United States – Measures Affecting Trade in Large Civil Aircraft: Recourse to Article 21.5 of the DSU by the European Union

(AB-2017-4 / DS353)

OTHER APPELLANT SUBMISSION
OF THE UNITED STATES OF AMERICA

August 10, 2017
SERVICE LIST

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<tr>
<td>AHB</td>
<td>Air Hub Bond</td>
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<td>BCI/HSBI</td>
<td>Procedures: Additional Working Procedures for the Protection of Business</td>
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<td>B&amp;O</td>
<td>Confidential Information and Highly Sensitive Business Information</td>
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<tr>
<td>CFR</td>
<td>U.S. Code of Federal Regulations</td>
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<tr>
<td>CLEEN</td>
<td>Continuous Lower Energy, Emissions, and Noise</td>
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<td>DoD</td>
<td>U.S. Department of Defense</td>
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<td>DSB</td>
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<tr>
<td>NPV</td>
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<td>R&amp;D</td>
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<td>RDT&amp;E</td>
<td>Research, Development, Testing and Evaluation</td>
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INTRODUCTION AND EXECUTIVE SUMMARY

1. The compliance Panel in this dispute issued a detailed and high-quality report, finding that the United States met its compliance obligations with respect to all but one of the measures challenged by the European Union (‘EU’) (i.e., the Washington State B&O tax rate reduction). On appeal, the United States challenges a limited set of Panel findings, many on a conditional basis. If the Appellate Body rejects the EU’s claims on appeal, then it only needs to address the U.S. claims in Sections I and II.

2. **Section I** demonstrates that the Panel misinterpreted its terms of reference when it allowed the EU to raise in this proceeding arguments regarding DoD procurement contracts that the original panel rejected in the original proceeding. As the Panel recognized, Article 21.5 does not generally entitle parties to relitigate issues on which they did not prevail in an original proceeding. While there are exceptions to this principle, none of them apply to this situation. Therefore, the United States respectfully requests the Appellate Body to reverse the Panel’s finding that its terms of reference included the EU’s claims that DoD procurement contracts were financial contributions that conferred a benefit.

3. **Section II** presents an appeal of the Panel’s finding that the Washington State B&O tax rate reduction causes adverse effects. The Panel’s calculation of a $1.99 million per-aircraft subsidy magnitude is flawed because it assumes that Boeing would pool B&O tax savings from all LCA sales to lower prices in just three single-aisle sales campaigns. This assumption is inconsistent with the Appellate Body’s findings in the original proceeding regarding the nature and operation of tied tax subsidies like the B&O tax rate reduction – findings that were confirmed by the compliance Panel itself. Correctly calculated, the per-aircraft magnitude of the B&O tax rate reduction would be at most $100,000, an amount so small that it cannot be a genuine and substantial cause of significant lost sales or threat of impedance.

4. Furthermore, under the Panel’s counterfactual causation analysis, even if Boeing had increased its prices by the full amount of the alleged subsidy – $100,000 – Airbus would not have won any additional sales. Thus, there is no basis for finding that the Washington B&O tax rate reduction was a genuine and substantial cause of the adverse effects alleged by the EU under Articles 5 and 6.3 of the SCM Agreement. Moreover, as discussed in greater detail below, even assuming *arguendo* that the Panel’s magnitude calculation were correct, the Panel’s causation findings suffer from several additional flaws, including a failure to make an objective assessment as called for in Article 11 of the DSU, which require reversal of the Panel’s findings that the Washington B&O tax rate reduction is a genuine and substantial cause of significant lost sales and threat of impedance.

5. **Section III.A** presents a conditional appeal: if the Appellate Body reverses the Panel’s finding that all or part of the subsidies it grouped in the category of “aeronautics R&D subsidies” did not cause adverse effects, then it should find that the Panel erred in not conducting a holistic analysis and instead confining its benefit evaluation for post-2006 NASA instruments, DoD assistance instruments, and the FAA Boeing CLEEN Agreement to the allocation of patent rights – while disregarding other terms, including the funding commitments, rights to terminate the agreement, rights to manage the project, and requirements to use particular accounting practices.
In other words, the Panel did not acknowledge the possibility that the benchmark transactions were not fully comparable to the NASA, DoD, and FAA transactions with respect to non-intellectual-property terms, and that the disregarded terms (including the monetary contribution) of the commercial transactions offset the more favorable patent-related rights that commercial commissioning parties would be expected to obtain.

6. In proceeding in this fashion, the Panel incorrectly applied Article 1.1(b) of the SCM Agreement by conducting an evaluation of the benefit without taking account of all of the terms that affected the value to the recipient. Even assuming *arguendo* that the Panel applied Article 1.1(b) correctly in addressing only the patent-related rights, it failed to conduct the objective assessment called for under Article 11 of the DSU by disregarding that these rights included a funding component in most of the benchmark transactions. The United States accordingly respectfully requests the Appellate Body to reverse the Panel’s finding that NASA contracts and cooperative agreements, DoD assistance instruments, and the Boeing CLEEN Agreement conferred a benefit.

7. **Section III.B** presents a conditional appeal: if the Appellate Body finds that DoD research contracts are collaborative R&D arrangements that confer a benefit, then the subsidies found to exist because of NASA, DoD, and FAA R&D instruments are not specific. The Panel analyzed each administrative agency – NASA, DoD, and FAA – separately in determining whether subsidies granted by those agencies were specific. However, if the Appellate Body finds that DoD procurement contracts create the same type of financial contribution as the DoD assistance instruments, NASA instruments, and the FAA’s Boeing CLEEN Agreement – as the EU argues that the Appellate Body should do – then the rationale for separate specificity analyses collapses.

8. The Panel stated that the only benefit it found to exist in all three categories of funding instruments was from the allocation of patent rights. As the Appellate Body found in *US — Large Civil Aircraft*, that allocation of rights is common to all U.S. government contracts, cooperative agreements, and assistance instruments that call for research, regardless of the agency, the private signatory of the agreement, or the topic of the research. It is dictated by the same set of authorizing legislation – the Bayh-Dole Act, related legislative instruments, and implementing regulations.\(^1\) In this situation, the Appellate Body’s guidance in *US — Large Civil Aircraft* calls for a specificity analysis at the level of “the broader legal framework pursuant to which the particular subsidy is granted and the relevant granting authorities operate.”\(^2\) That analysis establishes that the United States has not limited access to the subsidy to an enterprise or industry

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\(^1\) 19 U.S.C. §§ 200-212; Executive Order 12591, Facilitating Access to Science and Technology, 10 April 1987 (Exhibit EU-238); Memorandum to the Heads of Executive Departments and Agencies: Government Patent Policy, Public Papers 248, 18 February 1983 (Exhibit EU-1062); 48 CFR § 27.300-27.306 (Exhibit EU-221); *US — Large Civil Aircraft (AB)*, paras. 764-767, 769-773, and 779-780.

\(^2\) *US — Large Civil Aircraft (AB)*, para. 757.
or group of enterprises or industries for purposes of Article 2.1 of the SCM Agreement, and the EU has never argued otherwise.

9. **Section IV** presents a conditional appeal: if the Appellate Body reverses the Panel’s finding that the State of South Carolina’s payment to Boeing of Economic Development Bond and Air Hub Bond proceeds did not cause adverse effects to the EU, then the United States appeals the Panel’s finding that these payments confer a benefit to Boeing. The Panel’s benefit finding relies on the incorrect premise that, at the time of the agreement, South Carolina and Boeing did not foresee Boeing providing remuneration for the payments. In reaching this finding, the Panel disregarded evidence demonstrating that South Carolina did expect Boeing to invest in the project site, thereby offsetting any benefit conferred, at the time of the agreement. Accordingly, the Panel failed to make an objective assessment of the matter before it, as called for by Article 11 of the DSU.

10. **Section V** presents a conditional appeal: if the Appellate Body modifies or reverses any of the Panel’s findings with respect to adverse effects of the pre-2007 aeronautics R&D subsidies on the A330, then it should also reverse the Panel’s finding that the EU made a *prima facie* case of significant price suppression under Article 6.3(c) of the SCM Agreement. The Appellate Body has explained that in order for a subsidized product to have adverse effects on the complaining Member’s product, the two must be in the same market, meaning in actual or potential competition with one another. The EU has consistently asserted that, as of the end of the implementation period, the A330 is in a monopoly market and is not in actual or potential competition with any Boeing LCA. Consequently, the Panel erred in interpreting and applying Article 6.3(c) by refusing to reject the EU’s price suppression claim for failure to make a *prima facie* case and in failing to conduct an objective assessment as required under Article 11 of the DSU.

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3 Compliance Panel Report, para. 8.822.
ARGUMENT

I. **The Compliance Panel Erred in Finding that EU Claims against DoD Procurement Contracts Were within its Terms of Reference.**

11. The compliance Panel misinterpreted its terms of reference when it allowed the EU to raise in this proceeding arguments regarding DoD procurement contracts that the panel rejected in the original proceeding. As the compliance Panel recognized, Article 21.5 does not generally entitle parties to relitigate issues on which they did not prevail in an original proceeding. While there are exceptions to this principle, none of them apply to this situation. Therefore, the United States respectfully requests the Appellate Body to reverse the compliance Panel’s finding that its terms of reference included the EU’s claims that DoD procurement contracts were financial contributions that conferred a benefit.

12. The compliance Panel reviewed adopted dispute settlement reports that addressed the terms of reference of panels operating under Article 21.5 of the DSU, and concluded that:

   while panels and the Appellate Body have been careful not to permit complaining parties to use Article 21.5 proceedings as an opportunity to re-litigate issues that were resolved adversely to them in the original proceeding, this does not apply where the failure to achieve a definitive resolution of a claim cannot reasonably, in the circumstances, be laid at the feet of the complaining party. The Appellate Body has no power to remand a decision back to a panel to apply a corrected interpretation of the law to the facts. Moreover, in certain situations, the Appellate Body may simply be unable to complete the analysis by applying that corrected interpretation to the panel’s factual findings or undisputed factual material on the record. In these circumstances, while a complaining party may in some senses have been “unsuccessful” in establishing its claims at the end of the compliance proceeding, it is more accurate to consider the claims unresolved. To permit a complaining party to seek resolution of those unresolved claims as part of a compliance proceeding does not necessarily afford it an unfair second chance.

However, the compliance Panel failed to apply its own framework correctly in this proceeding.

A. **The EU Cannot Relitigate Adopted DSB Recommendations and Rulings that the DoD R&D Procurement Contracts are Purchases of Services.**

13. Under the compliance Panel’s analysis, the procedural facts of the original proceeding are critical. They are not in dispute. The original panel found that DoD R&D procurement contracts were purchases of services and, as such, not financial contributions. It did not evaluate whether

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4 Compliance Panel Report, para. 7.35.
those contracts conferred a benefit. The EU appealed the legal finding that purchases of services are not financial contributions, but not the finding that DoD procurement contracts were purchases of services. The EU also did not ask the Appellate Body to complete the analysis and evaluate whether the DoD contracts conferred a benefit. In the original proceedings, the Appellate Body found that the panel should not have centered its analysis of whether NASA contracts and DoD assistance instruments were financial contributions on the question of whether they were purchases of services. In light of this finding, the Appellate Body declared the panel’s findings regarding DoD procurement contracts were purchases of services to be moot, and did not complete the panel’s analysis of the EU’s claims regarding those contracts. The DSB consequently made no recommendations or rulings with respect to DoD procurement contracts.

14. Nevertheless, when the EU challenged U.S. compliance with the recommendations and rulings of the DSB, it included claims against the DoD procurement contracts covered by the original proceedings, arguing that they were not purchases of services, but joint ventures akin to equity infusions that resulted in direct transfers of funds and the provision of goods and services. The EU also challenged DoD procurement contracts awarded in the period covered by the original panel’s deliberations, but not challenged by the EU in the original proceedings, along with contracts awarded after that period. The United States explained that the EU claims on these measures were not within the compliance Panel’s terms of reference because the EU had failed to pursue those claims before the Appellate Body, and was not entitled to raise those claims again in a compliance proceeding. The compliance Panel disagreed, but its reasoning is in error.

15. The compliance Panel’s errors begin with its statement of what it considered to be the decisive question:

If we were to consider that the Appellate Body did not regard the DOD procurement contracts to be before it on appeal, this would imply that the Appellate Body considered that the European Union had not pursued its claims concerning the DOD procurement contracts on appeal. In these circumstances, we would be minded to conclude that the European Union is not able to reassert claims concerning the DOD procurement contracts at the compliance stage, when it had inadequately pursued them on appeal. To conclude otherwise would, in our

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5 Compliance Panel Report, para. 7.113 (quoting EU Notice of Appeal, WT/DS353/8 (4 April 2011)).
6 *US – Large Civil Aircraft (AB)*, paras. 585-587.
7 *US – Large Civil Aircraft (AB)*, note 1298.
8 Compliance Panel Report, para. 8.320.
9 *US FWS*, paras. 64-66.
view, compromise the finality of the DSB recommendations and rulings and provide the European Union an “unfair second chance.”

As the Panel recognized in its evaluation of past reports, the proper question is whether parties may “use Article 21.5 proceedings as an opportunity to re-litigate issues that were resolved adversely to them in the original proceeding.” Establishing that a measure was somehow “before” the Appellate Body in an original proceeding does not answer that question, because one measure may give rise to any number of claims and associated issues.

16. In this instance, the EU appealed the original panel’s handling of the issue of whether procurement contracts were financial contributions, but not whether DoD procurement contracts were purchases of services or whether they conferred a benefit. In other words, the EU decided to leave in place the original panel’s finding that DoD procurement contracts were purchases of services, and to leave unanswered the question of whether they conferred a benefit. Thus, to use the compliance Panel’s words, “the failure to achieve a definitive resolution of a claim” can indeed “reasonably, in the circumstances, be laid at the feet of the complaining party.” The EU was, therefore, not entitled in the compliance proceeding to relitigate its allegations that DoD procurement contracts were not purchases of services that conferred a benefit.

17. Assuming, arguendo, that the compliance Panel’s analytical approach was correct, it nonetheless erred in its application of that analysis. It concluded that, because the Appellate Body declared moot the original panel’s finding that DoD procurement contracts were purchases of services, that “the Appellate Body did in fact regard the DOD procurement contracts to be before it on appeal.” This finding is difficult to reconcile with the fact that the Panel found that most of the Appellate Body’s analysis suggested the opposite understanding – that “the Appellate Body did not consider that the DOD procurement contracts were on appeal before it.”

B. The EU Cannot Relitigate Whether the DoD Procurement Contracts Confer a Benefit.

18. The compliance Panel also erred in finding that the EU could relitigate its claims against DoD procurement contracts because:

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10 Compliance Panel Report, para. 7.126 (emphasis added).
11 Compliance Panel Report, para. 7.35 (emphasis added).
12 Compliance Panel Report, para. 7.35.
13 Compliance Panel Report, para. 7.127.
14 Compliance Panel Report, para. 7.116. See also, ibid., paras. 7.115-7.124.
The panel did not analyse whether the DOD procurement contracts conferred a benefit or caused adverse effects. We therefore agree with the European Union that it would have been impossible for the Appellate Body to complete the analysis regarding the DOD procurement contracts.

The EU’s own arguments before the compliance Panel disprove this conclusion. The EU asserted that: (1) application of the law to evidence showed that DoD procurement contracts were not purchases of services, and (2) they conferred a benefit for the same reasons as NASA contracts and DoD assistance instruments did. Essentially all of the evidence cited in the EU’s first written submission in this proceeding with respect to pre-2007 DoD contracts was also before the original panel. Thus, if the EU had truly considered that the original panel erred in finding that DoD contracts were a financial contribution different from NASA contracts and DoD assistance instruments, it could have appealed that issue and argued for completion of the analysis on the same basis as those other instruments.

19. In any event, the Appellate Body did not consider whether it could complete the analysis because the EU explicitly indicated that it was not seeking completion of the analysis. The EU cannot now grant itself an unfair second chance to litigate this issue after refraining from seeking completion of the analysis. Nor is it appropriate for the EU to ask the compliance Panel to stand in the shoes of the Appellate Body to determine whether completion of the analysis would have been possible had the EU pursued it in the original appeal.

C. The Time and Resources Devoted to an Issue are not Relevant to Whether that Issue is within the Terms of Reference.

20. The Panel closed its reasoning on this terms of reference issue with the following statement:

given the time and resources that have been expended in this dispute in order to arrive at a resolution of the fundamental disagreement between the European Union and United States as to whether the U.S. Government subsidizes Boeing through the procurement of military research, and given that the aim of the dispute settlement system, as expressed in Article 3.7 of the DSU, is to secure a positive resolution to a dispute, we have concluded that it would simply not be a reasonable outcome for us to rule that the European Union is precluded from

15 See Appellant Submission of the European Union, US – Large Civil Aircraft, para. 127 (Apr. 21, 2011) (Exhibit USA-1) (“Because there are a number of contested facts related to the DOD RDT&E Program measures that were found to constitute purchases of services, the European Union does not request that the Appellate Body complete the analysis.”).
pursuing in this compliance proceeding claims regarding the DOD procurement contracts at issue in the original proceeding.\(^{16}\)

21. This statement is legally irrelevant because Article 21.5 of the DSU limits a compliance panel’s terms of reference to “the existence or consistency with a covered agreement of measures taken to comply with the recommendations and rulings” of the DSB. That parties may have devoted “time and resources” to an argument indicates nothing about whether the measure in question meets that standard. Indeed, the logic is to a large extent circular – if the compliance Panel had excluded the claims in question at the outset, as the United States requested, the parties would not have had to invest much of the “time and effort” that now serves to justify addressing those same claims at the end of the proceeding.

