

NOTE FROM PATRICK FOLLEY IN RESPONSE TO MR BRASS'S EVIDENCE IN CHIEF

1. The attached table 1 shows the breakdown of Boeing 737 (old generation -800 and new generation Max 8 and Max 10) and Airbus A320 and A321 (old generation A320 and new generation A320 and A321 Neo) by key airlines within Jacobs' original and revised fleet mix.
2. The model was produced to test Mr Brass's fleet mix in the Bristol Airport traffic forecast (CD2.21, P.17 of the document). In doing so we kept Mr Brass's number of aircraft movements and built a bottom up model to test his fleet mix.
3. We also examined details of overall fleets of the airlines and looked at aircraft orders to inform us of future developments – such as degree of switch to new generation airlines
4. Our model then generated the movements in table 1 as outputs.
5. Our revised numbers were produced due to the letter submitted by Jet2.com which is in Mr Brass's rebuttal (8.3) outlining their plans for development of their operation at Bristol Airport. With that data provided by the airline it made sense to replace our original assumptions with data that had been supplied by the airline itself.
6. Because we were not challenging the total number of aircraft movements assumed by Mr Brass, but rather the composition of aircraft within that total, our revised model kept the same number of aircraft movements, but due to Jet2.com's letter assuming a higher number of passenger seats than we had assumed in our original model, it then saw an adjusted decrease in the movements by some other airlines to account for the greater Jet2.com number by a proportional level across the other airlines.
7. However, it should be noted that Jet2.com's letter stated *"we plan to increase our capacity to 865,000 passengers in 2022, increasing over the following years to 1,300,000 in 2027."* There is potentially some confusion over a reference to capacity and quoting passenger numbers rather than seats. We assumed in our model the more conservative assumption with this indeed meaning capacity (i.e seats) and not passengers. Assuming passengers would have led to a higher number of Jet2.com movements.
8. We also assumed an increase in Jet2.com's operations in 2030 over the 2027 figure they quoted in their letter, on the basis that once established, they would look to

continue to grow. As such we assumed the same CAGR on their capacity between 2027 and 2030 as the growth that Jet2.com has indicated they are anticipating between 2022 and 2027 (8% per year)

9. "Other airlines" also saw a slight increase due to the changes we accepted in the Note previously submitted (INQ10) following Mr Brass's rebuttal.
10. As can be seen from my Proof of Evidence (page 20 Table 3) the heading above the row addressing the 737-800 was "Aircraft used by Jet2.com (and others)". It was thus plain, that the 737-800 figures addressed use by Jet2.com and other airlines. Mr Brass in his rebuttal when responding to the fleet mix did not raise any issues regarding the use of 737-800 by other airlines.
11. In the Table above, while Jet2.com account for a significant proportion of Boeing 737-800 movements, they do not account for all of them; rather, the number of 737-800s in the mix relating to Ryanair and TUI (which Mr Brass did not query in his Rebuttal) have reduced.
12. Furthermore, I have assumed a very significant shift by Ryanair from operation of the Boeing 737-800 to Boeing 737-MAX aircraft and for easyJet from the A320 to A320NEO and A321 NEO aircraft. Both airlines have considerably larger operations at Bristol than Jet2.com in the Jacobs model.
13. As can be seen in the last table, Jet2.com remains far lower in terms of overall movements in our fleet mix when compared to Ryanair and particularly easyJet.
14. The question of the total passenger number of Mr Brass's calculation of the Jacob fleet mix producing a figure of 12.3 million passengers in his rebuttal is due to the fact that he has used a single typical seating configuration and a typical load factor for each airline, whereas the Jacobs model takes into account that different airlines have different seating configurations on the same aircraft type and will have different load factors. This will naturally result in some differences in the totals when the two are compared. A minor adjustment of assumed load factors would bring the numbers in alignment.
15. In his evidence in chief, Mr Brass stated that the load factors implied by the Jacob fleet mix would be too low for airlines to fly. I have not seen any calculations to support this statement. The starting point for the fleet mix was the busy day schedule, which was scaled up to produce annual movements. This is consistent with York Aviation's

