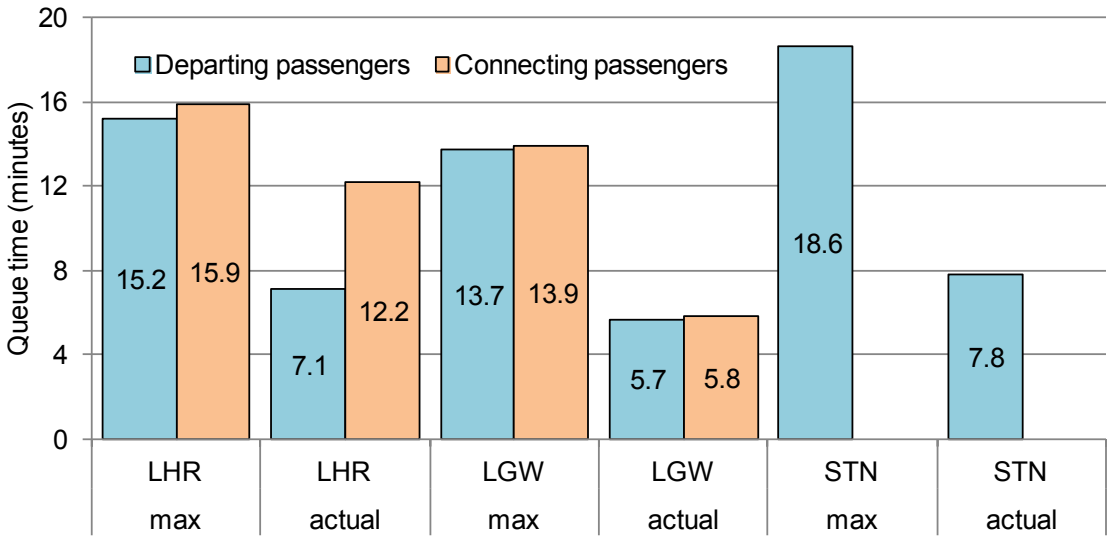
Figure 23: Departing passengers: perceived actual and maximum reasonable queue times



Note: weighted sample sizes as shown in figure 21.

2.37 Departing and connecting passengers at Heathrow and Gatwick have similar expectations on maximum reasonable queue times. Figure 24 below shows that while at Gatwick the two groups have comparable average perceived actual queue times, at Heathrow connecting passengers considered that they experienced a longer average queue time (12.2 minutes) than departing passengers (7.1 minutes).

Figure 24: Departing and connecting passengers: perceived actual and maximum reasonable security queue times



Note: weighted sample sizes as shown in figure 21.

Airport choice

2.38 For terminating passengers, across all three airports, airlines' route network, location/accessibility of the airport and price were the primary reasons for choosing to fly at a certain airport. As would be expected, the location/accessibility is not a consideration for connecting passengers.

Figure 25: Reasons for choosing to fly at Heathrow

	Arriving (N = 488)	N	%	Departing (N = 496)	N	%	Connecting (N = 558)	N	%
1	Location / accessibility	191	39	Route Network	191	39	Route Network	333	60
2	Route Network	161	33	Location / accessibility	162	33	Decision made by someone else	100	18
3	Decision made by someone else	57	12	Decision made by someone else	66	13	Price	59	11
	Others	80	16	Others	77	16	Others	65	12

Note: N = weighted sample sizes.

Figure 26: Reasons for choosing to fly at Gatwick

	Arriving (N = 434)	N	%	Departing (N = 431)	N	%	Connecting (N = 79)	N	%
1	Route Network	132	31	Route Network	143	33	Route Network	51	64
2	Location / accessibility	132	31	Location / accessibility	102	24	Decision made by someone else	13	17
3	Price	75	17	Decision made by someone else	76	18	Price	6	7
	Others	94	22	Others	111	26	Others	9	12

Note: N = weighted sample sizes.

Figure 27: Reasons for choosing to fly at Stansted

	Arriving (N = 171)	N	%	Departing (N = 170)	N	%
1	Price	64	37	Location / accessibility	65	38
2	Location / accessibility	53	31	Route Network	53	31
3	Route Network	43	25	Price	37	21
	Others	10	6	Others	16	9

Note: N = weighted sample sizes.

