European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft:
Recourse to Article 22.6 of the DSU by the European Union

(DS316)

RESPONSES OF THE UNITED STATES
TO THE FOURTH SET OF QUESTIONS FROM THE ARBITRATOR

March 22, 2019
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1 QUESTIONS SENT TO PARTIES ON 28 FEBRUARY 2019

1.1 For the United States

Question 153 (US)

With reference to Exhibits USA-16 (HSBI), USA-47 (HSBI) through USA-52 (HSBI), the United States' response to question No. 86, and Table 6 of the European Union's written submission, could the United States please clarify which exhibit is being offered vis-à-vis which actual Airbus A380 deliveries to demonstrate the value of corresponding counterfactual Boeing 747-8I deliveries in the six relevant geographic markets? In particular, could the United States please clarify how the information contained in these exhibits could be used to estimate the delivery prices in the six geographic markets at issue and eight customers to whom the deliveries were made in those markets?

1. The United States recalls that it submitted Exhibit USA-16(HSBI) in its methodology paper for purposes of valuing the Emirates 2013 lost sale. The United States submitted Exhibits USA-47(HSBI) through USA-52(HSBI) in response to Arbitrator Question 86.1 Question 86 references paragraph 310 of the EU written submission, which stated the EU’s preferred approach of using customer- and campaign-specific information for purposes of valuing impedance.2 Question 86 then asked, “if the Arbitrator were to use the same methodology to value lost sales and impedance (i.e. using ‘comparator orders’),” “could the United States please provide the same information to value impedance as it used to value lost sales, i.e. pricing, order size, escalation rates and delivery schedule of comparable Boeing firm orders or [BCI] to the customers identified in Table 6 of the European Union’s written submission.”3

2. In response, the United States noted that it had already provided [BCI], and it submitted [BCI] – i.e., the information contained in Exhibits USA-47(HSBI) through USA-52(HSBI). This evidence [BCI].4

3. In its responses to the Arbitrator’s third round of questions, the United States submitted extensive, original documentation concerning the 747-8I orders, [BCI] corresponding to Exhibit USA-16(HSBI) and Exhibits USA-47(HSBI) through USA-52(HSBI). The United States relies on that documentation in the remainder of its response to this question.

4. The EU insists that the United States “should have” based its impedance calculations on customer- and campaign-specific price information, similar to the U.S. approach to valuing lost sales.5 While the United States does not agree that this would be necessary, in response to the

1 See US RAQ86.
2 See EU Written Submission, para. 310.
3 See US RAQ86.
4 See US RAQ86; Boeing e-mail from [BCI] (Dec. 13, 2018) (Exhibit USA-35(BCI)).
5 See EU Written Submission, para. 312; ibid., para. 310.
Arbitrator’s question, we nonetheless provide those calculations now, which serve to further confirm the reasonableness of the U.S. approach for valuing lost sales.

5. First, the United States identifies the best possible match between the relevant 747-8I orders, [BCI] and the A380 deliveries to specific customers in the six VLA country markets at issue during the December 2011-2013 period. This matching exercise adheres to the following principles:

- If there is [BCI] to an A380 customer, then the approach uses [BCI] (e.g., using [BCI] to value the A380 delivery to Qantas in December 2011 pursuant to an order placed in 2001);  
- If the A380 customer ordered 747-8Is on two separate occasions, then the approach uses the 747-8I order closest in time to the A380 order resulting in the deliveries at issue (e.g., using the Korean Air 2009 747-8I order, rather than the Korean Air 2013 747-8I order, to value the A380 deliveries to Korean Air in 2012 and 2013 pursuant to orders placed in 2008);  
- If the A380 customer did not order any 747-8Is, then the approach uses a 747-8I order to another customer in the same country, if available, and if there is more than one such order, the approach uses the “same country” 747-8I order closest in time to the A380 order resulting in the deliveries at issue (e.g., using the Air China 2012 747-8I order, rather than the Air China 2013 747-8I order, to value the A380 deliveries to China Southern in December 2011, 2012, and 2013 pursuant to orders placed in 2005);  
- If no A380 customers in the country at issue ordered 747-8Is, then the approach uses a 747-8I order from the same region (e.g., using the Lufthansa 2006 747-8I order to value the A380 deliveries to Air France in 2012 and 2013 pursuant to orders placed in 2001).  