22. Similarly, the Panel’s observation about Article 3.7 of the DSU is a non sequitur. If claims are not properly within the terms of reference of a dispute in the first place, it would not serve the goal to “achieve a positive resolution” to treat them as if they were. To the contrary, excluding improper claims advances the objective of a positive resolution of the dispute by excising extraneous matters that can only result in delay. Moreover, Article 3.7 is not a basis to override the terms of reference of a panel, which are established by other provisions of the DSU.

23. To sum up, contrary to the compliance Panel’s view, it was not only reasonable but necessary to preclude the EU from pursuing claims regarding DoD procurement contracts at issue in the original proceeding. The EU had every opportunity to pursue those claims before the original panel, to appeal that panel’s finding that the contracts were purchases of services, and to ask the Appellate Body to complete the analysis by concluding that they conferred a benefit on the same terms as the NASA contracts and DoD assistance instruments. The EU’s decision not to do so represented an acceptance of the finding as to the nature of the financial contribution and the absence of a finding of benefit. Article 21.5 did not authorize the EU to reopen those issues, and did not authorize the compliance Panel to address them.

\(^{16}\) Compliance Panel Report, para. 7.129.
II. **The Panel Erred in Finding that the Washington B&O Tax Rate Reduction Is a Genuine and Substantial Cause of Significant Lost Sales and Threat of Impedance.**

24. Due to several errors, the Panel misattributed lost sales (and consequent threat of impedance findings) to the tiny Washington B&O tax rate reduction. The United States demonstrated that, even if the Washington B&O tax rate reduction were a subsidy, its magnitude was simply insufficient for it to be a genuine and substantial cause of adverse effects. The Panel, however, incorrectly treated the entire subsidy, which applied to sales of all Boeing LCA models, as having been deployed to lower prices in three sales of exclusively single-aisle aircraft. The resulting per-aircraft subsidy magnitude of $1.99 million was approximately 20 times the correct figure of $0.1 million. In doing this, the Panel acted inconsistently with Articles 5.3(c) and 6.3(c) of the SCM Agreement, or in the alternative, failed to provide an objective assessment for purposes of Article 11 of the DSU.

25. The Panel found that “the magnitudes of the Washington State B&O tax reduction were capable of enabling at least a portion of Boeing’s pricing advantage, contributing in substantial part to its winning those campaigns.”\(^{17}\) On this basis, the Panel was “satisfied that the Washington State B&O tax rate reduction, through the effects on Boeing’s pricing, contributed in a genuine and substantial way to determining the outcome of price-sensitive sales campaigns involving the 737 MAX and 737NG and the A320neo and A320ceo in the Fly Dubai 2014, Air Canada 2013 and Icelandair 2013 campaigns.”\(^{18}\) The Panel also concluded that, for the same reasons, the subsidy was a genuine and substantial cause of Airbus losing the Fly Dubai 2008 and Delta 2011 sales campaigns, which served as the basis for the Panel’s threat of impedance findings. These findings are erroneous. In conducting its causation analysis, the Panel erred in its interpretation or application of Articles 5(c) and 6.3 of the SCM Agreement, and it failed to make an objective assessment of the matter consistent with Article 11 of the DSU.

26. In Section II.A below, the United States reviews the proper causation standard as well as the compliance Panel’s approach to causation.

27. In Section II.B, the United States discusses the Appellate Body’s and the compliance Panel’s findings regarding the nature and operation of tied tax subsidies like the Washington B&O tax rate reduction. The United States highlights two important implications: (1) that there is no basis for assuming that Boeing would deploy tied tax subsidy savings from one sales campaign in another, unrelated sales campaign; and (2) that the counterfactual price Boeing

\(^{17}\) Compliance Panel Report, para. 9.403.

\(^{18}\) Compliance Panel Report, para. 9.404.
would charge in a particular sales campaign in the absence of the subsidy would be no greater than the price that would yield it the same post-tax revenue it actually earned.

28. In Section II.C, the United States reviews the arguments of the parties and the Panel’s findings that are relevant to this appeal.

29. In Section II.D, the United States explains why the correct per-aircraft magnitude of the Washington B&O tax rate reduction for single-aisle aircraft is less than $100,000. The United States explains that the Panel’s methodology of calculating the per-aircraft magnitude figure improperly included subsidies to Boeing aircraft other than single-aisle aircraft and contradicted the Appellate Body’s and the compliance Panel’s own findings regarding the nature and operation of tied tax subsidies. As a result, it calculated a magnitude that is approximately 20 times the correct per-aircraft magnitude of the Washington B&O tax rate reduction. On this basis alone, the Panel’s adverse effects findings should be reversed. The Panel’s approach was inconsistent with Articles 5.3(c) and 6.3(c) because its methodology of calculating the per-aircraft magnitude failed to properly attribute subsidy amounts to the products benefiting from them, and implied, contrary to the Appellate Body’s and the compliance Panel’s own findings, that savings from one campaign can be pooled and deployed in another, unrelated campaign. In the alternative, the Panel’s calculation of the per-aircraft magnitude of $1.99 million per 737NG or 737 MAX represents a failure to make an objective assessment under DSU Article 11.

30. In Section II.E, in case the Appellate Body considers that more analysis is appropriate, the United States demonstrates that the evidence relied upon by the Panel does not support the Panel’s causation findings. In particular, the evidence cited by the Panel does not establish that Airbus would have won any of the five sales campaigns at issue in the absence of the subsidy. Therefore, to the extent the Panel reached a contrary finding, it erred in the interpretation or application of Articles 5.3(c) and 6.3(c) of the SCM Agreement.

31. In Section II.F, the United States demonstrates that, even assuming arguendo the Panel’s magnitude figure were correct, the evidence still does not support the Panel’s adverse effects findings. First, the Panel erred in its application of law to facts by relying on its finding that the Washington B&O tax rate reduction was capable of enabling merely a portion of Boeing’s pricing advantage. Second, certain Panel statements, which arguably intimated that its $1.99 magnitude figure exceeded the pricing differential in the Icelandair 2013 and Air Canada 2013 campaigns, had no basis in evidence and represent a failure to make an objective assessment of the matter as called for in DSU Article 11. Third, the pricing differential in the Fly Dubai 2014 sales campaign is insufficient to support the Panel’s ultimate conclusion because, as the Panel found, [[HSBI]]. Therefore, even if the Panel’s $1.99 million per aircraft calculation were correct, the evidence cited by the Panel does not support any of its findings that the five sales campaigns at issue were significant lost sales caused by the Washington B&O tax rate reduction. Accordingly, the Panel erred in the interpretation or application of Articles 5.3(c) and 6.3(c) of the SCM Agreement, and failed to make an objective assessment of the matter under DSU Article 11.
32. For all of these reasons, the United States requests that the Appellate Body reverse the Panel’s findings that the Washington B&O tax rate reduction causes adverse effects in the form of significant lost sales and threat of impedance.

A. Causation Standard and the Compliance Panel’s Approach to Causation

33. In this section, the United States addresses the standard for establishing causation, as clarified by the Appellate Body, and summarizes the Panel’s approach to causation in the context of assessing whether the Washington B&O tax rate reduction causes adverse effects in the single-aisle product market.

34. “Article 6.3 {of the SCM Agreement} requires that the market phenomenon be the effect of the challenged subsidy.”19 In other words, the challenged subsidy must cause the alleged Article 6.3 market phenomenon.

35. Moreover, the causal link must be genuine and substantial. As the compliance Panel correctly recognized:20

The Appellate Body has consistently articulated the causal link required as “a genuine and substantial relationship of cause and effect”.21 The subsidies must contribute, in a “genuine” and “substantial” way, to producing or bringing about one or more of the effects, or market phenomena, identified in Article 6.3. The genuine nature of the causal link requires a complaining party to show that the nexus between cause and effect is “real” or “true”. The substantial component of the causal relationship concerns the relative importance of the causal agent (i.e. the subsidies at issue) in bringing about the adverse effects in question.22

36. The Appellate Body has endorsed the use of a counterfactual analysis to determine whether the requisite genuine and substantial causal link exists. As the Appellate Body explained:

The use of a counterfactual analysis provides an adjudicator with a useful analytical framework to isolate and properly identify the effects of the challenged subsidies. In general terms, the counterfactual analysis entails comparing the

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19 EC – Large Civil Aircraft (AB), para. 1109.
20 Compliance Panel Report, para. 9.59
21 Appellate Body Reports, US – Upland Cotton, para. 438; US – Upland Cotton (Article 21.5 – Brazil), para. 374; EC and certain member States – Large Civil Aircraft, para. 1232; and US – Large Civil Aircraft (2nd complaint), para. 913.
actual market situation that is before the adjudicator with the market situation that would have existed in the absence of the challenged subsidies. This requires the adjudicator to undertake a modelling exercise as to what the market would look like in the absence of the subsidies. Such an exercise is a necessary part of the counterfactual approach.\(^{23}\)

The Appellate Body has observed that, in conducting a counterfactual, “\{t\}he extent to which a panel may or must elaborate upon the specific details of its constructed alternative will vary by case, but, having selected a reasonable scenario, a panel should pursue its counterfactual analysis in a coherent and consistent fashion.”\(^{24}\)

37. “The Appellate Body has further explained that the particular market phenomena alleged under Article 6.3(c) must ‘result from a chain of causation that is linked to the impugned subsidy’ and the effects of other factors must not be attributed to the challenged subsidies.”\(^{25}\)

38. The Panel summarized its approach to causation as follows:

The Panel adopts a unitary approach to establishing causation, under which prices, sales, market share, and other indicators of competitive harm are not assessed in isolation, but rather as part of an integrated causation analysis. Our analysis is counterfactual in nature. We ask whether, but for the effects of the various subsidies, Airbus’ sales, prices and market share would be higher. We will analyse the effects of the subsidies in two related phases: First, we examine the effects, if any, of the relevant category of subsidies on Boeing’s product development and pricing of the 737 MAX and pricing of the 737NG; and second, we examine whether any such effects of the subsidies in question on Boeing’s product development and prices have the alleged impact on A320neo and A320ceo sales and prices in the post-implementation period, such that these subsidies constitute a genuine and substantial cause of the particular forms of serious prejudice alleged by the European Union with respect to the A320neo and A320ceo.\(^{26}\)

39. The United States argued, \textit{inter alia}, that the magnitude of the tied tax subsidies was insufficient to render them a genuine and substantial cause of the alleged lost sales.\(^{27}\) The Panel initially explained that it would “determin\{e\} whether, on the basis of the evidence before \{it\},

\(^{23}\) \textit{EC – Large Civil Aircraft (AB)}, para. 1110.

\(^{24}\) \textit{US – Large Civil Aircraft (AB)}, para. 1020.

\(^{25}\) \textit{EC – Large Civil Aircraft (AB)}, para. 1376 (citations omitted).

\(^{26}\) Compliance Panel Report, para. 9.341 (emphasis original) (internal citation omitted).

\(^{27}\) Compliance Panel Report, para. 9.386.
the magnitudes of the tied tax subsidies were enough to ‘cover the margin of victory between the final net prices of Boeing and Airbus’ such that the tied tax subsidies, through their effects on Boeing’s prices, are a genuine and substantial cause of lost sales.” However, in its analysis of the sales campaign evidence, it relied on a finding that the lone tied tax subsidy in the single-aisle market – the Washington B&O tax rate reduction – was capable of enabling merely a portion of Boeing’s pricing advantage. In other words, the compliance Panel found a causal link even where it did not find that the magnitude of the subsidy was enough to cover the margin of victory in the sales campaigns at issue.

B. The Nature and Operation of “Tied Tax Subsidies” through a Price Effects Causal Mechanism

40. The Washington B&O tax rate reduction was the only “tied tax subsidy” alleged to benefit the 737 MAX and 737NG. In the original proceeding, a second tied tax subsidy – FSC/ETI – was found to benefit Boeing’s single-aisle aircraft. However, the EU failed to establish that Boeing received subsidies after the expiry of the implementation period pursuant to FSC/ETI measures and successor legislation. The nature and operation of the Washington B&O tax rate reduction as a tied tax subsidy is critical to understanding how, and the extent to which, it might affect Boeing’s pricing of single-aisle aircraft in a particular campaign.

41. The Appellate Body in the original proceeding recognized that the nature of the tied tax subsidies renders “receipt of these subsidies contingent on the production and sale of individual LCA.” In this respect, it distinguished the tied tax subsidies from other subsidies not tied to individual LCA, which instead were “considered ‘fungible’ resources that provide Boeing with additional cash flow.”

42. The Appellate Body explained how tied tax subsidies operate to affect Boeing’s pricing:

All other things being equal, a firm provided with a subsidy that is tied to production or sale enjoys the ability to lower its price while nevertheless achieving the same profit margin. In effect, the subsidy enhances the firm’s ability to lower its prices in order to obtain a sale, notwithstanding that the outcome of any given sale, and the importance of price to that outcome, will still...
be dictated by the prevailing competitive conditions, including the market power and the pricing strategies of the participants, in a particular market.\textsuperscript{34}

In addition, the Appellate Body stated that, “regarding the nature of the tied tax subsidies, because the FSC/ETI subsidies and the B&O tax rate reductions lowered the taxes that Boeing paid in respect of revenue obtained on each LCA sale, they are directly tied to those sales.”\textsuperscript{35}

43. Thus, as the compliance Panel explained:

In the original proceeding, the Appellate Body reasoned (in relation to its analysis of the tied tax subsidies) that it is rational to expect that, where a subsidy is provided on a \textit{per-unit basis} in respect of LCA produced or sold, the manufacturer would be inclined, in the appropriate market context, to pass on all or part of that subsidy to the purchaser because it is possible to do so without sacrificing profit margins.\textsuperscript{36}

44. The Panel also recognized, consistent with the Appellate Body report in the original proceeding, that “\text{"\{t\}his subsidy reduces the state B&O taxes applicable to the revenues earned from the sale of 737 MAX and 737NG aircraft, lowering Boeing’s taxes and thereby increasing Boeing’s after-tax profits.\text{"\textsuperscript{37} In addition, “\text{"\{a\}ccording to the European Union, the structure, design, and operation of the tied tax subsidies impact Boeing’s LCA prices by lowering the taxes and fees paid by Boeing on the production and sale of each individual LCA …”}\textsuperscript{38} This reasoning has two important implications.

45. First, because tied tax subsidies are “directly tied to sales of individual LCA,”\textsuperscript{39} they can affect only the sale to which they are tied, and there is no basis to assume that Boeing would deploy savings from one sales campaign to lower its prices in another, unrelated sales campaign. An assumption that Boeing would consolidate B&O tax savings realized on all LCA orders and use the pool of savings to lower prices in just a few sales campaigns, treats the subsidy as fungible. This is contrary to the findings by the original panel, the Appellate Body, and the

\textsuperscript{34} \textit{US – Large Civil Aircraft (AB)}, para. 1260.

\textsuperscript{35} \textit{US – Large Civil Aircraft (AB)}, para. 1252 (citation omitted).

\textsuperscript{36} Compliance Panel Report, para. 9.274 (emphasis original) (citing \textit{US – Large Civil Aircraft (21.5)}, para. 1261).

\textsuperscript{37} Compliance Panel Report, para. 9.378 (citing \textit{US – Large Civil Aircraft (Panel)}, para. 7.1806).

\textsuperscript{38} Compliance Panel Report, para. 9.235 (citing EU FWS, paras. 1136-1146) (emphasis added). See also Compliance Panel Report, para. 9.379 (indicating in the context of the single-aisle market that the Panel provided in its analysis of the twin-aisle market an explanation of the parties’ general arguments as to the nature and operation of the tied tax category of post-2006 subsidies).

\textsuperscript{39} \textit{US – Large Civil Aircraft (AB)}, para. 1252.
compliance Panel that distinguished between fungible subsidies, which provide Boeing with additional cash flow, and tied tax subsidies, which allow Boeing to pass on some or all of the subsidy to a purchaser without sacrificing the profitability of a particular transaction.40

46. Second, because a tied tax subsidy like the Washington B&O tax rate reduction alters pricing by changing the profitability calculus for a given sale,41 the counterfactual price Boeing would charge in a particular sales campaign in the absence of the subsidy is, at most, the price that would yield it the same post-tax revenue it earned in reality. Put differently, a tied tax subsidy does not change the cost of producing a product. Instead, it means that, at any given price, the seller receives more post-tax revenue (which translates into that much more profit) than would otherwise be the case.

47. Thus, the B&O tax rate reduction changes, if anything, only the prices at which Boeing would be willing to make a sale.42 Because the subsidy provides Boeing with the potential to lower its price for an individual LCA while maintaining its profitability, Boeing would only increase its prices in a particular campaign by, at most, the amount necessary to achieve the same level of post-tax revenue. The subsidy can only lead to a lost sale where, in the absence of the subsidy, to achieve the same post-tax revenue (or profit), Boeing would need to raise its price to a level at which the sale would go to Airbus.