Older passengers[8]

2.39 To augment the initial sample, over 150 further interviews were conducted which targeted older departing passengers. In the general airport population passengers aged over 65 are estimated to account for 7.2% of passengers at Heathrow, 10.3% at Gatwick and 10.4% at Stansted.[9]

2.40 The purpose of these interviews was to help the CAA better understand whether these passengers had specific concerns which were not apparent when treating the passengers interviewed as a homogeneous group.

8 Passenger selection was based on interviewers' judgement, and was intended to target those aged over 65.

9 Using the CAA main survey (Q4 2012).

2.41 For this subgroup analysis, these interviews were weighted separately at an airport level by total passenger numbers in each terminal. The unweighted and weighted numbers of interviews are presented below.

Figure 28: Unweighted and weighted number of interviews

	LHR					**LGW**			**STN**	**Total**
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Unweighted	23	25	20	24	**92**	20	20	**40**	**25**	**157**
Weighted	20	25	17	30	**92**	19	21	**40**	**25**	**157**

Note: weighted sample sizes are rounded to the nearest integer.

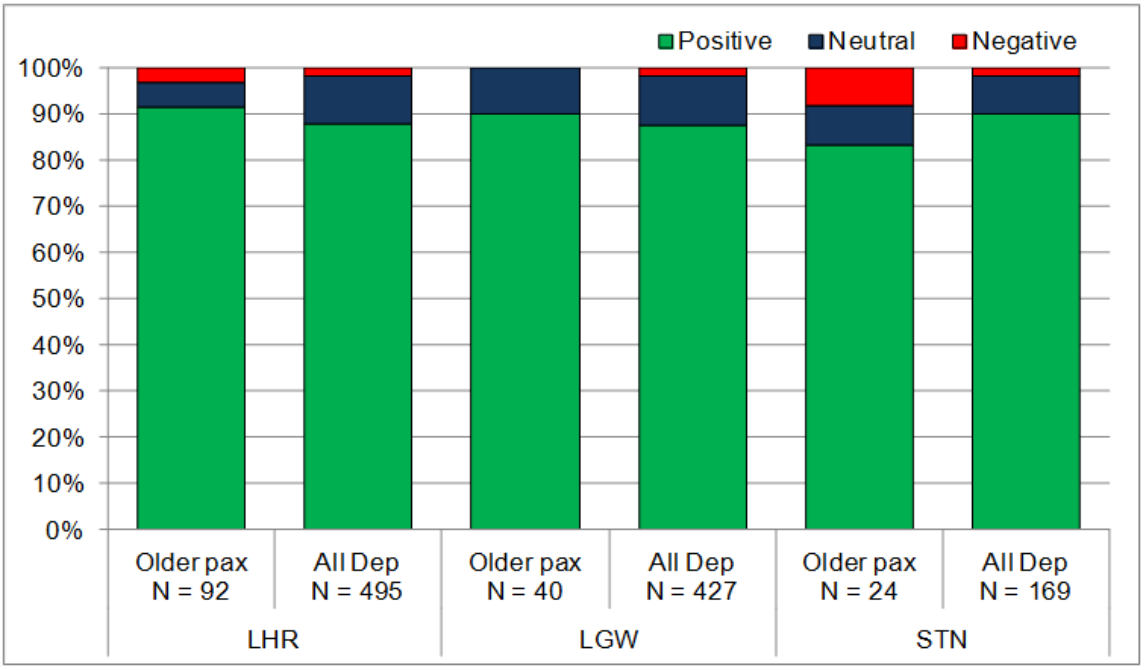
2.42 Given the small sample sizes by terminal, the findings from this data should be considered as providing useful qualitative insights rather than enabling robust analysis. Queue times have not been presented separately, and findings shown should be considered in the context of a higher level of sampling error than the overall survey.

2.43 Survey results for the older passengers have been reviewed and compared with the results obtained in the wider survey as follows: passenger satisfaction, sources of dissatisfaction and improvements identified, and airport choice.

Passenger satisfaction: older passengers

2.44 As shown in figure 29, in general, the older passengers interviewed appear to show similar levels of overall satisfaction towards airport services compared with responses from all departing passengers interviewed.