6. The following table shows the results of this matching approach:

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6 See Ascend Database (Exhibit EU-54).
7 See Ascend Database (Exhibit EU-54).
8 See Ascend Database (Exhibit EU-54).
9 See Ascend Database (Exhibit EU-54).
7. Second, the United States uses the original documentation submitted in its response to the third round of Arbitrator questions to calculate a base year price at the time of order for each applicable 747-8I order, [BCI], similar to the approach taken to calculate the revised lost sales values in the U.S. response to the third round of questions. These base year prices are adjusted for price concessions and escalated ([BCI]) to the period associated with the A380 deliveries to which they correspond: December 2011 (for December 2011 A380 deliveries), July 2012 (for 2012 A380 deliveries), or July 2013 (for 2013 A380 deliveries), as the case may be. These

<table>
<thead>
<tr>
<th>Period of A380 Deliveries</th>
<th>Boeing 747-8I Comparator Used in the Approach Described in the U.S. Response to Question 153</th>
<th>Comparator for A380 Deliveries to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 2011</td>
<td>[BCI]</td>
<td>Qantas (1)</td>
</tr>
<tr>
<td>Dec. 2011</td>
<td>Air China 2012 Order</td>
<td>China Southern (1)</td>
</tr>
<tr>
<td>Dec. 2011</td>
<td>[BCI]</td>
<td>Emirates (2)</td>
</tr>
<tr>
<td>2012</td>
<td>Lufthansa 2006 Order</td>
<td>Lufthansa (2), Air France (2)</td>
</tr>
<tr>
<td>2012</td>
<td>Air China 2012 Order</td>
<td>China Southern (2)</td>
</tr>
<tr>
<td>2012</td>
<td>Korean Air 2009 Order</td>
<td>Korean Air (1)</td>
</tr>
<tr>
<td>2012</td>
<td>[BCI]</td>
<td>Singapore Airlines (5)</td>
</tr>
<tr>
<td>2012</td>
<td>[BCI]</td>
<td>Emirates (11)</td>
</tr>
<tr>
<td>2013</td>
<td>Lufthansa 2006 Order</td>
<td>Air France (1)</td>
</tr>
<tr>
<td>2013</td>
<td>[BCI]</td>
<td>British Airways (3)</td>
</tr>
<tr>
<td>2013</td>
<td>Air China 2012 Order</td>
<td>China Southern (1)</td>
</tr>
<tr>
<td>2013</td>
<td>Korean Air 2009 Order</td>
<td>Korean Air (2)</td>
</tr>
<tr>
<td>2013</td>
<td>[BCI]</td>
<td>Emirates (13)</td>
</tr>
</tbody>
</table>

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10 See Net Price Calculations for Questions 153 and 154(d) Alternative Impedance Valuation (Exhibit USA-106(HSBI)).

11 See Calculation of Delivery Prices for Comparator Orders (Exhibit USA-61(HSBI)).

12 [BCI]. See also Net Price Calculations for Questions 153 and 154(d) Alternative Impedance Valuation (Exhibit USA-106(HSBI)).
calculations result in counterfactual 747-8I per-aircraft net prices in the delivery year of the A380 deliveries to which they correspond.\(^{13}\)

8. Third, the United States multiplies those counterfactual 747-8I per-aircraft net prices by the number of corresponding A380 deliveries and then summed to arrive at annual impedance values for December 2011, 2012, and 2013.\(^{14}\)

9. Fourth, the United States combines these revised impedance values with the revised lost sales calculations shown in Exhibit USA-99(HSBI) to arrive at an alternative aggregation of adverse effects determined to exist by year, which appears in Exhibit USA-107(HSBI).\(^{15}\)

**Question 154 (US)**

With reference to Exhibits USA-16 (HSBI), USA-50 (HSBI) through USA-52 (HSBI) and the United States’ response to question No. 86, regarding valuation of impedance, could the United States please explain the difference between a [BCI] and a [BCI]? Additionally, for the [BCI] mentioned in these exhibits, please explain the following:

10. To answer the first part of this question, the term [BCI],\(^{16}\) while the term [BCI].\(^{17}\) The United States has submitted evidence concerning [BCI].\(^{18}\) The United States has also submitted evidence concerning [BCI].\(^{19}\)

a. how were the terms, including the price, in these [BCI] formulated?

11. As indicated in the U.S. response to Question 121, the terms of these [BCI].\(^{20}\)

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\(^{13}\) See Net Price Calculations for Questions 153 and 154(d) Alternative Impedance Valuation (Exhibit USA-106(HSBI)).

\(^{14}\) Aggregation of Adverse Effects Determined to Exist by Year, Revised to Include Updated Impedance Calculation Described in Response to Question 153 (Exhibit USA-107(HSBI)).

\(^{15}\) Aggregation of Adverse Effects Determined to Exist by Year, Revised to Include Updated Impedance Calculation Described in Response to Question 153 (Exhibit USA-107(HSBI)).

\(^{16}\) [BCI].

\(^{17}\) See U.S. RAQ 121.

\(^{18}\) [BCI] (Exhibit USA-51(HSBI)); [BCI] (Exhibit USA-90(complete)(HSBI)); [BCI] (Exhibit USA-50(HSBI)); [BCI] (Exhibit USA-80(HSBI)).