methodology. We had no information from York Aviation on load factors and therefore assumed a high load factor which was applied to all airlines due to it being a “busy day” by its very nature. This could be considered a conservative approach as lower load factors would have led to considerably more movements. A Jacobs analysis of OAG seat data and CAPA passenger data for 2019 showed a load factor for Bristol across the year of approximately 88%. The OAG and CAPA data/ load factor analysis was taken from a very large Jacobs database that has been developed to cover analysis of over 600 airports worldwide to provide intelligence to Jacobs global and regional aviation practices. A 90% load factor was adopted to reflect the busy day profile that was identified rather than an average day during the year. Thus, the load factors were drawn from data for Bristol and are of a level that is above the average which airlines would and have flown from Bristol. Accordingly, it has been verified that the Jacobs mix above would result in 12mppa. I have satisfied myself that this analysis has been done on an appropriate basis.

16. Mr Brass said in his evidence in chief that “virtually all growth is coming from the 737 family”. He identified a 98% increase in Boeing 737 movements compared to 2019. But growth in Airbus A320 family movements on 2019 is just 8%. He said that 60% of traffic at BA is from Easyjet which flies Airbus A320s. He said that this must mean that the Jacobs fleet mix provided on Friday implies that Easyjet is not going to grow. Mr Brass said that “the fleet mix is not comprehensible.” In fact in the Jacobs’ Fleet mix easyJet, Ryanair and Tui all increase total movements by a similar amount in 2030 compared to 2019 (all between 10% and 12% growth). Ryanair and Tui’s numerical increase combined is less than easyJet’s. However, the implications of the growth plans outlined in the Jet2.com letter are such that it means that Jet2.com adds more new flights than all of the other three airlines combined, based on their growth plans. Thus, if the Jet.com growth plans are accommodated this leads to the significant growth by the 737 family in the Jacobs model to accommodate that growth within the 12 million passenger figure and associated 75,350 movements.
17. In 2019 approximately 26% of all movements at Bristol were by the 737-800 operated by Ryanair and Tui only. In 2030 those two airlines’ 737-800s accounted for only 7% of all movements. With the addition of Jet2.com (not operating at the airport in 2019), the 737-800 then accounts for 19% of all movements. This shows that even for the 737-800 the number of old generation aircraft is decreasing not increasing.
18. Mr Brass in his evidence in chief also alleged that “numbers of old aircraft are rising” and “numbers of new aircraft falling”. However, that is not correct. The Jacob’s fleet

mix set out in INQ10 increases the number of next gen aircraft and reduces the number of current generation aircraft compared to the fleet mix set out in my proof, which is shown in Table 2 to this Note.

19. The Jacobs Fleet Mix (INQ10) shows an increase in current generation aircraft compared to the Appellant's 2030 fleet mix. This is due to the introduction of Jet2.com as previously outlined since this airline operates a greater proportion of older aircraft. This is demonstrated in Table 3 to this Note.
20. Mr Brass in his evidence in chief indicated that the Jacobs fleet mix (INQ10) does not reflect the mix of existing generation/new generation shown in my proof (page 5 Table 1). I do not accept this. Table 1 of my proof (on p. 5) shows an estimate split across the whole of Ryanair's fleet of 93% next-gen aircraft and 7% older aircraft. As shown in table 1 to this Note, in 2030, of the movements by 737-800, Ryanair's share is 10.7%, equating to 1554 movements. I consider this to be consistent with table 1 on p. 5 of my proof because it represents 11% of the total movements by Ryanair in 2030 in my fleet mix. In 2030, I have attributed a total of 13,854 movements to Ryanair made up of: 11% (1554 movements) of 737-800 (older aircraft); and 89% of next-gen aircraft (10,250 movements of 737-Max 8 and 2,050 movements of 737-Max 10, both of which are next-gen). I consider the 7% figure in table 1 of my proof is consistent with this 11% figure in table 1 to this Note for a number of reasons. First, I would not expect the operations of Ryanair at each of their bases to mirror the estimates show in table 1 of my proof exactly because that estimate in table 1 of my proof applies to Ryanair's fleet as a whole, but there will necessarily be a degree of variation at each base. Secondly, in my experience it is more likely that Ryanair will introduce new next-gen aircraft into its new bases or step change growth at an existing base by adding new aircraft. This means that next-gen aircraft will not be introduced uniformly across all the bases (i.e. some bases will receive more next-gen aircraft than others). Given Ryanair's established position at Bristol, I consider that this is not one of the bases which would receive the highest levels of next-gen aircraft (although it would receive some next gen aircraft, as I have shown in my fleet mix). Thus the 11% figure in table 1 to this Note is slightly higher than the 7% figure in table 1 to my proof for these reasons.
21. By way of a sense check, I note that 1554 movements equates to 4.2 movements which in turn equates to no more than 1 plane. Thus the level of Ryanair movements by Boeing 737-800 is realistic.