Figure 29: Overall level of satisfaction, older and all departing passengers



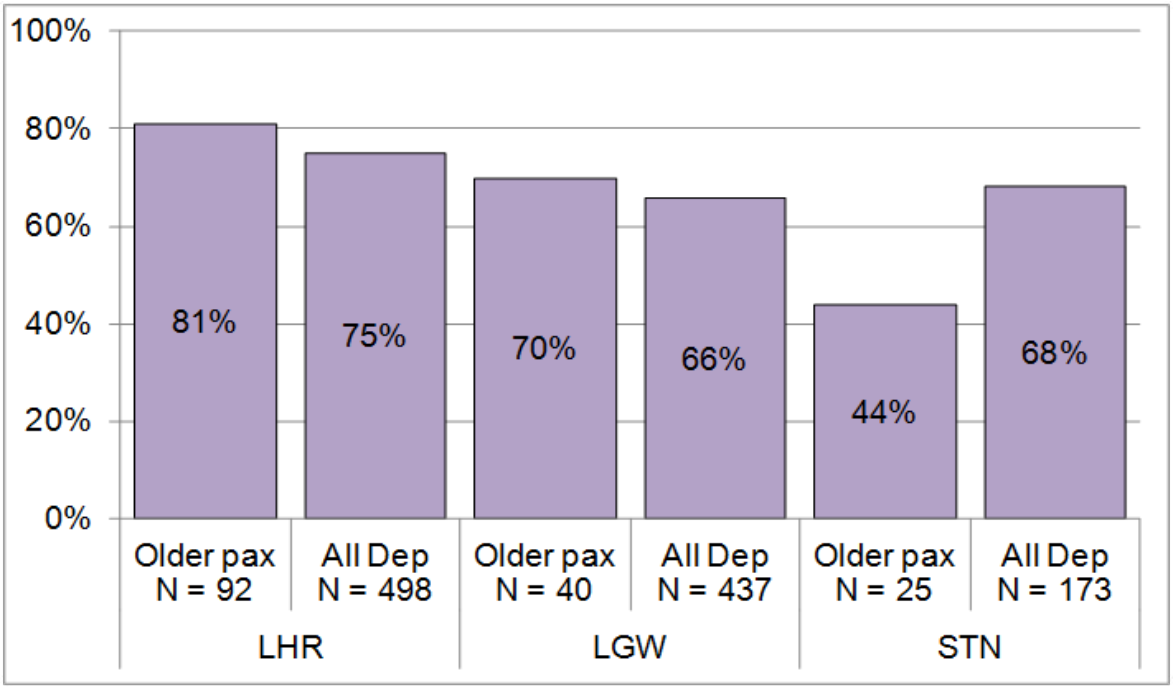
Note: N = weighted sample sizes.

2.45 Of the older passengers, 99% of those interviewed at Heathrow, and all at Gatwick and Stansted, indicated that they would use the same airport again in the future. This is in line with the responses given by departing passengers interviewed in the wider survey.

Sources of dissatisfaction and improvements identified: older passengers

2.46 Figure 30 shows the percentage of respondents who did not raise any sources of dissatisfaction. Compared with the responses from all departing passengers interviewed, a higher proportion of older passengers did not give any sources of dissatisfaction at Heathrow and Gatwick but at Stansted the proportion is lower. The sources of dissatisfaction mentioned were similar to those raised by the wider group of respondents.

Figure 30: Percentage of respondents who did not raise any sources of dissatisfaction



Notes: N = weighted sample sizes.

2.47 The areas of improvement suggested by older passengers were similar to those put forward by all departing passengers.

Airport choice: older passengers

2.48 The primary reasons given by older passengers as regards to airport choice were the same as those given by all departing passengers.

CHAPTER 3

Weighting methodology

Objectives

3.1 The aim of weighting is to reduce potential bias and, as far as possible, make the sample representative of the overall population.

3.2 In this passenger research, most (2,706) of the interviews were conducted in October and November 2012 (in the fourth quarter). The CAA main survey (Q4 2012)[10] was used as a benchmark for weighting, so that the responses in this research can better reflect the passenger satisfaction of the overall airport population. A small number (157) of targeted responses from older passengers were received in February 2013 and are included in the weighting of the overall results. It is assumed that the demographic characteristics (apart from age) of these responses are similar to the responses received earlier.

