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Scope of this work





Scope of the project

The Civil Aviation Authority ("CAA") has commissioned FTI Consulting ("FTI") to support the CAA in understanding and forming a view on Heathrow Airport Limited's ("HAL") consumer acceptability testing research. The research was undertaken by Yonder¹ and presented as part of HAL's H7 Updated Business Plan ("UBP") submission.

The purpose of this report is to:

- consider the research brief and methodology used for the acceptability testing;
- provide a view on HAL's interpretations of the results; and
- consider the wider context for the research, limitations and other information that could be considered as part of the Passenger Service Charge ("PSC") assessment.

This included the review of the following documents:

- HAL's UBP Chapter 4.0, "H7 consumer insights updates"
- HAL's research brief to Yonder, "Research Brief Acceptability Testing of Future Passenger Service Charge"
- Yonder's report, "Passenger Service Charge acceptability testing research", April 2021

¹ Yonder is a multi-disciplinary consulting firm specialising in independent market research.

Overview of Yonder's research brief and methodology





As part of its UPB, HAL presented the results from additional 'consumer acceptability testing' of its proposals

HAL's research brief

- HAL commissioned Yonder to:¹
 - 1. "Understand prior knowledge of the PSC from consumers (current and potential users of Heathrow), what they believe it consists of, and what they believe it is used for";
 - 2. "Understand consumer views once informed of the key information, contrasted against the prior view"
 - 3. "Understanding of what consumers feel is an acceptable level for an airport to be charging in return for delivering these services to passengers"
 - 4. "Acceptability of the different proposed service improvements that Heathrow intends to make"
 - 5. "Understand consumer acceptability of the 2-3 potential resultant passenger service charges for H7 for delivering these service improvements"
- Key guidance from HAL included:
 - Quantitative focus with high-level qualitative phase for context
 - Representative sample of current and potential passengers, including the ability to assess sub groups, such as business vs leisure, direct vs connecting
 - Questions cognitively tested for understandability
 - Monadic survey design, testing PSC options in isolated 'test groups', meaning respondents do not compare and contrast options
- HAL raised the possibility of carrying out further work, including comparison between PSCs. However, this does not appear to have been undertaken based on the documents received.

Yonder's consumer acceptability testing methodology

Stage 1: Qualitative survey

- Designed to provide contextual background
- Aid survey design for the quantitative phase
- Focused on three key areas:
 - Awareness of the PSC
 - Services / facilities related to the PSC
 - Potential service improvements and impact on PSC
- In depth 1-on-1 interviews with 20 passengers (16 UK, 2 US, 1 Indian, 1 German), covering a number of sub groups

Stage 2: quantitative survey

- Designed to test awareness of PSC and responses to PSC options
- Randomly allocated to groups, which were shown 1 of 3 proposed PSCs: £26.46, £31.27 and £41.43, as well as the control (2020 PSC, £23.56)
- Each PSC option presented a number of service improvements (see Slide 14). Options 1 & 2 offered 9 improvements - Option 3 offered 2 improvements
- Focused on quantifying three key areas:
 - Awareness of the PSC
 - Acceptability of proposed service improvements
 - Acceptability of potential options for PSC
- 6,321 online respondents:
 - 4,578 UK, 592 Germany, 572 US, and 579 India

¹ Heathrow Airport, Research Brief – Acceptability Testing of Future Passenger Service Charge, page 2.



The methodology is broadly consistent with best practice in other regulated sectors, but some areas may warrant further consideration

Based on a high level view, the research methodology appears to be broadly consistent with best practice from other regulated sectors:

- Questions appear to be well tested, building on a qualitative stage and cognitive testing
- A sample size of 6,321 respondents covering different groups and nationalities
- Consumers were randomly allocated to groups and were only asked to comment on one PSC option, meaning their views were not influenced by a perception of the range of possible charges

However, there are some areas which may warrant further consideration:

- It is not clear from Yonder's methodology whether the distribution of respondents across key categories such as business/leisure and premium/economy class is representative of the mix of passengers at Heathrow¹:
 - □ This is particularly important given some results appear to vary significantly depending on the type of traveller.
 - The share of subgroups may also change in the future, which might need to be taken into consideration. As HAL notes in the Updated Business Plan, "the return of business travel remain[s] more uncertain. Our research has shown a clear pattern by age, with younger consumers more likely to return to air travel sooner compared to older age groups". 2
- It is not clear whether respondents were given sufficient explanation or context when responding to questions:
 - Yonder notes from its qualitative disucssions that "passengers struggled to attach a value to the PSC".3
 - The options presented did not test the linkage between PSC and service improvements.
 - Wider contextual information, such as the PSC at other similar airports, does not appear to have been provided to respondents.