22. As to TUI, Mr Brass in his evidence in chief said that TUI wants to become a two aircraft airline by the early 2020s, shifting to Boeings 737max and 787. He said that there were slight delays and so TUI's aspiration will not be achieved on the timescale they envisaged. At the current time, and using up to date CAPA fleet information, there are no new aircraft orders for Tui Airways (UK). Whilst the wider TUI group has MAX aircraft on order, these are for their airlines in other markets in Europe not for Tui Airways in the UK. The 737-800 remains the largest component of the TUI fleet by some distance. While Mr Brass has made a statement that they want to become a two aircraft airline, I have been unable to identify where this has been widely stated in public. Even if TUI Airways (UK) was to order a complete fleet replacement, it would take considerable time to take delivery of new MAX aircraft due to Boeing's large orderbook and delivery backlog (circa 4000 aircraft currently). This means that Mr Brass' assertion in evidence in chief is not realistic. As a result I regard the Jacobs fleet mix as entirely reasonable in its inclusion of 737-800s for TUI for 2030. In particular, I note the following points which demonstrate the robustness of my approach to TUI:

- (a) I have based my fleet mix on 18 movements on the busy day by TUI in 2019 of which 2 are 787-8 (next gen), 4 are 757-200 (older aircraft) and 12 are 737-800 (older aircraft). As explained above, I have then scaled the busy day to reach my fleet mix.
- (b) In 2030, my fleetmix is based on 20 movements on the busy day by TUI of which 4 are Boeing 737-MAX 8 (next gen), 2 are Boeing 787-8 (next gen) and 14 are 737-800 (older aircraft).
- (c) As the comparison shows, I have included growth of next gen aircraft, in particular I have removed the 757-200 and replaced these with next gen aircraft.
- (d) I have included one additional 737-800 aircraft in 2030 in specific response to information provided by York Aviation. In York Aviation's Further Clarification Note dated 21 January 2021, York include a new route to Paphos (which I expect to be launched next year) and in my view this justifies the inclusion of the additional 737-800 aircraft.

29 July 2021.

Table 1

Boeing 737-800	Appellant's 2030 Fleet Mix	Jacobs initial fleet mix	Jacobs 2030 Fleet Mix - Initial	Jacobs updated fleet mix		Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	57.0%	7,855	61.7%		8,995
Ryanair		13.0%	1,792	10.7%		1,554
TUI		30.0%	4,134	27.7%		4,033
EasyJet		-	-	-		-
Other Airlines		-	-	-		-
Total		2,380	100%	13,781	100%	14,582

Boeing 737 Max 8	Appellant's 2030 Fleet Mix	Jacobs initial fleet mix	Jacobs 2030 Fleet Mix - Initial	Jacobs updated fleet mix		Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	-	-	-		-
Ryanair		89.7%	10,486	89.7%		10,250
TUI		10.3%	1,198	10.3%		1,171
EasyJet		-	-	-		-
Other Airlines		-	-	-		-
Total		14,360	100%	11,684	100%	11,421

Boeing 737 Max 10	Appellant's 2030 Fleet Mix	Jacobs initial fleet mix	Jacobs 2030 Fleet Mix - Initial	Jacobs updated fleet mix		Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	-	-	-		-
Ryanair		100.0%	2,097	100.0%		2,050
TUI		-	-	-		-
EasyJet		-	-	-		-
Other Airlines		-	-	-		-
Total		8,360	100%	2,097	100%	2,050

A320	Appellant's 2030 Fleet Mix	Jacobs initial fleet mix	Jacobs 2030 Fleet Mix - Initial	Jacobs updated fleet mix		Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	-	-	-		-
Ryanair		-	-	-		-
TUI		-	-	-		-
EasyJet		80.0%	2,262	80.0%		2,212
Other Airlines		20.0%	566	20.0%		553
Total		6,540	100%	2,828	100%	2,765