48. It is possible Boeing would have accepted even less post-tax revenue. But we know for certain it would not have demanded more. That is, we know for certain that Boeing preferred to make the sale at whatever post-tax revenue it generated rather than lose the sale to Airbus. Accordingly, we can be certain Boeing would have preferred to make the sale at a price that

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40 See Compliance Panel Report, paras. 9.68-9.73, 9.274. In the original proceeding, “both parties appeared to accept, and the Panel found, that the {tied tax subsidies} are ‘directly tied to sales of individual LCA’.” See Compliance Panel Report, paras. 9.271, 9.288, note 3138. The Appellate Body also noted that “the European Communities distinguished between, on the one hand, the price effects of the tied tax subsidies and, on the other hand, the price effects of the subsidies alleged to increase Boeing's non-operating cash flow.” US – Large Civil Aircraft (AB), para. 1252. The compliance Panel distinguished them as well in its analysis of which subsidies could properly be aggregated for purposes of collective assessment. See Compliance Panel Report, para. 9.78 (“Unlike the tied tax subsidies, Boeing's receipt of the state and local cash flow subsidies described above is not contingent upon per-unit production or sale of LCA.”).

41 See US – Large Civil Aircraft (AB), para. 1260 (“All other things being equal, a firm provided with a subsidy that is tied to production or sale enjoys the ability to lower its price while nevertheless achieving the same profit margin. In effect, the subsidy enhances the firm’s ability to lower its prices in order to obtain a sale, notwithstanding that the outcome of any given sale, and the importance of price to that outcome, will still be dictated by the prevailing competitive conditions, including the market power and the pricing strategies of the participants, in a particular market.”).

42 The EU made clear it was not alleging that Boeing was capital constrained or otherwise was unable to price its aircraft efficiently, and the Panel found that there was no evidence that would indicate that, in the absence of subsidies, Boeing would not have engaged, or would not have been financially able to engage, in the same pricing behavior as actually occurred. See Compliance Panel Report, paras. 9.271, 9.288, note 3138.
would have yielded it the same post-tax revenue it received with the subsidy rather than lose the sale to Airbus.

49. In summary, the nature and operation of the Washington B&O tax rate reduction – in particular, that it is linked to the post-tax profitability of LCA on a per-unit basis – means that: (1) there is no basis for assuming that Boeing would deploy savings from one sales campaign in other, unrelated sales campaigns; and (2) the counterfactual price Boeing would charge in a particular sales campaign in the absence of the subsidy would be no greater than the price that would yield it the same post-tax revenue it actually earned.

C. The Relevant Arguments of the Parties and Panel Findings

50. In this section, the United States recounts the arguments of the parties and the Panel findings that are relevant to Sections II.D-II.F.

51. The EU alleged that the tied tax subsidies, miscellaneous cash flow subsidies, and nearly all alleged post-2006 R&D subsidies allowed Boeing to lower the prices it offered on current aircraft, which caused the alleged Article 6.3 market phenomena. The Panel found that the EU failed to establish that any subsidies other than the “tied tax subsidies” affected Boeing’s pricing. With respect to the single-aisle market, the only tied tax subsidy was the Washington B&O tax rate reduction.

52. The Panel analyzed the evidence pertaining to each of the sales campaigns raised by the EU that implicated sales of single-aisle aircraft. It found that there were five single-aisle sales campaigns in which Boeing was under particular pressure to reduce its prices in order to secure the sale and there were no non-price factors that explained Boeing’s success in obtaining the sale: Fly Dubai 2014, Fly Dubai 2008, Icelandair 2013, Delta Airlines 2011, and Air Canada 2013.

53. Notably, in its assessment of the various sales campaigns, the Panel did not address the U.S. argument that, even if the B&O tax rate were a subsidy, it was far too small to be a genuine and substantial cause of the alleged Article 6.3 market phenomena. Instead, it found that the five sales campaigns were “price sensitive.” The Panel then explained that it would consider in a

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44 Compliance Panel Report, paras. 11.4-11.8.
subsequent section “whether, on the basis of the evidence before {it}, the magnitudes of the Washington State B&O tax rate reduction were enough to ‘cover the margin of victory between the final net prices of Boeing and Airbus’ such that this subsidy, through its effects on Boeing’s prices, is a genuine and substantial cause of lost sales of the A320neo and A320ceo.”

54. In an attempt to follow guidance from the Appellate Body, the Panel reviewed for the 2013-2015 period the value of Boeing’s single-aisle orders, Boeing’s reported revenues, and Boeing’s R&D expenses. The Panel recognized that, as in the original proceeding, the annual value of Boeing’s sales are “many orders of magnitude greater than the annual value of the subsidies.”

55. The Panel continued by observing that, despite the disparity, even relatively small subsidies can have significant effects depending on the circumstances. Thus, to the extent such a small subsidy acting through a price effects causal mechanism could be a genuine and substantial cause of the relevant market phenomena, it was because of the possibility that it could make the difference between Boeing winning and losing the sale. For this reason, “{t}he Panel sought to determine whether a price reduction enabled by a relatively small subsidy could nevertheless have determined the outcome of a price-sensitive campaign.”

56. In response to Panel questioning about what levels of price differences are sufficient to decide a price-sensitive sales campaign, the United States cited campaign evidence regarding the magnitudes of price movements, which, when compared to the price differences that could arguably be attributed to the subsidies, revealed the insignificance of the latter. However, the Panel found that the magnitudes of price movements in sales campaigns is of limited relevance in assessing whether a comparatively small subsidy may make a difference to the outcome of a sales campaign.

57. The EU argued that, rather than consider differences in prices, it would be more appropriate to consider differences in the NPV of Boeing and Airbus offers. “The European Union {did} not, however, provide an indication of the differences in customers’ NPV assessments of the respective Airbus and Boeing offers for any individual sales campaigns.

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49 Compliance Panel Report, para. 9.385 (quoting US – Large Civil Aircraft (AB), para. 1263).
51 Compliance Panel Report, para. 9.394 (internal quotation omitted).
52 Compliance Panel Report, para. 9.394.
54 Compliance Panel Report, para. 9.400.
before the Panel.”56 The EU submitted a statement from an Airbus employee alleging that NPV differences can be as small as $[\text{HSBI}].57

58. The EU also presented its own calculation of generalized per-aircraft subsidy magnitudes. For each year during the 2007-2014 period, the EU divided its estimate of the total subsidies by the total Boeing deliveries.58 The EU’s calculation resulted in a per-aircraft magnitude of $1.95 million for 2012, $1.93 million for 2013, and $1.86 million for 2014.59

59. The Panel found that the EU’s estimates of per-aircraft subsidy amounts were “based on significantly flawed estimates of the amounts of the subsidies.”60 This is because the EU’s estimate included a number of subsidies that were found not to be specific, included post-2006 measures found not to cause price effects, inflated the amounts of the subsidies, and otherwise was not the best evidence.61

60. The Panel then purported to replicate what it referred to as “the United States’ methodology” for the 2013-2015 period, using its own estimates of the subsidy values. By “the United States’ methodology,” the Panel was referring to an illustrative calculation the United States provided in its first written submission for the magnitude of subsidization for each allegedly subsidized aircraft. The United States warned that it was not meant to be an objectively valid calculation of the actual subsidy magnitude, but rather a demonstration that, even under “very conservative assumptions” favorable to the EU, the tied tax subsidy magnitude was far too small to have a genuine and substantial relationship of cause and effect with the alleged Article 6.3 market phenomena.62

61. The Panel used as its numerator the $325 million ($108.3 million annually) it estimated as the value of the B&O tax rate reduction from 2013-2015.63 The Panel used as its denominator the number of Boeing aircraft ordered in the three sales campaigns it found to be price sensitive

56 Compliance Panel Report, para. 9.399.
57 Compliance Panel Report, para. 9.403.
60 Compliance Panel Report, para. 9.401.
during the 2013-2015 timeframe – 163 (54.3 annually). On an annualized basis, the Panel divided $108.3 million by 54.3 aircraft to arrive at a per-aircraft magnitude of $1.99 million.\(^{64}\)

62. The Panel stated that this amount – $1.99 million – “does exceed the NPV difference that the evidence before us suggests can be determinative of the outcomes of sales campaigns involving single-aisle aircraft, as well as what we are reasonably able to infer regarding the differences in final net prices for the price-sensitive sales campaigns in the post-implementation period, based on our analysis of the sales campaign evidence.”\(^{65}\)

63. The Panel then provided its analysis regarding whether the magnitude of the Washington B&O tax rate reduction was sufficient to establish that it is a genuine and substantial cause of significant lost sales and threat of impedance. It indicated that evidence from the Fly Dubai 2014 sales campaign permitted an inference that the price difference was $H[HSBI]$ per aircraft.\(^{66}\) It indicated that evidence from the Air Canada 2013 campaign regarding the magnitudes of incremental proposals made by Airbus suggests that Airbus thought it was close enough to Boeing on price that relatively small improvements could affect the outcome of the campaign.\(^{67}\) It cited the somewhat larger price difference in the Icelandair 2013 campaign, which it quantified elsewhere as $H[HSBI]$.\(^{68}\) but then noted that other evidence suggests that Airbus’s final offer may have closed the gap.\(^{69}\) The Panel recalled evidence that NPV differences “can be as small as $H[HSBI]$.\(^{70}\) And the Panel stated that the $H[HSBI]$ price difference in the Fly Dubai 2008 campaign and the $H[HSBI]$ price difference in the Delta 2011 campaign, “indicates that the magnitudes of the Washington State B&O tax reduction were capable of enabling at least a portion of Boeing’s pricing advantage, contributing in substantial part to its winning those campaigns.”\(^{71}\)

64. On this basis, the Panel was “satisfied that the Washington State B&O tax rate reduction, through the effects on Boeing’s pricing, contributed in a genuine and substantial way to determining the outcome of price-sensitive sales campaigns involving the 737 MAX and 737NG and the A320neo and A320ceo in the Fly Dubai 2014, Air Canada 2013 and Icelandair 2013

\(^{64}\) See Compliance Panel Report, para. 9.402, note 3321.

\(^{65}\) Compliance Panel Report, para. 9.402 (emphasis original).

\(^{66}\) Compliance Panel Report, para. 9.403.

\(^{67}\) Compliance Panel Report, para. 9.403.

\(^{68}\) Compliance Panel Report, Appendix 2, para. 247.

\(^{69}\) Compliance Panel Report, para. 9.403.

\(^{70}\) Compliance Panel Report, para. 9.403.

\(^{71}\) Compliance Panel Report, para. 9.403.
campaigns.”72 The Panel also considered that “the lost sales of the A320ceo in the Fly Dubai 2008 and Delta Airlines 2011 sales campaigns were significant lost sales, within the meaning of Article 6.3(c) of the SCM Agreement.”73 On the basis of that finding, the Panel found a threat of impedance in the UAE and U.S. single-aisle markets.74

D. The Panel Erred Under Articles 5(c) and 6.3 of the SCM Agreement, or in the Alternative under Article 11 of the DSU, in Determining the Per-Aircraft Magnitude of the Subsidy Benefitting Boeing’s Single-Aisle Aircraft.

65. The B&O tax applies to the revenue from LCA sales. According to the Panel, the subsidy is the reduction of that tax from 0.484 percent to 0.2904 percent, resulting in a tax rate that is lower by 0.1936 percent.75 Therefore, it was relatively simple to calculate the value of the subsidy for a single-aisle aircraft – less than $100,000.76 In light of the findings by the Appellate Body and the Panel regarding the nature and operation of tied tax subsidies like the B&O tax rate reduction, that means that the most Boeing would have raised its price for a single-aisle aircraft in the absence of the subsidy is $100,000. The compliance Panel, however, found that the B&O tax rate subsidy’s per-aircraft magnitude for Boeing’s single-aisle aircraft was $1.99 million – approximately twenty times that figure.

66. The Panel made this mistake because, rather than rely on the objective calculation dictated by the fixed tax rate reduction of 0.1936 percent, the Panel attempted to estimate the per-plane magnitude by dividing the average annual amount of the Washington B&O tax rate subsidy to Boeing for 2013-2015 by the average annual number of aircraft ordered in three single-aisle sales campaigns during that period that the Panel found to be price sensitive. In eschewing an objectively correct calculation, the Panel instead undertook a calculation that fails to apportion the savings from the reduction over all of the aircraft that benefited from the reduction, artificially inflating the per-aircraft figure.

67. The Panel’s calculation embodies two separate and distinct errors. First, it erroneously includes subsidies tied to Boeing’s 787, 777, 777X, 767, and 747 families of aircraft, which do not compete in the same market as Boeing’s 737 MAX and 737NG. This effectively implies that subsidies to products in other markets are causing adverse effects to complaining Member products with which they do not compete.

72 Compliance Panel Report, para. 9.404.
73 Compliance Panel Report, note 3335.
75 See Compliance Panel Report, note 1907.
76 This is based on a purchase price of $50,000 in the subsidized scenario.
68. Second, contrary to the Appellate Body’s and its own findings regarding the nature and operation of tied tax subsidies, the Panel’s calculation assumes that Boeing would somehow pool its B&O tax savings from all LCA sales and then deploy this pool of savings to lower its prices in only the three single-aisle sales campaigns the compliance Panel found to be lost sales in the 2013-2015 period. Not only is this contrary to the underlying logic of how and why such tied tax subsidies could affect Boeing’s pricing, it also is contrary to the EU’s allegations in this dispute.

69. For each of these reasons, the Panel’s calculation of the per-aircraft magnitude reflects an incorrect interpretation or application of Articles 5(c) and 6.3 of the SCM Agreement. In the alternative, this represents a failure to make an objective assessment of the matter for the purposes of Article 11 of the DSU.

70. The United States will first explain the correct calculation of the magnitude of the subsidy and the maximum counterfactual price increase that potentially could result in the absence of the subsidy, which the Panel should have undertaken. Then the United States will turn to the flaws in the Panel’s calculation.

1. **The Correct Per-Aircraft Magnitude**

71. The Panel’s analysis of tied tax subsidies in the single-aisle market was limited to just one subsidy – the B&O tax rate reduction for single-aisle aircraft sales.77 The subsidy results in a 0.1936 percent reduction in the taxes owed on revenues from 737NG and 737 MAX sales.78 Once a price is determined, the correct per-aircraft magnitude of the subsidy is calculated by simply multiplying the price by the B&O tax rate reduction of 0.1936 percent.79 Indeed, this is how the Panel determined the value of the B&O tax rate reduction for all aircraft families (i.e., by multiplying 0.001936 by the price of each aircraft by the number of that type of aircraft ordered, and then summing the different aircraft families).80

72. The Panel estimated the average actual price of a 737 MAX and 737NG to be $54.1 million and $48.3 million, respectively.81 Multiplying these prices by 0.19036 percent results in a per-aircraft magnitude of the subsidy of less than $105,000 for a 737 MAX and less than

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77 This includes both the 737 MAX and the 737NG.
78 0.484 – 0.2904 = 0.1936. See Compliance Panel Report, note 1907.
79 0.1936 percent is the difference between the benchmark rate of 0.484 percent and the reduced rate of 0.2904 percent. See Compliance Panel Report, note 1907.
80 Compliance Panel Report, note 1907.
$94,000 for a 737 NG. Of course, in price-sensitive campaigns where prices are driven down by intense competition, the magnitudes are likely less.

73. The Appellate Body’s analysis confirms this approach. The Appellate Body explained that, “all other things being equal, a firm provided with a subsidy that is tied to production or sale enjoys the ability to lower its price while nevertheless achieving the same profit margin.”

Thus, as discussed previously in Section II.B, the maximum potential price effect of a tied tax subsidy is measured by the difference between the price charged with the subsidy and the price that, absent the subsidy, would achieve the same post-tax revenue (or profit).

74. On a $50 million sale, with a subsidized B&O tax rate of 0.2904 percent, Boeing would pay approximately $145,000 in B&O tax, leaving it with approximately $49,855,000 in post-tax revenue. In the absence of the subsidy, Boeing would need to sell the aircraft for just $97,000 more to achieve the same profit. At a price of $50,097,000 and a B&O tax rate of 0.484 percent, Boeing would owe approximately $242,000 in B&O tax, leaving it with the same approximate $49,855,000 in post-tax revenue.

75. Although Boeing may require a higher price in the absence of the subsidy so that it receives the same post-tax revenue (or profit), there is absolutely no basis to assume that Boeing would require more in post-tax revenue, yet this is what the Panel’s magnitude calculation indicates. The Panel’s flawed analysis indicates that, absent the subsidy, Boeing would raise its price by $1.99 million – meaning that, if Boeing charged $50,000,000 with the subsidy, it would demand $51,990,000 in the absence of the subsidy. At a price of $51,990,000 and an unsubsidized B&O tax rate of 0.484 percent, Boeing would owe approximately $250,000 in B&O tax, leaving it with post-tax revenue of approximately $51,750,000. This is nearly $2 million more than Boeing would have received on a $50,000,000 sale at the subsidized rate ($51,750,000 vs. $49,855,000).