¹ HAL has subsequently stated that the mix of respondents is representative of the profile of 2019 passengers who travelled through Heathrow. ²Updated Business Plan, chapter 4.0 (consumer insights) page 4. ³ Appendix 4: Yonder presentation, Slide 18.

HAL's interpretation of the acceptability survey results





HAL points to the acceptability research as evidence that the current PSC is good value and passengers are willing to pay more for improvements

In its Updated Business Plan, HAL identifies the following key conclusions:

"Heathrow is currently good value for money" 1

- Consumers were prompted with a definition of the PSC and asked to state an acceptable cost for HAL's PSC
- On average passengers considered £26.33 to be an acceptable charge
- HAL compares this to current charge of £23.56

2

"Customers value the proposed service improvements in our Optimal Plan" ²

- Respondents were asked 'how positive or negative' they felt about nine proposed investments, and were asked to rate each of them from 1 (negative) to 10 (positive)
- The majority attach positive values to HAL's proposed service improvements (8 or higher out of 10):
 - The four most desirable service upgrades were security, punctuality, connections and cleaning, with 60% of respondents rating these upgrades at 8 out of 10 or above
 - Seven of the nine proposed improvements received a rating of at least 8 out of 10 from 50% respondents

3

"Customers are willing to pay more for improved service" 3

- When consumers were asked to state an acceptable cost for HAL's PSC considering HAL's planned improvements, passengers on average considered £29.02 to be acceptable
- Separately, when presented with three PSC options and associated service levels, passengers find Option 2 (PSC of £31.27) as net 11% acceptable and Option 3 (PSC of £41.43) as net 18% unacceptable

4

"The acceptable level of charge... ranges between £29.89 and £39.59." 4

- HAL concludes that an acceptable PSC for the Optimal Plan is in the range between Option 2 (£29.89 in 2018 prices, £31.27 in 2021 prices) and Option 3 (39.59 in 2018 prices, £41.43 in 2021 prices)
- However, HAL also states (in the same document) that the *upper limit* of net acceptability is within this range.

5

"A Safety Only Plan with Low Adjustment prices is not acceptable to consumers" ⁵

- Option 3, which represents HAL's proposed safety plan with the low RAB adjustment (PSC of £41.43), is net 18% unacceptable
- On this basis, HAL argues that lower service levels and higher PSCs are not acceptable

FTI review of the key conclusions of the acceptability research





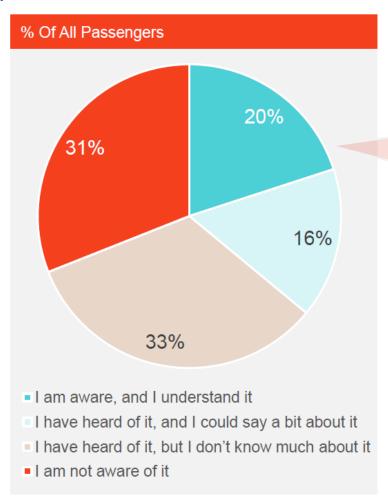
Before presenting the key findings, Yonder cautions that passengers' understanding of the PSC is low

Yonder first tested the awareness and understanding of the PSC among respondents.

Question 1:1

■ As an air travel passenger, to what extent are you aware of the Passenger Service Charge (PSC) at UK airports?

Question 1 results:



- 69% of respondents claim to have heard of the PSC (20% stated that they 'understand' it and a further 49% had 'heard of it')
- However, of those who have heard of it, only 46% correctly described it
- This suggests that a little over 30% of respondents correctly understood the PSC before taking the survey

- The prior lack of understanding of the PSC suggests that caution should used when relying on and interpreting the results of the acceptability testing
- Yonder notes that "understanding of the charge is low"²
- Yonder provided respondents with a short description of the PSC³ but it appears further context, such as the PSCs of other comparable airports was provided

b



Just over half of respondents consider HAL's 2020 PSC to be 'acceptable'

■ Yonder then posed two key questions in relation to the value of the current HAL PSC:

What is an acceptable PSC for HAL? 1

Question 2: The PSC was explained to consumers, who were then asked what they considered to be a reasonable amount

Question 2 results: On average, passengers considered £26.33 to be an acceptable PSC

- 52% of respondents considered it was acceptable
- 27% considered it unacceptable

Is HAL's current PSC acceptable? 2

Question 3: As part of its PSC option testing, Yonder asked a control group whether they thought that the current PSC of £23.56 was acceptable and then, ignoring acceptability, whether it was affordable.