3.3 The weights are calculated such that:

- the weighted sample size by airport equalled the number of interviews obtained;
- the split of passengers by terminal across each airport reflected that of actual terminal passenger numbers in the fourth quarter of 2012; and
- the flow of passengers (arriving, departing and connecting) by airport reflected that observed in the CAA main survey (Q4 2012).

3.4 In the analysis of older departing passengers as a subgroup, these interviews are weighted separately such that:

- the weighted sample size by airport equalled the number of interviews obtained; and
- the split of passengers by terminal across each airport reflected that of actual terminal passenger numbers in the fourth quarter of 2012.

10 The CAA carries out passenger surveys across a number of UK airports all year round, and weights the results at a carrier-sector level by quarter. These weights also incorporate a scaling factor such that the total sample weights match the airport population by route, sector and terminal.

3.5 The weights used in this report do not include a scaling factor, so when totalled add up to the number of interviews obtained.

Methodology

All passengers

3.6 The CAA carries out passenger surveys on departing passengers only, but weights for both arrivals and departures. The passenger population of the CAA main survey (Q4 2012) is given in figure 31.

Figure 31: Population derived from the CAA main survey (Q4 2012)

Thousands	**LHR**					**LGW**			**STN**	**Total**
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	1,241	1,528	1,030	1,797	5,596	1,601	1,776	3,377	1,924	10,898
Departing	1,241	1,528	1,030	1,797	5,596	1,601	1,776	3,377	1,924	10,898
Connecting	755	1,630	456	3,557	6,398	246	363	609	–	7,008
Total	3,236	4,687	2,517	7,151	**17,591**	3,448	3,915	**7,363**	**3,849**	**28,803**

Notes: numbers are rounded to the nearest thousand. "–" indicates zero responses. Due to the low volume of connecting traffic at Stansted, it was not targeted in this survey. Therefore, connecting passengers in the population are disregarded for weighting purposes.

3.7 The number of passengers that passed through each terminal as a proportion of the airport total can be calculated from figure 31.

3.8 Example 1: for passengers arriving at Heathrow Terminal 1, the proportion is given by

$$\frac{\text{Number of passengers arrived at LHR T1}}{\text{Total number of passengers at LHR}} = \frac{\text{1,241,000 (Figure 31)}}{\text{17,591,000 (Figure 31)}} = \text{7.1\% (Figure 32)}$$

3.9 Example 2: for passengers connecting at Gatwick South Terminal, the proportion is given by

$$\frac{\text{Number of passengers arrived at LGW S}}{\text{Total number of passengers at LGW}} = \frac{\text{246,000 (Figure 31)}}{\text{7,363,000 (Figure 31)}} = \text{3.3\% (Figure 32)}$$

3.10 Figure 32 shows the proportions for each flow. Column and row totals are not shown because they are not used in the weighting process.

Figure 32: Proportion derived from the CAA main survey (Q4 2012)

%	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	7.1	8.7	5.9	10.2		21.7	24.1		50.0	
Departing	7.1	8.7	5.9	10.2		21.7	24.1		50.0	
Connecting	4.3	9.3	2.6	20.2		3.3	4.9			
Total					**100.0**			**100.0**	**100.0**	**100.0**

Notes: numbers are rounded to one decimal place.

3.11 The actual (i.e. unweighted) number of interviews in this survey at each terminal is shown in figure 33.

Figure 33: Unweighted number of interviews

	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	150	150	152	151		141	156		152	
Departing	177	168	176	174		189	192		194	
Connecting	56	82	15	113		129	146		0	
Total					**1,564**			**953**	**346**	**2,863**

3.12 The weighted number of interviews is obtained by multiplying the proportions in figure 32 by the unweighted number of interviews at each airport in figure 33.