76. By simply multiplying the tax rate reduction of B&O tax rate reduction of 0.1936 percent by an average or sample single-aisle aircraft purchase price, the Panel could have objectively determined the magnitude of the subsidy. Rather than adopt this straightforward calculation, the Panel undertook an erroneous approach that concluded that Boeing would raise its single-aisle aircraft prices in price-sensitive sales campaigns by $1.99 million, which is more than 20 times the actual amount.

82 The exact figures are $104,738 for a 737 MAX and $93,509 for a 737 NG.

83 US – Large Civil Aircraft (AB), para. 1260.

84 The Panel treated the per-aircraft magnitude as if it reflected the maximum counterfactual price increase. In fact, the maximum counterfactual price increase is slightly different. The United States explains this calculation in Appendix A, where we demonstrate that the maximum counterfactual price would be 1.001945 times the actual price. This is equal to a price increase of approximately $97,000 above an original sale price of $50 million.
2. The Panel’s Magnitude Calculation Contains Several Fatal Flaws.

77. The Panel’s calculation of a $1.99 million per-aircraft subsidy magnitude is erroneous for several reasons. The Panel used as the numerator the annual value of the subsidy for sales of all Boeing LCA during the 2013-2015 period, which it estimated to be $108.3 million. The Panel used as the denominator the annual number of orders of 737 NGs and 737 MAXs during the 2013-2015 period in only the three single-aisle sales campaigns it found to be price sensitive, which it determined to be 54.3 single-aisle aircraft. Both figures (and the methodological approaches they reflect) are erroneous.

a. The Numerator

78. The Panel used as the numerator the average annual value of the subsidy for sales of all Boeing LCA for the 2013-2015 period – $108.3 million. The most significant error in the Panel’s numerator is that it includes tied tax subsidies benefitting each of Boeing’s aircraft families, despite the fact that the Panel was assessing only potential adverse effects in the single-aisle product market and that, relatedly, the denominator included only single-aisle aircraft.

79. This, in essence, assumes that Boeing will pool the B&O tax savings from all LCA sales in all product markets and “use” the savings to lower prices in just three single-aisle sales campaigns. Such an assumption contradicts the Appellate Body’s and the Panel’s own findings on the nature and operation of tied tax subsidies, as well as the EU’s allegations about such subsidies. Including subsidies benefitting the 787, 767, 777, and 747 in the numerator also effectively implies that subsidies to products in other markets are causing adverse effects to complaining Member products with which they do not compete. Furthermore, including all Boeing aircraft families in the numerator also renders it incongruent with the denominator, which only includes single-aisle aircraft.

80. In explaining its approach to calculating a per-aircraft magnitude of $1.99 million, the Panel purported to be “[a]pplying the United States’ methodology.”\(^{85}\) The Panel is referring to sample calculations that the United States provided in its first written submission.

81. The United States warned that the calculation in its first written submission was not meant to be an objectively valid calculation of the actual subsidy magnitude, but rather a very conservative calculation demonstrating that, even if several assumptions were made in the EU’s favor, the magnitude would not be in the vicinity of what would be necessary to have a genuine and substantial relationship of cause and effect with the alleged Article 6.3 market phenomena.\(^{86}\)

\(^{85}\) Compliance Panel Report, para. 3321.

\(^{86}\) See US FWS, paras. 823, 997.
The U.S. exercise was expressly intended to show that the subsidy magnitudes were obviously trivial in the context of an LCA sales campaign.

82. In its first written submission, the United States calculated per-aircraft magnitudes for each Boeing aircraft family that the EU alleged was subsidized. In so doing, the United States accounted for multiple alleged subsidies, some of which were alleged to benefit multiple Boeing products in different markets. For each subsidy, the United States divided the total subsidy amount during the 2007-2012 period by the number of orders of all aircraft the subsidy allegedly affected. Then for each aircraft, the United States totaled the subsidies allegedly applicable to that aircraft to arrive at a rough aircraft-specific magnitude of subsidization.

83. Thus, the United States allocated each subsidy amount across the different Boeing aircraft alleged to benefit from the subsidy and cause lost sales. In addition, the total subsidy amount alleged to benefit all Boeing LCA was included in the numerator, but orders of all Boeing LCA alleged to cause adverse effects to competing Airbus LCA were included in the denominator.

84. Furthermore, these calculations were put forward in a context in which the EU was pursuing claims against a wide array of alleged subsidies in multiple product markets, and at a time when the EU had left a great deal of ambiguity as to what it was alleging and had offered no per-aircraft magnitude calculation of its own. The U.S. illustrative calculations allowed for easy aggregation of different combinations of subsidies of different magnitudes, given the EU’s disparate claims in different LCA markets.

85. Unlike the multiple product market context of the U.S. first written submission, the Panel was conducting an adverse effects analysis exclusive to the single-aisle market. Reflecting this fact, the Panel’s denominator was limited to only single-aisle aircraft. Once the Panel was only assessing a single tied tax subsidy in isolation with respect to a single product market, it should have undertaken the objective calculation of the magnitude of this subsidy described in sub-Section II.D.1 above. However, if it were going to pursue its approach, at a minimum, it was required to include only the amount of the subsidy benefitting single-aisle aircraft in the numerator. By instead including the subsidy amount to all Boeing LCA in the numerator, the Panel failed to apply the conservative methodology employed by the United States in its first

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87 For example, the Washington B&O tax rate reduction applies to all Boeing LCA produced in Washington, which is every model Boeing sells.

88 See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations, Exhibit USA-295(HSBI)).

written submission – which itself was biased in the EU’s favor – and rendered its calculation erroneous.

86. Moreover, the Panel’s $1.99 million implicitly, and erroneously, assumes that subsidies to the 767, 777, 787, 777X, and 747 aircraft families are used to lower 737NG and 737 MAX prices. The price effects theory of “tied tax subsidies” is based on the notion that these subsidies are “tied” to individual aircraft and therefore operate by altering Boeing’s profitability equation on a per-unit basis. To assume the subsidies in the form of lower taxes on sales of 747s, for example, affect Boeing’s 737 pricing has no basis in the Appellate Body’s and the compliance Panel’s own findings regarding how tied tax subsidies affect Boeing’s pricing.

87. This error had a huge effect on the results. When the total amount of subsidy to all Boeing LCA is allocated among the various Boeing products produced in Washington, the amount attributable to single-aisle aircraft – the proper numerator for the Panel’s approach – falls from $108.3 million to $58.4 million.

88. In performing this calculation, the United States used the Panel’s methodology of calculating the value of orders for 2013-2015, as expressed in Table 14 of the report. In Appendix B, the United States provides a modified version of Table 14 that adds the values of 767 and 747 sales, which the original Table 14 did not include. The United States calculates these values using the same methodology and sources that the Panel used to calculate the order values for other aircraft families. The United States also divided the 787 values in half to reflect that some 787s are made in South Carolina. Although there is no suggestion that Boeing’s 787 production in South Carolina will equal that in Washington, attributing half of all 787 orders to South Carolina ensures a conservative calculation.

89. As the modified Table 14 shows, single-aisle revenues accounted for approximately 62.3 percent of Boeing’s Washington revenues in 2013, 51.6 percent in 2014, and 49.3 percent in 2015. The Panel found subsidy amounts of $97 million in 2013, $108 million in 2014, and $120 million in 2015. Thus, the subsidy amount attributable to single-aisle sales is $60.4 million for 2013, $55.7 million for 2014, and $59.2 million for 2015 – or an annual average of $58.4 million.

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90 See supra, Section II.B.

91 This is conservative because, by assuming that half of all 787 orders are filled with aircraft produced in South Carolina, half of the value of 787 orders is ignored. By reducing the value of 787 orders, the proportion of the total value allocated to single-aisle aircraft increases.
90. Accordingly, a rough conservative estimate of the amount of Washington B&O tax rate subsidy tied to Boeing’s single-aisle aircraft, based on the Panel’s estimate of the total value of the subsidy to all Boeing aircraft and the Panel’s methodology, is approximately $58.4 million.\(^{92}\)

\[ b. \quad \text{The Denominator} \]

91. The Panel used a denominator of 54.3 single-aisle aircraft, which represents only the orders in the three single-aisle sales campaigns found to be lost sales in the 2013-2015 period.\(^ {93}\) (It does not include the orders in the two pre-2012 sales campaigns found to be lost sales that were then used as the basis for the Panel’s threat of impedance findings.)

92. Even if subsidies to aircraft in other product markets were removed from the numerator, by including in the numerator subsidies to all single-aisle aircraft ordered during the relevant timeframe, but including only some single-aisle aircraft in the denominator, the calculation assumes that Boeing would deploy all of the savings from all single-aisle sales campaigns to lower prices in just three price-sensitive campaigns. This is contrary to the Appellate Body and compliance Panel findings regarding the nature and operation of tied tax subsidies, contrary to the EU’s allegations, and factually unfounded.

93. First, the Panel’s methodology assumes, contrary to the findings in the original proceeding and the Panel’s own findings in this compliance proceeding, that the tied tax subsidies are not tied to the individual LCA for which the state assessed a reduced B&O tax, but rather are fungible in the way that the “other subsidies” affecting cash flow may be.\(^ {94}\) As the Appellate Body and the compliance Panel found, a tied tax subsidy like the B&O tax rate reduction only alters Boeing’s pricing to the extent it changes Boeing’s profitability calculus on each transaction.\(^ {95}\)

94. If one assumes that a sales campaign was so competitive that it drove Boeing down to its “reserve price,” – i.e., Boeing would prefer not to make the sale rather than lower its price even a single dollar more – then, with the subsidy, Boeing would lower its price by the full amount of the subsidy. But, by definition, Boeing would lower its price no further. This is true regardless of how much money Boeing has saved in unrelated transactions. The issue is that Boeing would prefer not to make the sale than to make it at a price that is at all lower.

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\(^{92}\) This is a rounded figure. For all per-aircraft magnitude calculations below, the unrounded figure (i.e., 58,439,021.14…) was used.

\(^{93}\) Compliance Panel Report, note 3321.

\(^{94}\) See supra, Section II.B.

\(^{95}\) See supra, Section II.B.
95. In other words, Boeing would increase its price in the absence of the subsidy by, at most, the amount necessary to maintain the same level of profitability. Conversely, this is the maximum amount by which Boeing would lower its price as a result of the subsidy.

96. Second, the implicit premise of the Panel’s methodology that Boeing would deploy all of the subsidy benefit in just three single-aisle sales campaigns is contrary to the EU allegations in this proceeding. Although the Panel correctly found that the subsidy was not a genuine and substantial cause of any of the other alleged lost sales, the fact remains that the EU alleged price effects in sales campaigns involving thousands of LCA across all of the product markets. Thus, the assumption underlying the Panel’s calculations is fundamentally different from the case pursued by the EU.

97. Third, putting aside the error of treating all of the subsidy benefit as fungible, the Panel’s assumption that every last subsidy dollar would be “used” to lower prices in just these three sales campaigns is unfounded. For example, the Panel itself notes that “(t)op tier Boeing customers, such as American Airlines, Delta Airlines, and Southwest Airlines, reportedly obtain the benefits of Boeing’s ‘most-favoured customer’ clause, in which Boeing guarantees that no other customer will obtain a lower price.” If true, lowering the price in the identified “price-sensitive” campaigns presumably (or at least possibly) would require lowering the price of many other aircraft, even if they were not part of an identified “price-sensitive” campaign. Therefore, even if there were a basis to consider that Boeing would deploy savings from one sales campaign to lower prices in an unrelated sales campaign – and there is not – there still is no basis to assume that Boeing would deploy the entirety of the savings in just three identified “price-sensitive” single-aisle sales campaigns.

98. Moreover, the effect of this methodological error is that, the greater the number of competitive campaigns, the less relevant the subsidies become. The EU has appealed the Panel’s non-attribution analysis. If it were to succeed and any additional sales campaigns were to be included in the analysis, then under the Panel’s approach, the per-aircraft magnitude of the B&O tax rate reduction would only shrink.

99. Furthermore, the Panel’s methodology distorts the denominator in a manner that is also contrary to the EU’s proposed magnitude calculation. The EU calculated a per-aircraft subsidy

96 See supra, Section II.B; US – Large Civil Aircraft (AB), para. 1260.

97 See EC – Fasteners (AB), para. 566 (“Where there is an absence of argumentation, however, a panel cannot intervene to raise arguments on a party’s behalf and make the case for the {party}.”) (emphasis original).

98 Compliance Panel Report, note 2724.

99 See EU Appellant Submission, paras. 582-585.
magnitude for each year during the 2007-2014 period. It used all Boeing aircraft for a given year as the denominator. However, it used deliveries instead of orders.\(^\text{100}\)

100. Using the EU approach, the single-aisle deliveries in 2013 and 2014 totaled 440 and 485, respectively. The deliveries for 2015 were only updated as of September 22, 2015.\(^\text{101}\) If only 2013 and 2014 are averaged to account for the fact that only partial data for 2015 deliveries were submitted, the annual average according to the EU methodology would be \textbf{462.5 aircraft}.\(^\text{101}\)

101. It is telling that, despite finding the EU’s subsidy total (numerator) to be “based on significantly flawed estimates of the amounts of the subsidies,”\(^\text{102}\) the Panel nevertheless calculated a per-aircraft magnitude \textit{larger} than what the EU calculated.\(^\text{103}\) This underscores how erroneous the Panel’s denominator was.

102. In addition, the Panel’s calculation did not reflect an application of the “conservative” methodology from the U.S. first written submission, as the Panel suggested. It also ignored that the United States described the methodology as conservative because it intentionally used assumptions favorable to the EU to demonstrate just how trivial the subsidy amounts are.

103. In its illustrative calculation, the United States used as the denominator the total single-aisle aircraft in sales campaigns alleged by the EU to be lost sales, which was 1,483 for the period 2007-2012.\(^\text{104}\) Again, the United States noted that it purposely limited the denominator in this way to be conservative. The United States specifically explained, however, that tied tax subsidies acting through a price effects causal mechanism, which are understood to reduce the post-tax revenue of each individual sale, would affect pricing on a unit-specific basis.\(^\text{105}\) Therefore, because the tied tax subsidies are not “fungible,” if the numerator includes the subsidy value to all single-aisle aircraft sold, the denominator should include all single-aisle aircraft sold in the same period.

104. However, even if this conservative methodology were used, the denominator would be much larger than the 54.3 aircraft used by the Panel. Using all lost sales alleged by the EU, the

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\(^{100}\) EU RPQ 164, para. 115.

\(^{101}\) 2015 deliveries year to date at that point totaled 350, which is equivalent to about 482 deliveries on an annual basis. \textit{See} Ascend database, Deliveries made, data request as of September 22, 2015 (Exhibit EU-1659).

\(^{102}\) Compliance Panel Report, para. 9.401.

\(^{103}\) See Compliance Panel Report, paras. 9.399, 9.402.

\(^{104}\) See US SWS, para. 932; Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

equivalent number for the 2013-2015 period would be 333 single-aisle aircraft, or an annual average of 111.

105. The United States notes, however, that the subsidy amount calculated for the numerator includes an estimate for all of 2015 ($120 million), while the lost sales allegations for use in the denominator were last updated in the middle of 2015.\textsuperscript{106} As a result, the EU’s lost sales allegations include only a single sales campaign accounting for six aircraft in 2015, and that one sales campaign was not found to be a lost sale.\textsuperscript{107}

106. If one were to use the average for 2013 and 2014 only to account for the fact that only partial data for 2015 orders were submitted, the annual average according to the “conservative” methodology – that is, the annual average of all lost sales of single-aisle aircraft alleged by the EU – would be 163.5 aircraft.\textsuperscript{108}

107. Thus, the Panel deviated from both the explicitly conservative methodology from the U.S. first written submission and the EU’s approach, in only including in the denominator the aircraft ordered in the three single-aisle sales campaigns the Panel found to be price sensitive during the 2013-2015 period. As a result, the Panel’s denominator is approximately one-ninth of what the denominator would have been according to the EU’s approach (462.5), and one-third of the number that would have been determined based on an accurate application of the explicitly “conservative” methodology (163.5).

108. For all of these reasons, the Panel erred in using a denominator of 54.3 aircraft allegedly ordered annually in the three campaigns it identified.

c. Adjusting the Calculation to Account for the Panel’s Errors

109. As explained in Section II.D.1 above, the correct per-aircraft subsidy magnitude calculation is a straightforward application of the difference in tax rates to the relevant per-aircraft price. However, when the Panel eschewed this straightforward calculation for the approach it took, several corrections to its calculation were required.

\textsuperscript{106} \textit{See} Compliance Panel Report, para. 8.669; EU RPQ 169, para. 329.

\textsuperscript{107} Compliance Panel Report, Table 12, note 3274.

\textsuperscript{108} The two-year total of 327 aircraft includes the following campaigns: 2013 Southwest (55), 2013 United (14), 2013 Icelandair (16), 2013 Air Canada (61), 2013 TUI Travel (60), 2014 Fly Dubai (86), 2014 Avalon (5), and 2014 Monarch (30). \textit{See} Compliance Panel Report, Table 12.
110. As explained in Section II.D.2.a. above, by excluding the subsidies to Boeing’s other aircraft outside the single-aisle market, the numerator is reduced to approximately $58.4 million.  