- As discussed on the previous slide, the pre-existing lack of understanding of the PSC suggests that caution should be used when relying on and interpreting the results of the acceptability testing. Indeed, Yonder note from the qualitative discussions with respondents that "passengers struggled to attach a value to the PSC".3
- Only a small majority (52%) consider HAL's current PSC acceptable when it is presented in isolation.
- These results are likely to vary depending on the characteristics of the respondents (such as first/business class vs economy, leisure vs business), and it is not clear from Yonder's methodology whether the sample is representative of Heathrow passengers.⁴

¹ Appendix 4: Yonder presentation, Slide 19. ² Appendix 4: Yonder presentation, Slide 33. ³ Appendix 4: Yonder presentation, Slide 19. ⁴ HAL has subsequently stated that the mix of respondents is representative of the profile of 2019 passengers who travelled through Heathrow.



Consumers value the services improvements HAL proposes, but it appears that consumers were not given information on the associated costs

Yonder also asked respondents about perceptions of planned improvements at Heathrow.

Question 4:1

Yonder asked respondents how positive or negative they viewed nine possible service improvements, on a scale of 0-10 (10 being very positive).

Question 4 results:

 Yonder then calculated the percentage of respondents giving scores 8-10, for a number of different sub-group characteristics of the data.

Example results: premium vs economy passengers



Premium passengers consistently value service improvements more than economy passengers

Yonder's key findings

- The majority of consumers attach very positive values to HAL's proposed service improvements
- More efficient security, improved punctuality, quicker connections and enhanced cleaning are viewed most positively
- Foreign-based passengers are consistently more positive about proposed service upgrades than UK-based passengers

- It is unsurprising that consumers value service improvements, particularly given that it appears consumers were not asked to consider the cost of receiving a better service
- Demand for improvements is higher for premium customers, which means the survey weighting has an impact on overall results

¹ Appendix 4: Yonder presentation, Slide 21-25.



Yonder finds that the level of PSC that is deemed acceptable varies widely by consumer group

■ HAL primarily draws on two questions to argue that consumers are willing to pay higher PSCs. **First**, respondents were asked for their **unprompted view of the acceptable level of PSC**, **considering planned improvements** at Heathrow.

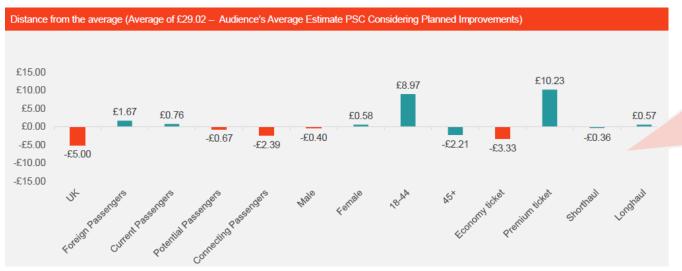
Question 5: 1

Considering the proposed service improvements and what is already covered by the PSC, what is an acceptable charge?

Question 5 results:

 On average, consumers consider an acceptable charge including planned improvements to be £29.02, compared to £26.33 without improvements

Disaggregation of results ²



- Consumers based in the UK are significantly below the average
- Younger consumers are willing to pay more than older consumers
- Premium passengers find much higher charges more acceptable

- While HAL's claim is consistent with the results, there is **considerable variation in responses by consumer group**:
 - □ The results suggest that consumers based in the UK think an acceptable PSC following the improvements would be around £24
 - The acceptable cost for premium ticket holders is substantially higher than for other passengers
- We also note Yonder's finding from the qualitative discussions that "passengers struggled to attach a value to the PSC", and the CMA's view that stated preferences can often lead to overstated estimates (see slide 24)



Consumers were asked to evaluate one of three different PSC options, where Option 1 was strictly superior and Option 3 strictly inferior

■ Second, respondents were asked for their view on one of three options for PSCs and associated planned service improvements at Heathrow.