3.13 For example 1 above, passengers arriving at Heathrow Terminal 1, the weighted number of interviews is given by

7.1% (Figure 32) x 1,564 (unweighted number of interviews at LHR) (Figure 33) = 110 (Figure 34)

3.14 For example 2 above, passengers connecting at Gatwick South Terminal, the weighted number of interviews is given by

3.3% (Figure 32) x 953 (unweighted number of interviews at LGW) (Figure 33) = 32 (Figure 34)

3.15 The weighted number of interviews for each passenger flow at each terminal is shown in figure 34.

Figure 34: Weighted number of interviews

	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	110	136	92	160		207	230		173	
Departing	110	136	92	160		207	230		173	
Connecting	67	145	41	316		32	47		0	
Total					**1,564**			**953**	**346**	**2,863**

Note: numbers are rounded to the nearest integer.

3.16 The total weighted numbers of interviews at each airport remain the same after weighting and no scaling factor is used.

3.17 The weights for each single interview is calculated by dividing the weighted number of interviews (figure 34) by the unweighted number of interviews (figure 33) for arriving, departing and connecting passengers at each terminal.

3.18 For example 1 above, passengers arriving at Heathrow Terminal 1, the weight is given by

$$\frac{\text{Weighted number of interviews for passengers arrived at LHR T1}}{\text{Unweighted number of interviews for passengers arrived at LHR T1}} = \frac{110 \text{ (Figure 34)}}{150 \text{ (Figure 33)}} = 0.74 \text{ (Figure 35)}$$

3.19 For example 2 above, passengers connecting at Gatwick South Terminal, the weight is given by

$$\frac{\text{Weighted number of interviews for passengers connected at LGW S}}{\text{Unweighted number of interviews for passengers connected at LGW S}} = \frac{32 \text{ (Figure 34)}}{129 \text{ (Figure 33)}} = 0.25 \text{ (Figure 35)}$$

3.20 The respective weights derived for each passenger flow at each terminal are shown in figure 35. Varying weights are partly the result of targeted sampling to ensure sufficient interviews for subset analysis.

Figure 35: Weights derived for each passenger flow at each terminal

	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Arriving	0.74	0.91	0.60	1.06		1.47	1.47		1.14	
Departing	0.62	0.81	0.52	0.92		1.10	1.20		0.89	
Connecting	1.20	1.77	2.71	2.80		0.25	0.32			
Total					**1.00**			**1.00**	**1.00**	**1.00**

Notes: the weights are rounded to two decimal places. Exact weights are used in the weighting process.

3.21 In figure 35, a weight smaller than one (e.g. that for passengers departed at Stansted) means that that group of passengers is over-represented in the sample, and therefore should be weighted down to reflect their smaller proportion compared to total passenger numbers at the airports in the population.

3.22 Likewise, a weight larger than one (e.g. that for passengers connected at Heathrow Terminal 4) means that that group of passengers is under-represented in the sample. They should be weighted up to reflect their larger proportion compared to total passenger numbers at the airports in the population.

3.23 The weights shown in figure 35 are applied to each interview response to obtain the weighted responses in the survey findings.

Older passengers

3.24 The same weighting methodology is adopted for the analysis of this passenger subgroup. Figure 36 shows the sample sizes and weights derived.

Figure 36: Unweighted and weighted number of interviews

	LHR					LGW			STN	Total
	T1	T3	T4	T5	**Total**	S	N	**Total**	**Total**	
Unweighted	23	25	20	24	**92**	20	20	**40**	**25**	**157**
Weighted	20	25	17	30	**92**	19	21	**40**	**25**	**157**
Weights derived	0.89	1.01	0.85	1.23		0.95	1.05		1.00	

Notes: weighted sample sizes are rounded to the nearest integer. The weights are rounded to two decimal places. Exact weights are used in the weighting process.

APPENDIX A

Arriving passenger questionnaire

Civil Aviation Authority

Date	ID	Shift	Schedule Charter	Serial						
Time	Male Female	<16 16-65 >65	Flt No	**LHR** 01	03	04	05	**STN** 260	**LGW** N	S

ARRIVALS ONLY

Q1 Which airport did you fly from?		
Q2 **What was your arrival flight number?**		
Q3 **Did you start your air journey in airport in** (Q1)?	No 2 ⬇	Yes 1 **Q5**
Q4 What was your original airport		

Q5 In which country have you been living for most of the last 12 months?			
Q6 What nationality passport do you hold?		Passport 1	Passport 2
Q7 What is the chief purpose of your present trip?	Business	VFR	Leisure
Q8 How would you rate your overall experience in the airport terminal today?			