111. To be consistent with the Appellate Body’s and the compliance Panel’s findings regarding the nature and operation of tied tax subsidies, if the entire subsidy amount to single-aisle aircraft were included in the numerator, the denominator must include all single-aisle orders during the relevant period. 737NG and 737 MAX orders totaled 1197 orders in 2013 and 1205 orders in 2014. The annual average of all 737NG and 737 MAX orders during the 2013–2014 period (with 2015 again excluded due to only partial data) is therefore 1201 aircraft. If the denominator is adjusted to 1201 aircraft, the resulting magnitude is less than $49,000 per-aircraft.

112. Moreover, recall that the EU’s approach of using all deliveries instead of orders resulted in an annual average of 462.5 aircraft for the single-aisle market. If the numerator of $58.4 million were divided by a denominator of 462.5 to reflect the EU’s approach, the per-aircraft magnitude would be $126,355.

113. The “conservative” methodology from the U.S. first written submission that the Panel attempted to apply would not be valid because limiting the denominator to aircraft in sales campaigns alleged by the EU to be lost sales treats the subsidy as fungible, rather than tied to individual LCA, contrary to the Appellate Body’s and the compliance Panel’s findings regarding the nature and operation of tied tax subsidies. For the 2013-September 2015 period, applying this methodology would imply that the B&O tax savings from all single-aisle sales can, and will, be deployed to lessen the prices in nine sales campaigns that account for only 333 of the 2,751 737NG and 737 MAX orders during that timeframe. Or, if 2015 were excluded due to the fact that only partial data exists for that year, applying this methodology would imply that the B&O tax savings from all single-aisle sales can, and will, be deployed to lessen the prices in eight sales campaigns that account for only 327 of the 2,402 737NG and 737 MAX orders during the 2013-2014 period.

114. However, if this “conservative” methodology were used, resulting in a denominator of 163.5 (i.e., 327/2 to calculate an annual average), the per-aircraft magnitude would be $357,425.

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109 See supra, para. 67.
110 See Ascend database, Orders, data request as of September 29, 2015 (Exhibit EU-1658).
111 See Ascend database, Orders, data request as of September 29, 2015 (Exhibit EU-1658).
112 See Compliance Panel Report, Table 14.
113 See Compliance Panel Report, Table 14.
115. As explained in Section II.D.1 above, math alone demonstrates that Boeing would have had to raise its price in the absence of the subsidy by, at most, approximately $100,000 per aircraft, even based on an estimate of a $50 million purchase price that is presumably higher than what was charged in price-sensitive campaigns where intense competition supposedly drove down prices.

116. However, even if the type of calculation the Panel undertook were pursued, merely adjusting the calculation to account for the Panel’s most obvious errors – errors at odds with the Appellate Body’s and the compliance Panel’s findings regarding the nature and operation of tied tax subsidies, the EU’s allegations, and the methodology that the Panel purported to be applying – the per-aircraft magnitude would be around $100,000 or less. Indeed, even accurately applying the “conservative” methodology with its invalid assumption that savings can be deployed in unrelated campaigns, results in a per-aircraft magnitude of approximately $350,000. Each of these per-aircraft magnitudes – $357,425, $126,355, and $48,659 – is far too small to be a genuine and substantial cause of Airbus losing the sales identified in the single-aisle sales campaigns raised by the EU.

117. The Panel’s analysis was almost exclusively based on comparing its flawed $1.99 million magnitude figure to record evidence of price differences in the relevant sales campaigns. The only other evidence cited by the Panel was an Airbus statement that NPV differences can be as small as $$[[\text{HSBI}]]$$. The correct magnitude of approximately $100,000 is $$[[\text{HSBI}]]$$ that, even under the Panel’s erroneous “portion of Boeing’s pricing advantage” standard (addressed in Section II.F below), it still would not support the Panel’s ultimate conclusion that “the Washington State B&O tax rate reduction, through the effects on Boeing’s pricing, contributed in a genuine and substantial way to determining the outcome of price-sensitive sales campaigns involving” single-aisle aircraft. Accordingly, the United States respectfully requests that the Appellate Body reverse the Panel’s findings that the Washington B&O tax rate reduction causes significant lost sales and threat of impedance.

E. The Evidence Does Not Show that Boeing Would have Lost the Sales in Question in the Absence of the Subsidy; in Fact, It Shows the Opposite.

118. As discussed above, the Panel’s findings that the Washington B&O tax rate reduction is a genuine and substantial cause of significant lost sales and threat of impedance should be reversed because the correct magnitude of $100,000 is so vastly smaller than the Panel’s $1.99 million figure that it does not support the conclusions reached by the Panel. However, to the extent the Appellate Body considers that further analysis is justified, the United States demonstrates in this section that the evidence relied upon by the Panel is insufficient to support a finding that the

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Washington B&O tax rate reduction is a genuine and substantial cause of significant lost sales and threat of impedance.

119. “Article 6.3 {of the SCM Agreement} requires that the market phenomenon be the effect of the challenged subsidy.” Furthermore, “a panel is never absolved from having to establish a ‘genuine and substantial relationship of cause and effect’ between the impugned subsidies and the alleged market phenomena under Article 6.3.” The Appellate Body has explained that “{t}he use of a counterfactual analysis provides an adjudicator with a useful analytical framework to isolate and properly identify the effects of the challenged subsidies.” It has also clarified that, “having selected a reasonable scenario, a panel should pursue its counterfactual analysis in a coherent and consistent fashion.”

120. Consistent with this guidance, the compliance Panel stated that it adopted a counterfactual analysis of causation, according to which it would “ask whether, but for the effects of the various subsidies, Airbus’ sales, prices and market share would be higher.” The only Article 6.3 market phenomena at issue here are significant lost sales and threat of impedance, with the latter flowing exclusively from the Panel’s lost sales findings.

121. Critically, the genuine and substantial relationship of cause and effect must be between the subsidy and the relevant Article 6.3 market phenomenon. It is therefore important to distinguish between “price effects” – which describe how the subsidy in question allows Boeing to lower its prices – and significant lost sales. The latter is the relevant Article 6.3 market phenomenon.

122. Accordingly, the proper counterfactual question is not whether the subsidy is a genuine and substantial cause of Boeing lowering its prices, because lower Boeing prices do not necessarily translate into additional Airbus sales. Instead, the proper counterfactual question is whether the subsidy is a genuine and substantial cause of Airbus losing sales. Thus, with respect

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116 EC – Large Civil Aircraft (AB), para. 1109.
118 EC – Large Civil Aircraft (AB), para. 1110.
119 US – Large Civil Aircraft (AB), para. 1020.
120 Compliance Panel Report, para. 9.341.
121 US – Large Civil Aircraft (AB), para. 1284 (quoting US – Upland Cotton (AB), para. 438).
122 As already discussed, the Panel also made findings of threat of impedance, but they were based on lost sales that were the result of the same analysis as the Panel’s significant lost sales findings. If Boeing would have won the 2008 Fly Dubai and 2011 Delta campaigns even in the absence of the subsidy, then there is no basis to attribute the absence of additional Airbus market share to the subsidy. Therefore, to the extent the United States makes arguments in the context of significant lost sales, these arguments should be understood as applying with equal force to the Panel’s threat of impedance findings.
to price effects alleged to cause significant lost sales (and threat of impedance based on lost sales), the proper counterfactual asks not only whether Boeing’s prices would have been higher, but rather whether Boeing’s prices would have been sufficiently higher in the absence of the subsidy such that Airbus would have won additional sales. If no, then the subsidy is not a genuine and substantial cause of significant lost sales. That is, for a subsidy that affects sales revenue to be a genuine and substantial cause of lost sales, it is necessary for it to alter the outcome of sales campaigns.\(^{123}\)

123. The Panel’s analysis focused on a single subsidy, so there is no need to consider potential interactions with other subsidies. Furthermore, there are no findings that Airbus would have won any of these sales while trailing Boeing on price. Therefore, if Boeing’s price in the counterfactual scenario remained lower than Airbus’s price, there is no basis to find that Airbus would have won the sale in the absence of the subsidy, and the subsidy is not a genuine and substantial cause of the alleged lost sale.

124. The Panel seemed to recognize this, as it explained that it would “determine whether, on the basis of the evidence before it, the magnitudes of the tied tax subsidies were enough to ‘cover the margin of victory between the final net prices of Boeing and Airbus’ such that the tied tax subsidies, through their effects on Boeing’s prices, are a genuine and substantial cause of lost sales.”\(^{124}\) Moreover, prior to reviewing the sales campaign evidence, the Panel suggested that its calculated per-aircraft magnitude of $1.99 million, which as explained above was deeply flawed, “exceeded” what it could reasonably infer based on its analysis of sales campaign evidence about final net price differences in post-implementation, price-sensitive sales campaigns.\(^{125}\)

125. However, the evidence does not provide any support for finding that, in the absence of the Washington B&O tax rate reduction, Airbus would have won any of the five sales campaigns that the Panel found to be lost sales. After calculating its subsidy magnitude, the Panel provided the following analysis:

While the sales campaign evidence does not provide direct evidence of the net prices of the final Boeing and Airbus offers, the parties do allege approximate differences in net prices between the competing Airbus and Boeing offers for

\(^{123}\) The United States notes that, even if Boeing would have lost the sale in the absence of the subsidy, the subsidy still may not as a legal matter be a genuine and substantial cause of an alleged lost sale. In context, a subsidy that is a necessary or but-for cause of an Article 6.3 market phenomenon may be too trivial to be a genuine and substantial causal factor. In addition, there could be other factors that sever the causal link. See EC – Large Civil Aircraft (AB), para. 1233. But, at minimum, the Boeing price increase in the absence of the subsidy must be large enough that Airbus would have won the sale. Thus, showing that the counterfactual price increase is large enough that Airbus would have won the sale is necessary, but not sufficient, to establish the alleged adverse effects.

\(^{124}\) Compliance Panel Report, para. 9.379.

\(^{125}\) See Compliance Panel Report, para. 9.402.
some of the sales campaigns. There is HSBI evidence from the sales campaign that led to the Fly Dubai 2014 order from which it is possible to infer that the difference between Boeing and Airbus final net prices was in the vicinity of [[HSBI]]. There is also evidence from the Air Canada 2013 campaign regarding the magnitudes of the incremental proposals made by Airbus in the concluding stages of the campaign that suggests that Airbus thought it was close enough to Boeing on price that relatively small improvements on price could affect the outcome of the campaign. The evidence from the sales campaigns in respect of the Icelandair 2013 order could suggest a somewhat larger price differential than appears from the evidence in the Fly Dubai and Air Canada campaigns, however, this is somewhat contradicted by other evidence that Airbus’ final offer for both the A320neo and A320ceo was [[HSBI]], which suggests that at the final stage, Airbus had closed the gap. We also recall the evidence submitted by the European Union, which the United States does not appear to contradict, that in certain price-sensitive sales campaigns involving single-aisle LCA, the NPV differences can be as small as [[HSBI]]. The HSBI evidence from the Fly Dubai 2008 and Delta 2011 campaigns suggests that the difference in net prices in those campaigns were approximately [[HSBI]] and [[HSBI]] which indicates that the magnitudes of the Washington State B&O tax rate reduction were capable of enabling at least a portion of Boeing’s pricing advantage, contributing in substantial part to its winning those campaigns.\textsuperscript{126}

\textsuperscript{126} Compliance Panel Report, para. 9.403 (internal citations omitted).

126. Thus, the Panel found that, theoretically, there can be NPV differences as small as $\[\text{[[HSBI]]}\]$. The remainder of the Panel’s analysis touched briefly on aspects of all five sales campaigns it found to be lost sales. As the United States demonstrates below, the information cited and inferences made by the Panel provide no basis to conclude that Airbus would have won any of the five sales campaigns at issue.

127. The United States will address each piece of evidence cited by the Panel, starting with the Panel’s discussion of the EU evidence on potential NPV differences, and then addressing the five sales campaigns in the order they are referenced in the quoted paragraph above.

128. Without reference to any specific campaign, the Panel recalled EU evidence that “NPV differences can be as small as [[HSBI]].” As the United States observed before the Panel, just because an NPV difference “can be” this small does not mean that it was this small in any of the relevant sales campaigns. Regardless, the per-aircraft magnitude of the Washington B&O tax rate reduction on the sale of a 737 NG or 737 MAX ($100,000) is [[HSBI]]. Accordingly, this observation by the Panel does not support a finding that the Washington B&O tax rate reduction is a genuine and substantial cause of significant lost sales or threat of impedance.
129. The first sales campaign addressed by the Panel is the *Fly Dubai 2014* campaign. The Panel’s sole observation with respect to this campaign was that it could infer from evidence a price difference of approximately $[[HSBI]]. The Panel did not explicitly compare this figure to its $1.99 million magnitude calculation. This makes sense because $[[HSBI]]. Because, as discussed below, $[[HSBI]], there is no basis for finding the subsidy to be a genuine and substantial cause of Airbus losing the Fly Dubai 2014 sales campaign.

130. However, even if the pricing difference in the Fly Dubai 2014 campaign were considered relevant, it still would not support a lost sale finding. If, in the absence of the subsidy, Boeing increased its price by the full amount of the subsidy – $100,000 – $[[HSBI]]. Therefore, the Panel’s finding that the Washington B&O tax rate reduction is a genuine and significant cause of Airbus losing the Fly Dubai 2014 sales campaign should be reversed.

131. The Panel next addresses the *Air Canada 2013* campaign. The Panel did not identify a specific price differential for this campaign. It asserted instead that evidence of incremental proposals made by Airbus in the concluding stages of the campaign – which showed price reductions of $[[HSBI]] and then $[[HSBI]] – suggests that Airbus thought it was close enough to Boeing on price that relatively small improvements on price could affect the outcome of the campaign. The Panel also seemed to insinuate that the pricing differential at Air Canada was “somewhat” lower than the $[[HSBI]] pricing differential in the Icelandair 2013 campaign.

132. As an initial matter, it is unclear what weight, if any, the Panel placed on its observation regarding Airbus’s incremental proposals given that the Panel previously found that “an analysis of the degree of magnitudes of price movements in sales campaigns…is of limited assistance in assessing whether a comparatively small subsidy may make a difference to the outcome of a sales campaign.” Furthermore, as discussed in Section II.F.2.b, the Panel’s statement that Airbus thought relatively small price improvements could tip the campaign to Airbus has no basis in evidence.

133. Nevertheless, even if that were the case, as demonstrated above, Boeing’s offer in the absence of the subsidy would have been higher by no more than $100,000 per-aircraft. Thus, even if the pricing differential were somewhat less than $[[HSBI]], there is no basis to conclude that, in the absence of the subsidy, Airbus would have won the sale. Accordingly, the Panel’s

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128 See Compliance Panel Report, para. 9.403; *ibid*, Appendix 2, note 570 (showing that $[[HSBI]])
129 See Compliance Panel Report, para. 9.403 (stating that the Icelandair 2013 pricing differential of $[[HSBI]] is “somewhat larger” than in the Fly Dubai 2014 and Air Canada 2013 campaigns).
130 Compliance Panel Report, para. 400.
finding that the Washington B&O tax rate reduction is a genuine and significant cause of Airbus losing the Air Canada 2013 campaign should be reversed.

134. The Panel next addressed the Icelandair 2013 campaign, stating that “evidence from the sales campaigns in respect of the Icelandair 2013 order could suggest a somewhat larger price differential than appears from the evidence in the Fly Dubai and Air Canada campaigns, however, this is somewhat contradicted by other evidence that Airbus’ final offer for both the A320neo and A320ceo was $[HSBI], which suggests that at the final stage, Airbus had closed the gap.”

135. In the Panel’s separate discussion of the Icelandair 2013 sales campaign, it noted that the pricing differential was $[HSBI]. If, in the absence of the subsidy, Boeing had increased its price by $100,000, and thereby ensured itself in the counterfactual scenario the exact same profit that it earned with the subsidy, $[HSBI]. Therefore, Airbus would have lost the sale even in the absence of the subsidy. Accordingly, the Panel erred in finding that the Washington B&O tax rate reduction was a genuine and substantial cause of Airbus losing the Icelandair 2013 sales campaign, and this finding should be reversed.

136. The United States notes that the Panel did state that the $[HSBI] price differential figure was “somewhat contradicted by other evidence that Airbus’ final offer for both the A320neo and A320ceo was $[HSBI], which suggests that at the final stage, Airbus had closed the gap.” As the United States explains in Section II.F.2.a, there is no evidence that contradicts the $[HSBI] figure, nor is there any basis for finding that Airbus had “closed the gap.”

137. Nevertheless, even assuming arguendo that Airbus had closed the gap to less than $[HSBI], given that the maximum counterfactual price increase would be just $100,000, there still is no basis to conclude that Airbus would have won the sale in the absence of the subsidy. Accordingly, the United States respectfully requests that the Appellate Body reverse the Panel’s finding that the Washington B&O tax rate reduction is a genuine and substantial cause of Airbus losing the Icelandair 2013 campaign.