\(^{19}\) [BCI] (Exhibit USA-52(HSBI)); [BCI] (Exhibit USA-81(HSBI)); [BCI]; [BCI] (Exhibit USA-71(HSBI)).

\(^{20}\) See U.S. RAQ 121.
12. [BCI].

b. were these [BCI]?

13. The [BCI].

c. could the United States further elaborate on the status of negotiations between Boeing and [BCI] and the processes that Boeing went through to [BCI]?

14. Below the United States summarizes the status of negotiations between Boeing [BCI]. Regarding the processes that Boeing went through to [BCI], please see the response to subpart (a) of this question and the U.S. response to Question 121.

15. [BCI].

16. [BCI].

17. [BCI].

18. [BCI].

d. if the Arbitrator were to reject these [BCI] as a basis upon which to illustrate the sales price of a counterfactual sale of 747-8I aircraft to [BCI], what would be the United States' suggestion for an alternative comparator order (rather than a [BCI]) to each? With respect to any comparator orders that the United States proposes in response to this question, please provide, at minimum, the information specified in the "Explanatory Note: Evidentiary Requests" in Section 4 of the Arbitrator's questions to the parties dated 19 February 2019, and please provide that information in accordance with the other instructions in that Section. This information request similarly applies vis-à-vis any new comparator orders that the United States may provide in response to question No. 121(f).

19. Prior to this submission, [BCI] the United States proposed for use in calculating the level of countermeasures, and that was in the context of valuing [BCI]. In the U.S. response to Question 153, the United States describes and implements an approach to valuing impedance that uses price information from Boeing 747-8I orders, [BCI] that best match the A380 deliveries that were made to the customers and country markets underlying the first compliance impedance

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21 See U.S. RAQ 121.
22 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
23 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
24 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
25 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
26 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
findings, and escalates those prices to December 2011, July 2012, or July 2013 (as the case may be). If the Arbitrator determines that it cannot rely on [BCI] information to value impedance, then the Arbitrator could adopt a modified version of the approach described in the U.S. response to Question 153.

20. In this modified approach, no [BCI] would be used. Instead, only 747-8I orders would be used. This modified approach adheres to the following principles:

- If the A380 customer also ordered 747-8Is, then a 747-8I order by that customer is used (e.g., using the Lufthansa 2006 747-8I order to value A380 deliveries to Lufthansa in 2012 pursuant to an order placed in 2001);\[^{27}\]

- If the A380 customer ordered 747-8Is on two separate occasions, then the approach uses the 747-8I order closest in time to the A380 order resulting in the deliveries at issue (e.g., using the Korean Air 2009 747-8I order, rather than the Korean Air 2013 747-8I order, to value the A380 deliveries to Korean Air in 2012 and 2013 pursuant to orders placed in 2008);\[^{28}\]

- If the A380 customer did not order any 747-8Is, then the approach uses a 747-8I order to another customer in the same country, if available, and if there is more than one such order, the approach uses the “same country” 747-8I order closest in time to the A380 order resulting in the deliveries at issue (e.g., using the Air China 2012 747-8I order, rather than the Air China 2013 747-8I order, to value the A380 deliveries to China Southern in December 2011, 2012, and 2013 pursuant to orders placed in 2005);\[^{29}\]

- If no A380 customers in the country at issue ordered 747-8Is, then the approach uses a 747-8I order from the same region or a nearby region, and if there is more than one such 747-8I order, the approach uses the “same region” 747-8I order closest in time to the A380 order resulting in the deliveries at issue (e.g., using the Korean Air 2009 747-8I order, rather than the Air China 2012 747-8I order, to value the A380 deliveries to Qantas (pursuant to an order placed in 2001), to Singapore Airlines (pursuant to orders placed in 2006), and to Emirates (pursuant to orders placed in 2001, 2003, and 2007).\[^{30}\]

21. The following table indicates the Boeing 747-8I comparators selected under this modified approach, with bold type indicating changes from the approach described in the U.S. response to Question 153.

\[^{27}\text{See Ascend Database (Exhibit EU-54).}\]
\[^{28}\text{See Ascend Database (Exhibit EU-54).}\]
\[^{29}\text{See Ascend Database (Exhibit EU-54).}\]
\[^{30}\text{See Ascend Database (Exhibit EU-54).}\]
22. All the evidence necessary for implementing that approach is now before the Arbitrator, including the information specified in the “Explanatory Note: Evidentiary Requests” with respect to the Boeing orders that would be used.

23. The calculations for this modified approach are provided in Exhibit USA-109(HSBI).  

Question 155 (US)

With reference to Exhibit USA-48 (HSBI), could the United States please explain the relationship between the [BCI] orders, and in particular the [BCI]?