Question 6: 1

■ Respondents were randomly allocated to groups, which were shown one of three proposed PSCs: £26.46, £31.27 and £41.43 and planned service improvements (shown below), as well as the control (2020 PSC, £23.56). They were asked to consider whether the proposed PSC is affordable, acceptable and value for money.

3 £41.43 £26.46 **Option 2 is strictly** £31.27 inferior to Option 1, with a higher Planned improvements shown to options 1 and 2 Planned improvements shown to option 3 **PSC** but the same Improved punctuality on both arriving and departing flights with Enhanced levels of cleaning and hygiene fewer disruptions (Departure punctuality increases from 78.4% checks throughout the airport planned to 80.5%) **improvements** More efficient and reliable baggage delivery so more passengers Passengers no longer needing to remove travel with their bags on the same flight (Bags not travelling with liquids, gels and electronics from their hand the passenger reduces from 9 bags in 1000 to 7 bags in a 1000) luggage Enhanced levels of cleaning and hygiene checks throughout the airport More efficient security search process including passengers no longer needing to remove liquids, gels and electronics from their hand luggage An easier journey through the airport by introducing more automated processes (increased availability of self-bag drop points, automated boarding gates and electronic immigration Greater variety of options for where passengers can wait and relax while at the airport (e.g. improved variety of seating, rest More airport staff on hand to assist at key points of the journey to help and reassure passengers Improved levels of help and navigation while in the airport through the development of digital tools and real time information to support passengers Improvements to make it easier and quicker to connect between flights [shown to connecting passengers only]

Option 3 is strictly inferior to 1 and 2, with a higher PSC and fewer planned improvements

¹ Appendix 4: Yonder presentation, Slide 35-36.



Respondents considered Option 1, with the lowest PSC of the three options, to be most acceptable and affordable

Question 6 (cont): 1

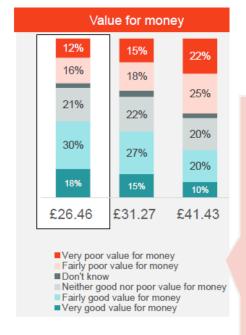
■ Respondents were randomly allocated to three groups (with PSCs of £26.46, £31.27 and £41.43) and associated planned service improvements, and were asked to consider whether the proposed PSC is affordable, acceptable and value for money.

Question 6 results:

Option 1, which combines the highest levels of service and the lowest PSC, is unsurprisingly the most acceptable, affordable and best value for money according to respondents







48% of consumers consider Option 1 to be good value for money. None of the options were considered good value for money by a majority of respondents

- Whilst HAL presents the results in support of their preferred option, these results show that consumers believe the cheapest option is the best value for money
- It doesn't appear that consumers strongly agree any of the PSCs represent good value for money, even the cheapest
- The more expensive options did not include more services, so no conclusions can be made on trade-offs between the PSC and service improvements



None of the three options were considered to provide "good value for money" by a majority of consumers

Yonder also present the results to Question 6 as shown below.

Question 6 (cont.):1

■ Respondents were randomly allocated to three groups (with PSCs of £26.46, £31.27 and £41.43) and associated planned service improvements, and were asked to consider whether the proposed PSC is affordable, acceptable and value for money.

Question 6 results (cont.):

Option 1: £26.46 (£25.29 in 2018)

- Acceptable by 53% of passengers
- Affordable by 62% of passengers
- "good value for money" by
 48% of passengers

Option 2: £31.27 (£29.89 in 2018)

- Acceptable by 46% of passengers
- Affordable by 55% of passengers
- "good value for money" by
 42% of passengers

Option 3: £41.43 (£39.59 in 2018)

- Acceptable by 32% of passengers
- Affordable by 44% of passengers
- "good value for money" by 30% of passengers

- The Yonder results show that none of HAL's proposals are considered to offer good value for money by a majority of consumers²
- Indeed, Yonder's summary of the results is that "among PSC options tested, £26.46 is considered the most acceptable (53%), the most affordable (62%) and the best value for money (48%)"³

¹ Appendix 4: Yonder presentation, Slide 38, 45, & 48. ² HAL has subsequently noted that respondents struggled to attribute value to the PSC. In their view, it is therefore best practice to consider the net scores. Appendix 4: Yonder presentation, Slide 7.