138. The Panel concluded by addressing the two campaigns prior to the implementation period – the Delta 2011 and Fly Dubai 2008 campaigns. The Panel stated that evidence from these sales campaigns suggests approximate price differences of $[HSBI] (Fly Dubai 2008) and $[HSBI] (Delta 2011), “which indicates that the magnitudes of the Washington State B&O tax rate reduction were capable of enabling at least a portion of Boeing’s pricing advantage, contributing in substantial part to its winning those campaigns.” The United States addresses in

131 Compliance Panel Report, Appendix 2, paras. 249 and 250.

the next section why enabling only a portion of Boeing’s pricing advantage is insufficient to support the Panel’s ultimate causation finding.

139. In any event, it is clear that, in light of the correct subsidy magnitude, there is no basis to find that the subsidy is a genuine and substantial cause of Airbus losing the Fly Dubai 2008 campaign. Even if Boeing would have increased its price by the full amount of the subsidy – $100,000 – [[HSBI]]. Therefore, even in the absence of the subsidy, Airbus would not have won the sale.

140. The Panel’s finding that the Fly Dubai 2008 campaign was a lost sale served as the basis for the Panel’s threat of impedance finding regarding the UAE single-aisle market under Article 6.3(b) of the SCM Agreement, [[HSBI]]. Accordingly, the United States respectfully requests that the Appellate Body reverse both of these findings in addition to the finding that the subsidy was a genuine and substantial cause of Airbus losing the Fly Dubai 2008 sales campaign.

141. Likewise, there is no basis to find that the subsidy is a genuine and substantial cause of Airbus losing the Delta 2011 campaign. Even if Boeing would have increased its price by the full amount of the subsidy – $100,000 – [[HSBI]]. Therefore, even in the absence of the subsidy, there is no basis to find that Airbus would have won the sale. The Panel’s threat of impedance finding in the U.S. single-aisle market under Article 6.3(a) of the SCM Agreement was based on the Delta 2011 campaign being a lost sale. Accordingly, the United States respectfully requests that the Appellate Body reverse this finding.

142. As the United States has demonstrated in this section, there is no basis to find that the Washington B&O tax rate reduction caused Airbus to lose any of the relevant sales campaigns. To the contrary, even in the absence of the subsidy, Boeing would have won all five of the sales campaigns at issue. Accordingly, the Panel’s findings that the Washington B&O tax rate reduction is a genuine and substantial cause of significant lost sales and threat of impedance should be reversed.

F. Even Assuming Arguendo that the Panel’s Magnitude Calculation Were Correct, the Panel Still Erred in Finding the Requisite Causal Link.

143. As the United States demonstrated above, the Panel’s magnitude calculation was erroneous. Furthermore, once the magnitude is corrected, the evidence relied upon by the Panel does not support a finding that the Washington B&O tax rate reduction causes adverse effects.

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However, even assuming *arguendo* that the Panel’s magnitude calculation were correct, the Panel still erred in finding that the subsidy is a genuine and substantial cause of adverse effects.

144. First, the Panel erred in its interpretation or application of Articles 5 and 6.3 of the SCM Agreement by relying on its finding that the Washington B&O tax rate reduction was capable of enabling merely a portion of Boeing’s pricing advantage. Second, certain statements by the Panel, which arguably intimated that its $1.99 million magnitude figure exceeded the pricing differential in the Icelandair 2013 and Air Canada 2013 campaigns, have no basis in evidence and represent a failure to make an objective assessment of the matter as called for in DSU Article 11. Third, and finally, the pricing differential in the Fly Dubai 2014 sales campaign is insufficient to support the Panel’s ultimate conclusion because, as the Panel found, [[HSBI]].

145. Accordingly, even without correcting the magnitude calculation, the evidence does not support a finding that the Washington B&O tax rate reduction was a genuine and substantial cause of Airbus losing any of the five sales campaigns.

1. **The Panel Erred in Relying on Its Finding that the Subsidy is Capable of Enabling Merely a Portion of Boeing’s Pricing Advantage.**

146. The Panel only explicitly draws a conclusion about the comparison between the $1.99 million magnitude figure and the pricing differential in sales campaign evidence with respect to two of the five sales campaigns in question – the Fly Dubai 2008 and the Delta 2011 campaigns.

147. As discussed above, where Airbus would not have overtaken Boeing and won the sale even in the absence of the subsidy, there is no basis to conclude that the subsidy is a genuine and substantial cause of significant lost sales.\(^{136}\) The Panel initially appeared to understand this, as it explained that it would “determin[e] whether, on the basis of the evidence before [it], the magnitudes of the tied tax subsidies were enough to ‘cover the margin of victory between the final net prices of Boeing and Airbus’ such that the tied tax subsidies, through their effects on Boeing’s prices, are a genuine and substantial cause of lost sales.”\(^{137}\) Moreover, prior to reviewing the sales campaign evidence, the Panel suggested that its calculated per-aircraft magnitude of $1.99 million, which as explained above was deeply flawed, exceeded what it could reasonably infer based on its analysis of sales campaign evidence about final net price differences in post-implementation, price-sensitive sales campaigns.\(^{138}\)

\(^{136}\) See supra, Section II.B; *ibid.*, paras. 118-123.

\(^{137}\) Compliance Panel Report, para. 9.379.

148. However, when the Panel proceeded to analyze the evidence concerning pre-implementation sales campaigns, it found:

The HSBI evidence from the Fly Dubai 2008 and Delta 2011 campaigns suggests that the difference in net prices in those campaigns were approximately [[HSBI]] and [[HSBI]] which indicates that the magnitudes of the Washington B&O tax rate reduction were capable of enabling at least a portion of Boeing’s pricing advantage, contributing in substantial part to its winning those campaigns.**¹³⁹

149. In the Fly Dubai 2008 campaign, even if one assumes arguendo that Boeing’s price would have been $1.99 million higher in the absence of the subsidy, the price difference was $[[HSBI]]. Therefore, even in the absence of the subsidy, [[HSBI]]. Moreover, the Panel found that the evidence supported the EU’s contention that this campaign [[HSBI]].¹⁴⁰ In this circumstance, there is no basis to conclude that, absent the subsidy, Airbus would have won the sale, and the Panel failed to make any such finding.

150. Similarly, in the Delta 2011 campaign, even if one assumes arguendo that Boeing’s price would have been $1.99 million higher in the absence of the subsidy, the price difference was $[[HSBI]]. Therefore, even in the absence of the subsidy, Boeing would have maintained [[HSBI]].

151. The Panel erred by shifting its focus from “whether, on the basis of the evidence before {it}, the magnitudes of the tied tax subsidies were enough to ‘cover the margin of victory between the final net prices of Boeing and Airbus,’”¹⁴¹ to whether “the magnitudes of the Washington B&O tax rate reduction were capable of enabling at least a portion of Boeing’s pricing advantage.”¹⁴² To the extent the Panel relied on the subsidy accounting only for a portion of Boeing’s pricing advantage in the relevant campaigns, to determine that the subsidy was a genuine and substantial cause of Airbus losing those sales campaigns, the Panel committed an error in its application of law to fact. In the alternative, the Panel failed to make an objective assessment of the matter as required by DSU Article 11.

152. As a result, the Panel erroneously found that the B&O tax rate reduction was a genuine and substantial cause of Airbus losing the Fly Dubai 2008 and Delta 2011 sales despite that its findings fail to establish that Airbus would have won either of these campaigns in the absence of the subsidy. The Panel’s own findings make clear that there is no relationship of cause and effect, much less a genuine and substantial relationship of cause and effect, between the B&O

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¹³⁹ Compliance Panel Report, para. 9.403 (emphasis added).
¹⁴⁰ Compliance Panel Report, Appendix 2, paras. 162, 164.
¹⁴¹ Compliance Panel Report, para. 9.379.
¹⁴² Compliance Panel Report, para. 9.403 (emphasis added).
tax rate reduction and the relevant Article 6.3 market phenomena – i.e., significant lost sales and a threat of impedance in certain country markets. Because the Panel’s threat of impedance findings are based on these erroneous lost sales findings, those findings too are erroneous and should be reversed. In addition, as discussed below, the Panel’s significant lost sales finding with respect to the Fly Dubai 2014 campaign is [[HSBI]]. Accordingly, that finding too is erroneous and should be reversed.

2. *The Panel’s Statements Intimating that Its Magnitude Figure Exceeded the Price Differential in the Icelandair 2013 and Air Canada 2013 Campaigns Reflect a Failure to Make an Objective Assessment of the Matter under DSU Article 11.*

153. As the Appellate Body has explained:

> We recall that the Appellate Body has observed that Article 11 of the DSU requires a panel to “consider all the evidence presented to it, assess its credibility, determine its weight, and ensure that its factual findings have a proper basis in that evidence”. Panels may not “make affirmative findings that lack a basis in the evidence contained in the panel record”.

154. In the context of its magnitude analysis, the Panel makes observations with respect to the Icelandair 2013 and the Air Canada 2013 campaigns that lack a basis in evidence. Accordingly, they represent error under DSU Article 11.

a. *Icelandair 2013*

155. The Panel found that the evidence in the Icelandair 2013 sales campaign reflected a price differential of $[HSBI]. Thus, $[HSBI]$ the Panel’s $1.99 million magnitude figure $[HSBI]$ the pricing differential based on the relevant evidence.

156. However, the Panel also suggested that this evidence “is somewhat contradicted by other evidence that Airbus’ final offer for both the A320neo and A320ceo was $[HSBI]$, which suggests that at the final stage, Airbus had closed the gap.” Although the Panel does not draw any explicit conclusions from this observation, it can be read to suggest that the $1.99 million figure might, in fact, have exceeded the pricing differential. However, the Panel’s statement in this respect lacks any basis in the evidence.

157. The Panel gives no explanation for why Airbus offering its aircraft at the $[HSBI]$ would mean that Airbus “closed the gap.” The relationship between Airbus’s price offering in a given

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143 *India – Agricultural Products (AB)*, para. 5.182 (citations omitted).
144 Compliance Panel Report, Appendix 2, paras. 249 and 250.
sales campaign and [[HSBI]] says nothing about the relationship between Airbus’s price offering in that campaign and Boeing’s pricing in the same campaign.

158. Moreover, the Airbus statement introduced by the EU states that [[HSBI]].Therefore, even if the Panel inferred that Airbus lowered its price at the end, there would be no basis to conclude that it “closed the gap” considering [[HSBI]].

159. And regardless of whether the gap closed or expanded from some earlier uncertain point in time, Airbus’s statement that the price difference was $[[HSBI]] was made well after the end of the campaign and therefore reflected any changes to the price difference from concessions made “at the final stage.” Therefore, the Panel’s statement that other evidence “somewhat contradicted” the evidence indicating a $[[HSBI]] price difference has no basis in evidence.

160. Because there is no basis to find that other evidence “somewhat contradicted” the evidence of the price difference in the Icelandair 2013 sales campaign, the United States therefore respectfully request that the Appellate Body reverse this finding.

b. Air Canada 2013

161. The Panel does not identify a specific price differential for this campaign. The Panel seems to insinuate that the pricing differential at Air Canada was somewhat lower than the $[[HSBI]] pricing differential in the Icelandair 2013 campaign. It also asserts that evidence of incremental proposals made by Airbus in the concluding stages of the campaign – which showed price reductions of approximately $[[HSBI]] and then $[[HSBI]] – suggests that Airbus thought it was close enough to Boeing on price that relatively small improvements on price could affect the outcome of the campaign. The Panel does not draw any explicit conclusions regarding a comparison of the evidence from these campaigns and its $1.99 million magnitude figure. However, there is no support for these statements, and to the extent they are meant to insinuate that the subsidy magnitude exceeds the price differential, they represent a failure to make an objective assessment of the matter under DSU Article 11.

162. Again, the Panel did not identify a specific price difference based on the record evidence for this sales campaign. It is unclear on what basis the Panel insinuates that the pricing

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145 [[HSBI]], para. 7 (Exhibit EU-987(HSBI)), para. 7.

146 See Compliance Panel Report, para. 9.403 (stating that the Icelandair 2013 pricing differential of $[[HSBI]] is “somewhat larger” than in the Fly Dubai 2014 and Air Canada 2013 campaigns).

147 See Compliance Panel Report, para. 9.403; ibid, Appendix 2, note 570 (showing that [[HSBI]]).
differential was somewhat lower than the $[[HSBI]] pricing differential in the Icelandair 2013 campaign. The post-campaign analysis from Airbus indicates that Airbus [[HSBI]].

163. Moreover, the Panel’s statement that Airbus thought relatively small improvements on price could sway the outcome has no basis in evidence. The Panel is apparently referring to supposed price reductions from [[HSBI]].

164. The parties made no arguments based on these reductions, and the Panel does not appear to have examined the reason for them. [[HSBI]].

165. Rather, [[HSBI]].

166. [[HSBI]]

167. Thus, there is no evidence whatsoever that Airbus [[HSBI]]. Therefore, to the extent the Panel was insinuating that the amount of this concession was in any way a proxy for the price differential, such an insinuation is baseless.

168. Because there is no basis in evidence to find that the price differential in the Air Canada 2013 campaign was somewhat lower than the price differential in the Icelandair 2013 campaign, or that Airbus thought it was close enough to Boeing on price that relatively small improvements on price could affect the outcome of the campaign, the Panel’s findings in this regard represent a failure to make an objective assessment under DSU Article 11. Therefore, the United States respectfully requests that the Appellate Body reverse these findings.

3. The Evidence from the Fly Dubai 2014 Campaign Does Not Support the Panel’s Adverse Effects Findings.

169. The Panel observed that the price differential in the Fly Dubai 2014 campaign was $[[HSBI]]. However, even assuming arguendo that the Panel’s $1.99 million magnitude figure were correct, the fact that [[HSBI]] in this campaign is of no consequence.

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148 [[HSBI]], p.4 (Exhibit EU-1587(HSBI)).
149 See [[HSBI]], arts. 2.2.1(i), 7.12 (Exhibit EU-1601(HSBI)); [[HSBI]] (Exhibit EU-1591(HSBI)); [[HSBI]] (Exhibit EU-1589).
150 See [[HSBI]] (Exhibit EU-1591(HSBI)); [[HSBI]] (Exhibit EU-1589(HSBI)); [[HSBI]], p. 2 (Exhibit EU-1587(HSBI)).
170. The Panel determined that the Fly Dubai 2014 campaign [[HSBI]]. Therefore, there is no basis to assume, even if Boeing’s price was $1.99 million higher in the absence of the subsidy, that Airbus would have won the sale. Rather, this campaign is a consequence of [[HSBI]].

171. As demonstrated above, even if Boeing’s price were $1.99 million higher, Airbus still would not have [[HSBI]]. Therefore, there is no basis to attribute Boeing’s success in this campaign to the subsidy.

4. Conclusion

172. The Panel erred in its causation analysis when it relied on its finding that the subsidy was capable of enabling merely a portion of the price difference. As a result, the Panel erred in finding that the subsidy is a genuine and substantial cause of the Fly Dubai 2008 and Delta 2011 campaigns.

173. The Panel further erred to the extent it insinuates that the $1.99 million magnitude it calculated exceeds the price difference in the Icelandair 2013 or Air Canada 2013 campaigns. Therefore, there is no basis to conclude that the subsidy is a genuine and substantial cause of Airbus losing either of those two sales campaigns.

174. Furthermore, the Fly Dubai 2014 finding is a consequence of [[HSBI]], the Panel erred in finding that the subsidy is a genuine and substantial cause of the Fly Dubai 2014 campaign.

175. Accordingly, the evidence does not support a finding that Airbus would have won any of the five sales campaigns in the absence of the subsidy even if the Panel’s magnitude calculation were correct. Therefore, even assuming arguendo that Boeing would have increased its price by $1.99 million in the absence of the subsidy, the Panel still erred in finding that the Washington B&O tax rate reduction is a genuine and substantial cause of significant lost sales and threat of impedance.
III. NASA/DoD/FAA ISSUES


176. This appeal is conditional on the Appellate Body reversing the Panel’s finding that all or part of the subsidies it grouped in the category of “aeronautics R&D subsidies” did not cause adverse effects.

177. It is well established that the ordinary meaning of “benefit” in Article 1.1(b) of the SCM Agreement, as informed by the context of Article 14, means that a “benefit” exists when the government confers a financial contribution on terms more favorable than those available to the recipient in the market. Both parties in this proceeding cited this principle, and structured the analysis as a comparison of the NASA, DoD, and FAA contracts and agreements with comparable commercial transactions, or “benchmarks.”

178. But rather than examine all of the terms of the relevant transactions, the compliance Panel looked at only one – the allocation of intellectual property rights – and concluded that commercial commissioning parties obtained a more favorable allocation of patent rights and related license rights than NASA, DoD, or FAA. The compliance Panel viewed this disposition as more favorable to the commissioned party, Boeing, than the commercial transactions that it analyzed as benchmarks. The compliance Panel disregarded all other terms – the funding commitments, rights to terminate the agreement, rights to manage the project, and requirements to use particular accounting practices. It closed its eyes to the possibility that the benchmark transactions were not fully comparable to the NASA, DoD, and FAA transactions with respect to non-intellectual-property terms, and that the disregarded terms (including the monetary contribution) of the commercial transactions offset the more favorable patent-related rights that commercial commissioning parties obtained.