24. The United States understands this question to refer to Exhibit USA-49(HSBI), which contains [BCI].

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31 Aggregation of Adverse Effects Determined to Exist by Year, Revised to Include Updated Impedance Calculation Described in Response to Question 154(d) (Exhibit USA-109(HSBI)).

32 See [BCI].

<table>
<thead>
<tr>
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<th>Boeing 747-8I Comparator Used in the Approach Described in the U.S. Response to Question 153</th>
<th>Boeing 747-8I Comparator Used in the Approach Described in the U.S. Response to Question 154(d) (changes in bold)</th>
<th>Comparator for A380 Deliveries to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 2011 Air China 2012 Order</td>
<td>Air China 2012 Order</td>
<td>China Southern (1)</td>
<td></td>
</tr>
<tr>
<td>2012 Lufthansa 2006 Order</td>
<td>Lufthansa 2006 Order</td>
<td>Lufthansa (2), Air France (2)</td>
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<td>2012 Air China 2012 Order</td>
<td>Air China 2012 Order</td>
<td>China Southern (2)</td>
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<tr>
<td>2012 Korean Air 2009 Order</td>
<td>Korean Air 2009 Order</td>
<td>Korean Air (1)</td>
<td></td>
</tr>
<tr>
<td>2013 Lufthansa 2006 Order</td>
<td>Lufthansa 2006 Order</td>
<td>Air France (1)</td>
<td></td>
</tr>
<tr>
<td>2013 [British Airways 2012 Proposal]</td>
<td><strong>Lufthansa 2006 Order</strong></td>
<td>British Airways (3)</td>
<td></td>
</tr>
<tr>
<td>2013 Air China 2012 Order</td>
<td>Air China 2012 Order</td>
<td>China Southern (1)</td>
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<tr>
<td>2013 Korean Air 2009 Order</td>
<td>Korean Air 2009 Order</td>
<td>Korean Air (2)</td>
<td></td>
</tr>
</tbody>
</table>
25. [BCI].33 [BCI].34 [BCI].35 [BCI].36 [BCI].37 [BCI], one can see that [BCI].38 Thus, [BCI].

**Question 156 (US)**

*With reference to Exhibit USA-49 (HSBI), could the United States please explain the relationship between the [BCI] orders, and in particular the [BCI]?*

26. The United States understands this question to refer to Exhibit USA-48(HSBI), which contains [BCI].39

27. [BCI].40 [BCI].41 [BCI].42 [BCI].43 [BCI], reveals that [BCI].44 Thus, [BCI].

**Question 157 (US)**

*With reference to Exhibits USA-12 (HSBI) through USA-16 (HSBI), USA-47 (HSBI) through USA-52 (HSBI) and any other additional exhibits that the United States will provide to the Arbitrator regarding comparator orders, could the United States please provide a summary table with information on both the contractually agreed and the current delivery schedules for each of the comparator orders contained in those exhibits?*

28. The United States provides the requested summary table in Exhibit USA-110(HSBI), which includes delivery schedule information pertaining to all Boeing orders, [BCI] referenced by the parties in connection with the discussion of potential comparator orders – *i.e.*, not just those for which the United States has advocated use as a comparator order.45 For the orders, [BCI] referenced in that table (including for those corresponding to Exhibits USA-12(HSBI))

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33 [BCI].
34 [BCI].
35 [BCI].
36 [BCI].
37 *See [BCI].*
38 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
39 *See [BCI].*
40 [BCI].
41 [BCI].
42 [BCI].
43 *See [BCI].*
44 Boeing E-mail regarding Questions 154-157 (Exhibit USA-108(HSBI)).
45 *Summary Table of Boeing Contracted and Current Delivery Schedules (Exhibit USA-110(HSBI)).*
through USA-16(HSBI) and USA-47(HSBI) through USA-52(HSBI)), the table cites to the
documentation provided in response to the Arbitrator’s third set of questions.

29. In connection with this response, the United States notes that the version of Exhibit
USA-90(HSBI) submitted to the Arbitrator contained two clerical errors. First, the summary
sheet on page 1 of Exhibit USA-90(HSBI), which provided documentation from the [BCI],
incorrectly indicated that it pertained to [BCI]. (There was no [BCI].) Second, the version
submitted to the Arbitrator omitted one relevant page from the [BCI]. The United States is
therefore providing the Arbitrator with a complete version of Exhibit USA-90(HSBI), and is
transmitting a complete version to the designated HSBI room in Brussels. The complete version
of the exhibit is also available for viewing in the designated HSBI room in Washington, DC.46
To avoid confusion, Exhibit USA-90(complete)(HSBI) marks the previously omitted page as
page 2(a) so that all other pagination remains unchanged.

46 [BCI] (Exhibit USA-90(complete)(HSBI)).