ALL Surface Passengers

Q9 Were there any aspects of your arrival experience today (at this airport) that you dissatisfied with?	
Getting off the plane	
Immigration	
Baggage Reclaim	
Customs	
Arrivals Hall	
Shops/Food Outlets	
Information at the Airport	
Other	

Q10 Thinking about the immigration process today, what was your estimated queuing time and what do you think would be the maximum reasonable queuing time?	*Today*	*Max*

Q11 Were there any other aspects of your arrival experience at the airport today that you were not satisfied with?	

Q12 Thinking about the time to pass through baggage reclaim today, what was your estimated waiting time and what do you think would be the maximum reasonable wait for your baggage?	*Today*	*Max*

Q13a What single improvement would you like to see at this airport?	
Q13b How much would you pay for this improvement?	*If Q13a answered*

Q14 Why did you choose to fly to *this* airport today?	

Q15 If you have departed this airport within the last 4 weeks how would you compare your departing experience to today's arrival?	*Better*	*Same*	*Worse*
Q16 Would you use this airport again in the future?	*Yes*	*No*	

END

APPENDIX B

Departing passenger questionnaire

Civil Aviation Authority

Date	ID	Shift	Schedule Charter	Serial						
Time	Male Female	Flt No	Depart Connect	**LHR** 01	03	04	05	**STN** 260	**LGW** N	S

Q1 Have you arrived at any UK airport by air within the last 24 hours?	Yes 1 ⬇	No 2 **Q4**

Q2 Did you come to *Airport* just to change planes?	Yes 1 ⬇	No 2 **Q4**

Q3 Which airport did you fly from?	

Q4 Where, in the UK, did you start your journey to catch this flight?	

Q5 Which airport are you travelling to on the flight you are now boarding?	
Q6 What is your flight number?	

Q7 Are you flying there to change planes or are you completing your air journey at (Q5)?	Changing 1 ⬇	Completing 2 **Q9**
Q8 At which airport will you complete your air journey?		

Q9 In which country have you been living for most of the last 12 months?		
Q10 What nationality passport do you hold?	Passport 1	Passport 2

Q11 What is the chief purpose of your present trip?	Business	VFR	Leisure
Q12 How would you rate your overall experience in the airport terminal today?			

ALL Surface Passengers

Q13 Were there any aspects of your departing experience today that you were dissatisfied with?	
Getting to the airport	
Check-in	
Security	
Departures lounge (Airport/Business)	
Airside shops/restaurants	
Departure gate	
Other	

Q14 Did you check-in or use the bag drop facilities at the airport today?	*Check-in* **Q15a**	*Bag-drop only* **Q15b**	*Neither (checked-in online, no hold baggage)* **Q16**
Q15a Thinking about check-in today, what was your queuing time and what do you think would be the maximum reasonable queuing time?	*Today*	*Max*	
Q15b Thinking about bag-drop today, what was your queuing time and what do you think would be the maximum reasonable queuing time?	*Today*	*Max*	

Q16 Thinking about the time to pass through security today, what was your queuing time and what do you think would be the maximum reasonable queuing time?	*Today*	*Max*

ALL Connecting Passengers

Q17 Were there any aspects of your departing experience today were you dissatisfied with?	
Getting off plane	
Transferring between or within terminals	
Immigration	
Security	
Departures lounge	
Airside shops/restaurants	
Departure gate	
Other	

Q18 Thinking about the time to pass through security today, what was your queuing time and what do you think would be the maximum reasonable queuing time?	*Today*	*Max*

Q19 Were there any other aspects of your experience at the airport today that you were not satisfied with?”	

ALL Passengers

Q20a What single improvement would you like to see at this airport?	
Q20b How much would you pay for this improvement?	*If Q20a answered*

Q21 Why did you choose to fly from *this* airport today?	

Q22 If you have arrived at this airport within the last 4 weeks how would you compare your arriving experience to today's departure?	*Better*	*Same*	*Worse*

Q23 Would you use this airport again in the future?	*Yes*	*No*

END