179. Put in concrete terms, if commercial commissioning parties committed more funding than the government agencies at the same time they obtained more rights in resulting patents, it would be necessary to consider both elements to determine whether the government transaction is more favorable to the commissioned party. This is not a theoretical concern. The United States identified a number of benchmark transactions in which the commissioning parties committed more funds than NASA, DoD, and FAA did in their transactions, and pointed out other ways in which the commercial transactions were less favorable to the commissioning party than the challenged transactions. In line with its view that it could evaluate the benefit based solely on the allocation of patent rights, the Panel addressed none of this evidence.

180. In proceeding in this fashion, the compliance Panel incorrectly applied Article 1.1(b) of the SCM Agreement by conducting an evaluation of the benefit without taking account of all of
the terms that affected the value to the recipient. Even assuming *arguendo* that the Panel applied Article 1.1(b) correctly in addressing only the patent-related rights, it failed to conduct the objective assessment called for under Article 11 of the DSU by disregarding that these rights included a funding component in most of the benchmark transactions. The United States accordingly requests the Appellate Body to reverse the Panel’s finding that NASA contracts and cooperative agreements, DoD assistance instruments, and the Boeing CLEEN Agreement conferred a benefit.

181. In the following analysis, Section III.A.1 demonstrates that a panel evaluating the existence of a benefit for purposes of Articles 5 and 6.3 of the SCM Agreement must take account of all terms of the transaction that affect the value to the recipient. Section III.A.2 summarizes the Panel’s findings regarding the NASA, DoD, and FAA transactions and the benchmark commercial transactions, and describes other relevant terms. Section III.A.3 demonstrates that the Panel misinterpreted Article 1.1(b) of the SCM Agreement when it found that it could evaluate benefit based solely on the allocation of patent rights and related license rights. Section III.A.4 demonstrates that, by disregarding the funding component of the allocation of those rights in commercial transactions, the Panel failed to conduct an objective assessment of the facts, as called for under Article 11.

1. **A Proper Evaluation of Benefit under Article 1.1(b) of the SCM Agreement Requires a Consideration of All Terms of the Financial Contribution that Potentially Affect the Value to the Recipient.**

182. Article 1.1(b) of the SCM Agreement provides that a subsidy exists when a benefit is conferred by a financial contribution. Based on the ordinary meaning and the context provided by Article 14 of the SCM Agreement, the Appellate Body found that “the word ‘benefit’ . . . implies some sort of comparison,” namely, whether “the ‘financial contribution’ makes the recipient ‘better off’ than it would otherwise have been, absent that contribution.”\(^{152}\) This occurs when “the recipient has received a ‘financial contribution’ on terms more favourable than those available to the recipient in the market.”\(^{153}\)

183. The rendering of the word “terms” in the plural is not coincidental. A financial contribution would not “make the recipient ‘better off’” if unfavorable terms offset any favorable terms. Nor, conversely, would it be appropriate to find that a financial contribution did not confer a benefit by focusing only on a term that was no more favorable than would be available in the market while disregarding other terms that were more favorable. And, indeed, the

\(^{152}\) *Canada – Aircraft (AB)*, para. 157.

\(^{153}\) *Canada – Aircraft (AB)*, para. 158.
Appellate Body has repeatedly emphasized the importance of taking account of all of relevant terms of the financial contribution and potential benchmarks.\textsuperscript{154}

184. As the Appellate Body has observed, the SCM Agreement does not define the term “benefit.”\textsuperscript{155} Article 14 provides a set of “guidelines” to calculate the benefit to the recipient for purposes of assessing countervailing measures. Those are:

(a) government provision of equity capital shall not be considered as conferring a benefit, unless the investment decision can be regarded as inconsistent with the usual investment practice (including for the provision of risk capital) of private investors in the territory of that Member;

(b) a loan by a government shall not be considered as conferring a benefit, unless there is a difference between the amount that the firm receiving the loan pays on the government loan and the amount the firm would pay on a comparable commercial loan which the firm could actually obtain on the market. In this case the benefit shall be the difference between these two amounts;

(c) a loan guarantee by a government shall not be considered as conferring a benefit, unless there is a difference between the amount that the firm receiving the guarantee pays on a loan guaranteed by the government and the amount that the firm would pay on a comparable commercial loan absent the government guarantee. In this case the benefit shall be the difference between these two amounts adjusted for any differences in fees;

(d) the provision of goods or services or purchase of goods by a government shall not be considered as conferring a benefit unless the provision is made for less than adequate remuneration, or the purchase is made for more than adequate remuneration. The adequacy of remuneration shall be determined in relation to prevailing market conditions for the good or service in question in the country of provision or purchase (including price, quality, availability, marketability, transportation and other conditions of purchase or sale).

185. Although Article 14 applies only to domestic countervailing measure investigations, the Appellate Body has found that it provides “relevant context” for interpretation of Article 1.1(b),\textsuperscript{156} and concluded on that basis that:

\textsuperscript{154} E.g., \textit{US – Antidumping and Countervailing Duties (AB)}, paras. 476, 485; \textit{US – Carbon Steel (AB)}, para. 4.244-4.245; \textit{EC – Large Civil Aircraft (AB)}, para. 1024.

\textsuperscript{155} \textit{EC – Large Civil Aircraft (AB)}, para. 832.

\textsuperscript{156} \textit{Canada – Aircraft (AB)}, para. 155; \textit{Canada – FIT (AB)}, para. 5.163
the word “benefit”, as used in Article 1.1(b), implies some kind of comparison. This must be so, for there can be no “benefit” to the recipient unless the “financial contribution” makes the recipient “better off” than it would otherwise have been, absent that contribution. In our view, the marketplace provides an appropriate basis for comparison in determining whether a “benefit” has been “conferred”, because the trade-distorting potential of a “financial contribution” can be identified by determining whether the recipient has received a “financial contribution” on terms more favourable than those available to the recipient in the market.157

In US – Large Civil Aircraft, the Appellate Body explained further that “the assessment of benefit must examine the terms and conditions of the challenged transaction at the time it is made and compare them to the terms and conditions that would have been offered in the market at that time.”158

186. The Appellate Body’s analysis of the individual guidelines in Article 14 underscores the importance of looking at all of the terms of the financial contribution and benchmark transactions. In US – Antidumping and Countervailing Duties, the Appellate Body found that “a benchmark loan under Article 14(b) should have as many elements as possible in common with the investigated loan to be comparable.”159 If the terms of the commercial benchmark are not identical to the allegedly subsidized loan, “an investigating authority will need to make adjustments to reflect differences from investigated loans, such as date of origination, size, maturity, currency, structure, or borrower’s credit risk.”160 Thus, it is not enough to look at one term in isolation. Rather, the analysis must address all terms potentially affecting the financial contribution’s value to the recipient. If a benchmark transaction is “identical” to the financial contribution with respect to a particular term, the analysis ends. But if the transactions are different, some allowance must be made.161

157 Canada – Aircraft (AB), para. 157.
158 US – Large Civil Aircraft (AB), para. 636.
159 US – Antidumping and Countervailing Duties (AB), para. 476.
160 US – Antidumping and Countervailing Duties (AB), para. 485.
161 Most of the Appellate Body’s findings regarding benefit occurred in the context of disputes over the calculation of the benefit to the recipient for purposes of determining the size of countervailing measures under Part V of the SCM Agreement. In this context, the Appellate Body has found that a Member’s authorities must make “adjustments” to account for any differences in terms. E.g., US – Antidumping and Countervailing Duties (AB), para. 485. However, an arithmetic adjustment is not necessary in a dispute under Part III of the SCM Agreement because “[a] precise, definitive quantification of the subsidy is not required” in such claims. US – Upland Cotton (AB), para. 467. Rather, a qualitative assessment may be sufficient.
187. In *US – Carbon Steel*, the Appellate Body found with respect to government provision of goods that:

the inclusive list of prevailing market conditions identified in the second sentence of Article 14(d) – price, quality, availability, marketability, transportation and other conditions of purchase or sale – describe factors that may affect the comparability of the financial contribution at issue with a benchmark. Thus, if a proposed benchmark does not reflect prevailing market conditions in the country of provision, adjustments in the light of the factors listed in the second sentence of Article 14(d) are necessary to ensure comparability and, by extension, a meaningful benefit comparison.\(^\text{162}\)

The Appellate Body added that:

a government-provided financial contribution confers a benefit if the ‘‘financial contribution’ makes the recipient ‘better off’ than it would otherwise have been, absent that contribution”. Thus, a determination of the adequacy of remuneration in relation to prevailing market conditions in the country of provision must capture the full cost to the recipient of receiving the government-provided good in question.\(^\text{163}\)

The observation that Article 14(d) provides an inclusive list of considerations and the focus on the “full cost to the recipient” underscores the point that the analysis must include all factors that influence the value of the financial contribution to the recipient and the potential value of the benchmark.

188. With respect to the provision of equity capital, the Appellate Body found in *EC – Large Civil Aircraft* that

Article 14(a) focuses the inquiry on the ‘investment decision’. This reflects an *ex ante* approach to assessing the equity investment by comparing the decision, based on the costs and expected returns of the transaction, to the usual investment practice of private investors at the moment the decision to invest in undertaken.

By necessity, an assessment of the costs and expected returns of a transaction requires consideration of all terms affecting the value to the recipient of the equity capital, and a parallel consideration of the value that would result under the “usual investment practice of private investors.” Thus, in the original proceedings, the Appellate Body found that “‘it was not sufficient for the Panel to examine whether a company is in a position to attract private capital

\(^{162}\) *US – Carbon Steel (AB)*, para. 4.244.

\(^{163}\) *US – Carbon Steel (AB)*, para. 4.245.
without reference to the proper investment decision at issue, because the ‘attractiveness’ of an investment will be determined by the particular costs and expected returns associated with that decision.”\textsuperscript{164} In that instance, the “central question” was “whether the anticipated returns of the equity investment were sufficient to justify the costs, including the loss of control of Dassault Aviation, of transferring the French Government’s stake in Dassault Aviation to Aérospatiale.”\textsuperscript{165}

189. These examples show that, while each class of financial contribution has its own characteristic terms, a proper evaluation of any single financial contribution requires taking all of the relevant terms into account. The Appellate Body has, in the context of Part V of the SCM Agreement, called for “adjustments” to the subsidy margin calculation to reflect any differences from the benchmark.\textsuperscript{166} However, as “{a} precise, definitive quantification of the subsidy is not required” in evaluating claims under Article 6.3(c),\textsuperscript{167} a panel considering claims of serious prejudice is free to address such differences qualitatively.\textsuperscript{168}

190. In short, the determination whether a financial contribution conferred a “benefit” by providing more favorable terms than would be available to the recipient in the market requires a consideration of all of the terms that affect the value of the transaction. Otherwise, there can be no certainty that the financial contribution is, in fact, more favorable.

2. The Financial Contributions in Question – Transfers of Funds and Provision of Facilities, Equipment and Employees Pursuant to NASA, DoD, and FAA Instruments – Were Subject to a Number of Terms Beyond the Allocation of Intellectual Property Rights.

191. The Panel found that the NASA instruments, DoD assistance instruments, and the FAA’s Boeing CLEEN Agreement were collaborative R&D arrangements reflecting a “partnership” between Boeing and each agency.\textsuperscript{169} It concluded that these instruments constituted financial contributions in the form of direct transfers of funds and the provision of goods or services (in

\textsuperscript{164} EC – Large Civil Aircraft (AB), para. 1024.
\textsuperscript{165} EC – Large Civil Aircraft (AB), para. 1024.
\textsuperscript{166} E.g., US – Antidumping and Countervailing Duties (AB), para. 485.
\textsuperscript{167} US – Upland Cotton (AB), para. 467.
\textsuperscript{168} For example, in in EC – Large Civil Aircraft, the Appellate Body found that the proposed benchmark did not reflect the premium that the market would have commanded for the Mühlenberger Loch industrial site, and that it could not value that premium. It nevertheless concluded that the existence of this difference between the terms of the financial contribution and the benchmark transaction evidenced the existence of a benefit. EC – Large Civil Aircraft (AB), paras. 988-989. The Appellate Body upheld similar reasoning used by the panel in evaluating the Bremen runway subsidy. \textit{Ibid.}, para. 992.
\textsuperscript{169} Compliance Panel Report, paras. 8.103, 8.157, 8.353, and 8.522.
the form of access to facilities, equipment, and employees) under Article 1.1(a)(1), clauses (i) and (iii), respectively.\textsuperscript{170} It found further that these financial contributions occurred through “particular legal instruments,” and not through the relevant programs as a whole.\textsuperscript{171}

192. The Panel identified several salient characteristics of the post-2006 instruments. In particular, it found that despite the “technical elements” of payments in exchange for services, “NASA and Boeing nonetheless remain engaged in a collaborative enterprise, in pursuit of a common goal, in which they both have a stake in the risks and returns.”\textsuperscript{172} The Panel observed that the NASA contracts involved a combination of direct funding, along with access to government facilities, equipment, and employees, and that the value of the facilities, equipment, and employees was “significantly lower” after 2006 than in the original proceedings.\textsuperscript{173} The Panel found that DoD assistance instruments similarly conveyed financing, and provided access to government facilities, equipment, and employees,\textsuperscript{174} while the FAA Boeing CLEEN Agreement conveyed payments and access to government employees.\textsuperscript{175}

193. The Panel found that, by operation of U.S. government procurement rules:

where NASA or DOD employees and Boeing employees work together under a NASA procurement contract or under a DOD assistance instrument or procurement contract on a research effort that results in an invention, the allocation of ownership of patent rights is as follows:

a. Where a NASA (or DOD) employee makes an invention in the course of work under a NASA procurement contract or cooperative agreement (or under a DOD assistance instrument or procurement contract), the U.S. Government will have sole ownership of the patent. This is because the U.S. Government employee who made the invention would be recognized as the inventor, and his or her interest in the patent that would issue in that employee’s name would pass to the U.S. Government.

b. Where a Boeing employee makes an invention in the course of work under a NASA procurement contract or cooperative agreement (or under a DOD assistance instrument or procurement contract), Boeing has title to the

\textsuperscript{170} Compliance Panel Report, para. 8.157.
\textsuperscript{171} Compliance Panel Report, para. 8.62.
\textsuperscript{172} Compliance Panel Report, para. 8.151.
\textsuperscript{173} Compliance Panel Report, para. 8.148.
\textsuperscript{174} Compliance Panel Report, para. 8.414.
\textsuperscript{175} Compliance Panel Report, paras. 8.517-8.520.
invention and thus the right to ownership of the patent. This results from the application of the U.S. federal laws and regulations and NASA-specific waiver provisions discussed above. The U.S. Government receives a government use license in Boeing inventions made in the performance of a NASA procurement contract or cooperative agreement, or DOD assistance instrument and procurement contract.

c. Where a NASA employee (or DOD employee) and a Boeing employee jointly make an invention in the course of work under one of these instruments, the resulting patent would issue jointly in the names of the NASA (or DOD) and Boeing employees, and by operation of the U.S. federal laws and regulations and NASA-specific waiver provisions discussed above, NASA (or DOD) and Boeing would each own an undivided share in rights under the patent.176

The Panel found further that “the U.S. Government’s rights to patents in respect of inventions developed by Boeing employees in the course of work under a U.S. Government R&D contract or agreement consist of a ‘nonexclusive, non-transferable, irrevocable paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world’.”177 The Panel extended these findings to the FAA Boeing CLEEN Agreement.178

194. The Panel noted that the disposition of data rights was somewhat different:

contractors own all technical data produced with U.S. Government funding, as a general rule, and may use data for their own commercial purposes. In exchange, the U.S. Government receives a royalty-free license to use data produced in the performance of research. In cases of R&D contracts funded solely by the U.S. Government (e.g. NASA procurement contracts and DOD procurement contracts) the U.S. Government receives “unlimited rights data”, which enables it to use data for its own purposes, both inside and outside government. Where a contractor also contributes funding toward research (e.g. DOD assistance instruments), the U.S. Government may agree to forego certain rights to data, i.e. the U.S. Government obtains only “limited rights” in data.179

176 Compliance Panel Report, para. 8.34.
177 Compliance Panel Report, para. 8.35.
178 Compliance Panel Report, para. 8.537.
179 Compliance Panel Report, para. 8.36.
It is worth noting that the government use rights with respect to patents and data extend to any use by the government, by any agency, at any time,\textsuperscript{180} and would include future uses that are currently unknown.

195. The United States noted during the course of the proceedings that these instruments included several other terms that affected the value to the commissioned party:

- NASA procurement contracts commit the U.S. government to make payments to the commissioned party to reimburse expenses incurred in conducting the tasks covered by the instrument.\textsuperscript{181} NASA and DoD cooperative agreements, and the FAA Boeing CLEEN Agreement, provide for the agencies to reimburse a portion of the incurred costs.\textsuperscript{182}

- Most of the NASA procurement contracts provided for an additional “fee,”\textsuperscript{183} which covered costs not eligible for reimbursement, as well as providing a profit for the contractor.\textsuperscript{184} (Cooperative agreements and the Boeing CLEEN Agreement do not provide for a fee.\textsuperscript{185})

- Under the Boeing CLEEN Agreement, Boeing contributed a greater share of the costs than any NASA or DoD funding instruments considered in the original proceeding.\textsuperscript{186}

- Under NASA and DoD contracts, the agencies hold the final say on all aspects of contract management.\textsuperscript{187}

\textsuperscript{180} US – Large Civil Aircraft (AB), paras. 773 and 779-780.