HAL's assertion that the acceptable level of charge ranges between Option 2 and Option 3 is not clearly evident in the survey results

■ In HAL's UBP, they represent the results to this question in the table below showing net responses (e.g. % very acceptable and acceptable less % very unacceptable and unacceptable). ¹

Question 6 (cont.):

■ Respondents were randomly allocated to three groups (with PSCs of £26.46, £31.27 and £41.43) and associated planned service improvements, and were asked to consider whether the proposed PSC is affordable, acceptable and value for money.

Question 6 results (cont.):

This table is taken from HAL's UBP which presents charges in 2018 prices, while the Yonder presentation (and our report where possible) uses nominal (2021) prices:³

Option 1: £25.29 (2018) £26.46 (2021) Option 2: £29.89 (2018) £31.27 (2021) Option 3: £39.59 (2018) £41.43 (2021)

		airport charge is:		
	Average H7 Charge (2018p)	Acceptability	Affordable	Representing "Good" Value for Money
High H7 Passenger Demand (P90)	£25.29	+23%	+44%	+20%
Mid H7 Passenger Demand (P50)	£29.89	+11%	+34%	+10%
Low H7 Passenger Demand (P10)	£39.59	-18%	+11%	-17%

Net levels* of consumers saying that proposed

- In the Updated Business Plan, HAL points to these result as evidence that the acceptable level of PSC charges is between Option 2 (£29.89 in 2018) and 3 (£39.59 in 2018). However, as shown on the previous slide, **Options 2 and 3 were not considered acceptable by the majority of respondents, and none of HAL's proposals are considered to offer good value for money by a majority of respondents.**
- Further, Yonder states that the third PSC option tested (£39.59 in 2018 prices, £41.43 in 2021 prices) is "broadly considered unacceptable" which is arguably inconsistent with HAL's key finding that the "acceptable level of charge ... ranges between £29.89 and £39.59".4

^{*} Net Levels = % Very/Acceptable - % Very/Unacceptable

¹ Updated Business Plan, Chapter 4, page 12. ² Appendix 4: Yonder presentation, Slide 7. ³ Appendix 4: Yonder presentation, Slide 5. ⁴ Updated Business Plan, Chapter 4, page 13. £29.89 (2018 prices) and £39.59 (2018 prices) are equivalent to £31.27 (2021 prices) and £41.43 (2021 prices) in the Yonder research.



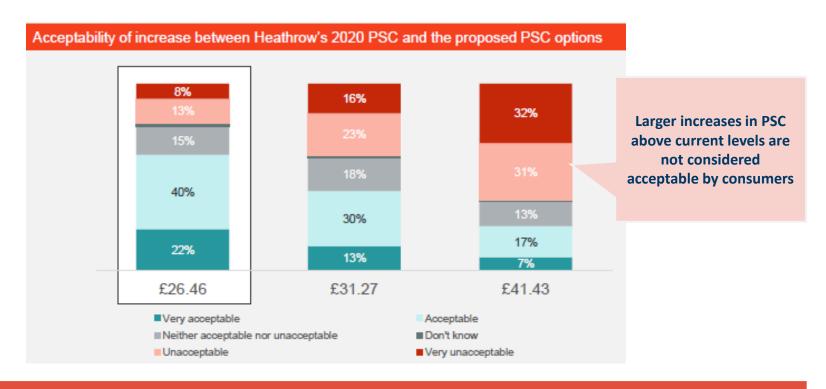
When consumers were asked to consider an increase in PSC from its current level, Option 1 with the smallest increase was most acceptable...

Respondents were then asked to consider the difference between the 2020 PSC (£23.56) and the proposed PSC options.

Question 7:

Respondents in each group were asked whether the proposed increase in charges (to £26.56, £31.27, £41.43 for the group shown Options 1, 2, and 3, respectively) from 2020 PSC (£23.56) was acceptable.¹

Question 7 results:



- The largest increase (from £23.56 to £41.43) was unacceptable to the majority of respondents in that group
- Less than half (43%) of those shown Option 2 agreed that an increase from £23.56 to £31.27 was acceptable

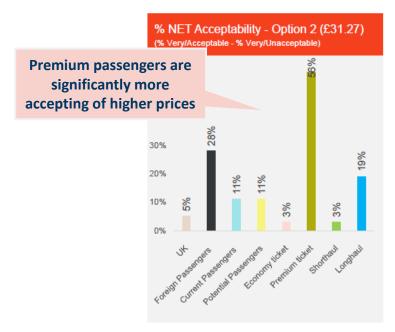


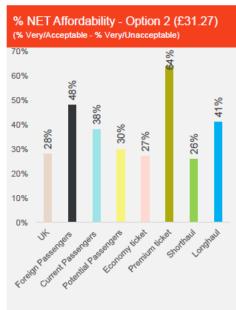
... and there was significant variation between consumer types, with premium passengers more likely to consider higher PSCs to be acceptable