A320 Neo	Appellant's 2030 Fleet Mix	Jacobs initial fleet mix	Jacobs 2030 Fleet Mix - Initial	Jacobs updated fleet mix		Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	-	-	-		-
Ryanair		-	-	-		-
TUI		-	-	-		-
EasyJet		100.0%	24,538	100.0%		23,985
Other Airlines		-	-	-		-
Total		20,200	100%	24,538	100%	23,985

A321 Neo	Appellant's 2030 Fleet Mix	Jacobs initial fleet mix	Jacobs 2030 Fleet Mix - Initial	Jacobs updated fleet mix		Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	-	-	-		-
Ryanair		-	-	-		-
TUI		-	-	-		-
EasyJet		100.0%	9,887	100.0%		9,664
Other Airlines		-	-	-		-
Total		15,720	100%	9,887	100%	9,664

Airlines ATMs as a percentage of BRS total movements			
Attributes	Appellant's 2030 Fleet Mix	Jacobs 2030 Fleet Mix - Initial	Jacobs 2030 Fleet Mix - Updated
Jet2.com	unknown - detail on airline fleet mix not provided within evidence submitted	7,855	8,995
Ryanair		14,374	13,854
EasyJet		36,687	35,861
Other Airlines		16,433	16,640
Total		75,350	75,350

Table 2

	Jacobs 2030 Fleet Mix - Initial	Jacobs 2030 Fleet Mix - Updated	Difference between Jacobs initial fleet mix and updated fleet mix	
Aircraft used by Jet2.com (current generation)				
Boeing 737-800 (winglets) Passenger	13,781	14,582	801	Current Generation
Next Generation Aircraft				
Airbus A320neo	24,538	23,985	(553)	New Generation
Airbus A321neo	9,887	9,664	(223)	New Generation
Boeing 737 MAX 10	2,097	2,050	(47)	New Generation
Boeing 737 MAX 8	11,684	11,421	(263)	New Generation
Embraer 195-E2	-	2,343	2,343	New Generation
Boeing 787-8	599	879	280	New Generation
Boeing 787-9	-	586	586	New Generation
All other existing generation aircraft				
Airbus A320	2,828	2,765	(63)	Current Generation
ATR 72	5,225	5,108	(117)	Current Generation
Boeing 737-700 (winglets) Passenger	2,397	-	(2,397)	Current Generation
Boeing 767-400	300	-	(300)	Current Generation
Boeing 777	300	-	(300)	Current Generation
Embraer 190	599	878	279	Current Generation
Embraer RJ145	1,115	1,089	(26)	Current Generation
Total New Generation Movements	48,805	50,928	2,123	New Generation
Total Current Generation Movements	26,545	24,422	(2,123)	Current Generation
Total air movements	75,350	75,350		
% New Generation	64.8%	67.6%		

Table 3

	Appellant's 2030 Fleet Mix	Jacobs 2030 Fleet Mix - Updated	Difference between appellant and Jacobs updated fleet mix	
Aircraft used by Jet2.com (current generation)				
Boeing 737-800 (winglets) Passenger	2,380	14,582	12,202	Current Generation
Next Generation Aircraft				
Airbus A320neo	20,200	23,985	3,785	New Generation
Airbus A321neo	15,720	9,664	(6,056)	New Generation
Boeing 737 MAX 10	2,050	2,050	-	New Generation
Boeing 737 MAX 8	14,360	11,421	(2,939)	New Generation
Embraer 195-E2	2,240	2,343	103	New Generation
Boeing 787-8	510	879	369	New Generation
Boeing 787-9	-	586	586	New Generation
All other existing generation aircraft				
Airbus A320	6,540	2,765	(3,775)	Current Generation
ATR 72	8,360	5,108	(3,252)	Current Generation
Boeing 737-700 (winglets) Passenger	750	-	(750)	Current Generation
Boeing 767-400	-	-	-	Current Generation
Boeing 777	-	-	-	Current Generation
Embraer 190	2,240	878	(1,362)	Current Generation
Embraer RJ145	-	1,089	1,089	Current Generation
Total New Generation Movements	55,080	50,928	(4,152)	New Generation
Total Current Generation Movements	20,270	24,422	4,152	Current Generation
Total air movements	75,350	75,350		
% New Generation	73.1%	67.6%		