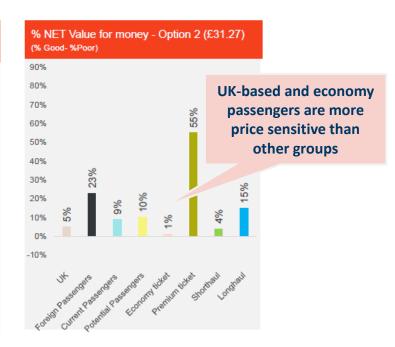
Question 7 (cont.):

Respondents in each group were asked whether the proposed increase in charges (to £26.56, £31.27, £41.43 for the group shown Options 1, 2, and 3, respectively) from 2020 PSC (£23.56) was acceptable.¹

Question 7 results (cont.):







Areas for CAA consideration

 HAL does not appear to consider the variation in acceptability and perceived value for money between different consumer groups when drawing its conclusions



It appears that Option 3, with the highest PSC and lowest service offering, is used to infer acceptability for HAL's low RAB adjustment option

■ In the UBP, HAL infer that consumers will not accept the Low Adjustment Case as this involves service levels deteriorating and the PSC increasing to £42. This appears to be based on results for Option 3 presented in Question 6 (repeated below).

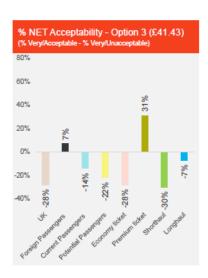
Question 6 (cont.):1

Respondents were randomly allocated to three groups (with PSCs of £26.46 (Option 1), £31.27 (Option 2) and £41.43 (Option 2)) and associated planned service improvements, and were asked to consider whether the proposed PSC is affordable, acceptable and value for money.

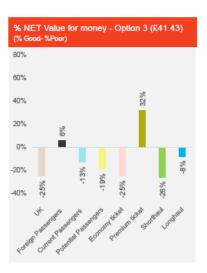
Question 6 results for Option 3:

Option 3: £41.43 (£39.59 in 2018)

- Acceptable by 32% of passengers
- Affordable by 44% of passengers
- "good value for money" by
 30% of passengers







- Given the lower service offering and significantly higher PSC, it is unsurprising that Option 3 is the least acceptable to consumers
- As discussed previously, premium consumers have a much higher willingness to accept higher PSCs, while UK-based and economy consumers are particularly adverse to higher PSCs

Comments on the wider context





HAL's acceptability research can be considered alongside other available data and research

Consumer understanding of the PSC

- Consumers generally did not have a good understanding of what the PSC represents and what services it covers before undertaking the survey.
- In addition, they were provided with little evidence to help understand the PSC, such as charges at comparable airports.

Comparisons with revealed preference data

- There already exists a range of optional premium services on offer at Heathrow (e.g. Fasttrack security, lounges, baggage porters), on which data could be available. Beyond the 'baseline' services that the PSC covers, consumers can pay for better service if they want to.
- 'Revealed preference data' is generally more reliable than 'stated preference data' (see box below).

Relationship between PSC and ticket prices

- When determining the appropriate PSC, consideration should also be given to the extent to which any change in the PSC would be passed through to consumers.
- This is broadly consistent with the limitations raised by HAL in the Updated Business Plan (page 10, Chapter 4).

Ofwat and the CMA - lessons from PR19

- In its redeterminations of PR19¹, the CMA reviewed evidence submitted by water companies supporting their business plans, which contained a mixture of revealed preference and stated preference (survey) evidence.
- The CMA found that stated willingness to pay tended to be substantially higher than revealed willingness to pay, which highlighted the
 difficulties of relying on customer surveys to estimate willingness to pay.
- Although the company triangulated between the two sources, the CMA cautioned that the significant gap between stated and revealed willingness to pay should have cautioned the company "against relying on [stated preference surveys], or at least should have caused them to do further work."

¹ PR19 is the price control process of the water companies, where companies submit their business plans to Ofwat ² CMA Final Report: PR19 Redeterminations, paragraph 7.294