\textsuperscript{181} Compliance Panel Report, paras. 8,360, 8,368. The compliance Panel addressed cost reimbursement only with respect to DoD procurement contracts. However, rules applicable to NASA procurement contracts also require cost reimbursement. 48 CFR § 16.307(1)(1) (“The contracting officer shall insert the clause at 52.216-7, Allowable Cost and Payment, in solicitations and contracts when a cost-reimbursement contract . . . is contemplated.”) (“Exhibit USA-544); 48 CFR § 52.216-7 (Exhibit USA-545).

\textsuperscript{182} Compliance Panel Report, paras. 8,177, 8,298(b), and 8,504.

\textsuperscript{183} Compliance Panel Report, paras. 8,360, 8,368. The compliance Panel addressed the fee only with respect to DoD procurement contracts.

\textsuperscript{184} Compliance Panel Report, para. 8,362

\textsuperscript{185} Compliance Panel Report, para. 8,298.b.

\textsuperscript{186} See Compliance Panel Report, para. 8,538.

\textsuperscript{187} US RPQ 67, para. 30.
• Under the standard NASA and DoD contracts, the government can stop providing funds at any time it sees fit, and work must stop immediately. ¹⁸⁸

• U.S. government contractors must comply with hundreds of pages of cost accounting rules that differ in important ways from generally accepted accounting principles. ¹⁸⁹

The Panel found “direct transfers of funds” to be one of the financial contributions, which would make the amount and nature of the payments critical to an understanding of what the recipient obtained. The other terms identified above would increase the risk or cost to the commissioned party of entering into an agreement with NASA, DoD, or FAA.

196. Finally, the United States noted that most of the NASA contracts were awarded under competitive bidding rules or subject to alternative strategies to inject competition. ¹⁹⁰ The United States observed that in Canada – FIT, the Appellate Body found that in situations where a transaction presents valuation difficulties, a benchmark “may also be found in price-discovery mechanisms such as competitive bidding or negotiated prices, which ensure that the price paid by the government is the lowest possible price offered by a willing supply contractor.” ¹⁹¹

3. The Benchmark Contracts on which the Panel Based its Benefit Finding Were also Subject to a Number of Terms, which Differed from the Terms of NASA, DoD, and FAA Instruments in Important Ways.

197. The compliance Panel noted that the parties submitted [BCI]. These included six of the contracts submitted to the panel in the original proceeding, 21 contracts among and between private entities, and the standard terms and conditions of the Wichita State University National Institute for Aviation Research (“NIAR”). ¹⁹² The compliance Panel described its analysis of

¹⁸⁸ 48 CFR § 52.249-6(a) (“The Government may terminate performance of work under this contract in whole or, from time to time, in part, if . . . The Contracting Officer determines that a termination is in the Government's interest.”); 48 CFR § 52.249-6(b) (“After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately . . . Stop work as specified in the notice.”) (Exhibit USA-502).

¹⁸⁹ E.g., 48 CFR Chapter 99, Table of Contents (Exhibit USA-503).

¹⁹⁰ US RPQ 83, paras. 82-98.

¹⁹¹ Canada – FIT (AB), para. 5.228.

¹⁹² Compliance Panel Report, Appendix 1, paras. 2-6. The Panel did not address a contract between Boeing and NIAR that the EU submitted to the original panel, and re-submitted in this proceeding. Contract between Boeing Commercial Airplane Group Wichita Division and Wichita State University, Contract No. 000051728 (Nov. 4, 2002) (original panel Exhibit EC-1231) (Exhibit EU-243). In a statement submitted to the compliance Panel, the current director of NIAR, John Tomblin, explained that “under today’s practices, we do not accept those terms for sponsored research projects. The standard terms attached to my statement are a more accurate reflection of the terms that commercial entities accept from us today.” (Exhibit USA-263).
these transactions as entailing “a focus on the allocation of intellectual property rights as the ‘output’ of a joint venture undertaking” based “solely on the allocation of the intellectual property rights arising from the performance of the R&D, in isolation from the other terms of the transaction.”

198. Within those bounds, the Panel reached the following conclusions about the disposition of intellectual property rights under the benchmark contracts:

- [BCI]

- [BCI]:
  - [BCI]
  - [BCI]

The Panel saw these features as “typically” resulting in the commissioning party having:

(a) [BCI] and/or

(b) [BCI]

199. Over the course of the proceeding, the United States pointed to several terms that required further analysis, most particularly the monetary commitment by the commissioning party, which the Panel found to be a “direct transfer of funds.” The Panel did not address these terms, or consider in any way the possibility that other terms of the transactions might compensate for the imbalance it perceived in the distribution of intellectual property rights.

200. On the issue of the monetary commitment, there was no dispute that the private commissioning parties in the benchmark transactions all contributed funds to the joint research projects. The contracts typically identified commissioning parties’ payments not as fixed

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194 Compliance Panel Report, Appendix 1, para. 46.
195 Compliance Panel Report, Appendix 1, para. 47.
196 Compliance Panel Report, Appendix 1, para. 49.
197 Compliance Panel Report, Appendix 1, para. 49.
numbers, but as categories of payments that the commissioning party would make to the commissioned party:

- reimbursement for costs incurred by the commissioned party in carrying out the research, including compensation for employees, materials expended, and overheads;
- fixed up-front payments, often framed as compensation for the expertise or intellectual property that the commissioned party brought to the partnership;
- royalties paid by the commissioning party to the commissioned party for use of intellectual property resulting from the project; and
- milestone payments if the commissioned party met pre-defined objectives of the research project.

The private-to-private transactions showed a diversity of payment arrangements. In the majority of cases for which funds information was available, the commissioning party paid a combination

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199 There were a small number of instances in which the commissioning party paid a fixed price for the research project. As there was no way to compare this set number to the amount paid in the challenged NASA, DoD or FAA transactions, the United States does not consider these transactions to be relevant to the benefit analysis.
of cost reimbursement, up-front payments, royalties, and milestone payments. There were also instances in which the commissioning party did not make all four forms of payment, or when the commissioned party paid royalties to the commissioning party for use of the results of the research project.

202. The commercial contracts submitted by the United States and the EU also had a number of other clauses that might affect their attractiveness to a commissioned party. Most of them provided for some sort of joint committee to make decisions about the direction of research, with commissioned and commissioning parties having equal representation. Most of them also had clauses that gave the commissioning party the right to terminate the agreement only in defined circumstances. These often provided for a phase out of payments, rather than immediate termination, or guaranteed other rights for the commissioned party. Cost reimbursement clauses did not specify how the commissioned party accounted for costs.

The following table indicates the agreements with full payments information that provided for all four forms of payment. All citations for payments are to the section or article of the relevant agreement.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Exhibit</th>
<th>Up-front payments</th>
<th>Cost reimbursement</th>
<th>Milestone payments</th>
<th>Royalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aveo-Schering Plough</td>
<td>USA-377</td>
<td>7.1</td>
<td>1.40</td>
<td>7.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Archemix-Merck</td>
<td>USA-379</td>
<td>5.1</td>
<td>1.57, 3.2</td>
<td>5.4</td>
<td>5.5</td>
</tr>
<tr>
<td>OGS-Bayer</td>
<td>USA-352</td>
<td>4.1</td>
<td>Exhibit D, para. 2</td>
<td>4.3</td>
<td>4.4</td>
</tr>
<tr>
<td>ACADIA-Mei; Seika</td>
<td>EU-1292</td>
<td>5.1</td>
<td>1.18 and 5.2</td>
<td>5.3</td>
<td>5.5</td>
</tr>
<tr>
<td>BMS-Adnexus</td>
<td>USA-496</td>
<td>9.1</td>
<td>9.2</td>
<td>9.3</td>
<td>9.4</td>
</tr>
<tr>
<td>BMS-Tranzyme</td>
<td>USA-498</td>
<td>6.1</td>
<td>1.25</td>
<td>6.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Givaudan-Redpoint</td>
<td>USA-493</td>
<td>18</td>
<td>1(w) and 10</td>
<td>10, 19, 21</td>
<td>23</td>
</tr>
<tr>
<td>Neurobiological-Buck</td>
<td>USA-489</td>
<td>5.2</td>
<td>5.1</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>OSI-Aveo</td>
<td>USA-504</td>
<td>6.1</td>
<td>1.18 and 5.2</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>ISIS-BMS</td>
<td>USA-378</td>
<td>5.1</td>
<td>3.5</td>
<td>5.3</td>
<td>5.4</td>
</tr>
</tbody>
</table>

The ISIS-BMS Agreement provided for the commissioning party to reimburse the commissioned party’s employee compensation costs, but for the employee to bear costs of supplies, consumables, and overheads. ISIS-BMS Agreement, para. 3.5 (Exhibit USA-378). This appears to be an outlier against a general rule of full cost reimbursement.

201 US RPQ 67, para. 32.


203 E.g., Synta-Roche Agreement, sec. 3.1.3 (Exhibit USA-375); AVEO-Schering Plough Agreement, sec. 2.1 (Exhibit USA-377); Isis-BMS Agreement, sec. 3.3 (Exhibit USA-378); and Archemix-Merck Agreement, sec. 2 (Exhibit USA-379).

204 E.g., BMS-Tranzyme Agreement, sec. 12.3(c) (Exhibit USA-498) (“Termination by BMS without cause. If BMS determines that it will not pursue the Development or Commercialization of one or more Licensed
4. The Panel Erroneously Applied Article 1.1(b) of the SCM Agreement in Finding that it Could Evaluate the Existence of a Benefit Based Solely on the Allocation of Rights to Own and Use Patents.

203. The Panel stated openly and explicitly that it considered only the intellectual property terms of the benchmark transactions put in evidence by the parties, and disregarded other terms. This approach clearly contravenes Article 1.1(b) of the SCM Agreement, as well as the Appellate Body’s guidance on the interpretation and application of that Article. The Panel considered that this narrow inquiry was necessary to conform to the Appellate Body’s approach in the original proceeding. The Panel was mistaken.

204. The Appellate Body did not lay down a general rule that the terms affecting intellectual property rights are the only factors relevant to determining whether a collaborative R&D agreement confers a benefit. It was simply analyzing the evidence and argumentation before it to determine whether they allowed completion of the panel’s analysis of whether the financial contribution found by the Appellate Body, which was different from the one found by the original panel, conferred a benefit. In the circumstances, most of that evidence and argumentation pertained to the allocation of intellectual property rights, but the Appellate Body addressed other issues raised by the parties, such as contribution by Boeing to work under assistance instruments and the effect of competitive bidding. To properly apply this approach to the post-2006 measures challenged by the EU, the compliance Panel needed to consider all of the evidence before it with regard to those measures, along with the salient features of the benchmarks adduced by the parties. In failing to do so, it incorrectly applied Article 1.1(b) of the SCM Agreement.

a. The Panel’s consideration of only one set of terms to the relevant transactions - disposition of intellectual property rights - did not provide the holistic analysis necessary for a valid conclusion as to the existence of a benefit.

205. The Panel stated explicitly that in light of the Appellate Body’s findings in the original proceeding, “{w}e will therefore evaluate whether the financial contributions provided through the post-2006 NASA procurement contracts confer a benefit by comparing the allocation of rights to own and use patents . . .” It applied the same approach to NASA cooperative

Products (or Collaboration Targets), then BMS may terminate this Agreement on a Licensed Product-by-Licensed Product (or Collaboration Target-by-Collaboration Target) basis upon ninety (90) days’ prior written notice to Tranzyme, provided no such termination shall become effective before the end of the Research Program Term and/or the payment in full of the amounts owed by BMS to Tranzyme under Section 6.2.”

205 US – Large Civil Aircraft (AB), paras. 663-665.

206 Compliance Panel Report, para. 8.178
agreements, DoD assistance instruments, and the FAA’s Boeing CLEEN Agreement. Later in its report, the compliance Panel described this approach as “focusing solely on the allocation of the intellectual property rights arising from the performance of the R&D in isolation from the other terms of the transaction.”

206. The report shows that the Panel did what it said it would do. Its conclusions on all of these measures rely on the findings in Appendix 1 of the report, which address only the allocation of patent rights and related licensing rights across the various benchmark contracts. The analysis in the report addressed only the allocation of patent-related rights under the challenged agreements, and compared that to the findings from Appendix 1. With the exception of the discussion of Boeing’s contribution to the FAA’s Boeing CLEEN Agreement, the Panel did not address the other terms of any of these instruments.

207. In restricting its inquiry and analysis in this way, the Panel failed to examine whether the terms (plural) of the financial contribution were more favorable to the recipient than would be available in the market, and accordingly applied Article 1.1(b) of the SCM Agreement erroneously.

\[ b. \] The Appellate Body’s findings in the original proceeding do not justify the compliance Panel’s decision to disregard other terms of the financial contribution and benchmark contracts.

208. The Panel provided just one justification for its decision to consider only the terms related to rights in patents – that “we consider it incumbent upon this compliance Panel to adopt this approach” because that is what the Appellate Body did in the original proceeding. But the Panel misunderstood. The Appellate Body did not find that, as a legal matter, the disposition of intellectual property rights is the only term relevant to evaluating whether the government contribution to a collaborative R&D arrangement confers a benefit. Nor did the Appellate Body find that the disposition of intellectual property rights was the only relevant consideration for all NASA contracts and cooperative agreements and DoD assistance instruments with Boeing. To the contrary, the Appellate Body stressed the need for a Panel to test its theories against the evidence, and addressed evidence and arguments that the parties raised with respect to other terms of the relevant transactions. Therefore, there was no valid justification for the Panel to
address intellectual property rights allocation “in isolation from the other terms of the transaction.”

209. The compliance Panel’s fullest explanation for its approach to evaluation of the benefit appears in the analysis of post-2006 NASA procurement contracts, cooperative agreements, and Space Act Agreements:

In the original proceeding, the Appellate Body characterized the pre-2007 NASA procurement contracts as collaborative R&D arrangements which involved financial contributions within the meaning of Article 1.1(a)(1) of the SCM Agreement and then determined whether they conferred a benefit by comparing the allocation of intellectual property rights under those contracts with the allocations of intellectual property rights in private collaborative R&D agreements which it treated as evidence of market practice in this regard. We recall that this is a compliance proceeding. In these circumstances, we consider it incumbent upon this compliance Panel to adopt the same approach to determining whether the post-2006 NASA procurement contracts and cooperative agreements confer a benefit as the Appellate Body took to determining whether the similarly characterized pre-2007 NASA procurement contracts at issue in the original proceeding conferred a benefit.

We will therefore evaluate whether the financial contributions provided through the post-2006 NASA procurement contracts confer a benefit by comparing the allocation of rights to own and use patents between NASA and Boeing under post-2006 NASA procurement contracts with the evidence before us concerning the allocation of such rights in collaborative R&D arrangements between market actors.

The Panel used the same logic to support its benefit analysis for the other post-2006 instruments: NASA cooperative agreements and Space Act Agreements, DoD assistance instruments, and the FAA Boeing CLEEN Agreement.

210. The compliance Panel’s understanding of the Appellate Body’s approach was flawed in two ways. First, the Appellate Body did not base its conclusion exclusively on the comparison of the allocations of intellectual property rights. It also addressed two U.S. arguments – that the Panel should have considered Boeing’s contribution of funds to research projects under

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212 Compliance Panel Report, para. 8.421.
assistance instruments and the effect of competitive bidding. 215 Second, the Appellate Body was attempting to complete the analysis based on the evidence and argumentation adduced by the parties in addressing forms of financial contribution different from the one the Appellate Body found to be correct. Nowhere does the Appellate Body suggest that these were the only considerations relevant in evaluating a collaborative R&D arrangement. To the contrary, it stressed the necessity of “empirically testing the views that {the Panel} had about the market on the basis of the evidence submitted by the parties pertinent to the relevant market benchmarks.” 216

211. A summary of the Appellate Body’s reasoning reveals the Panel’s errors. In the original proceeding, the EU argued that “in a market transaction one entity will pay another entity to conduct research and development only if that entity acquires full ownership of any intellectual property rights to the technologies that result from the research and development.” 217 The EU submitted articles, a contract between Boeing and NIAR, and an affidavit by an Airbus employee in support of this assertion. 218 The United States disputed the EU’s argument that commissioning parties always obtained full ownership of all intellectual property resulting from an R&D agreement, and submitted six contracts (labeled A, B, C, D, E, and F) documenting a number of terms. 219 The United States also argued that the Panel needed to account for Boeing’s financial contribution under DoD cooperative agreements and the effect of DoD’s use of competitive bidding to award assistance instruments. 220 Without addressing the EU or US evidence, the panel found that there was a benefit because “no commercial entity, i.e. no private entity acting pursuant to commercial considerations, would provide payments (and access to its facilities and personnel) to another commercial entity on the condition that the other entity perform R&D activities principally for the benefit and use of that other entity.” 221

212. The Appellate Body raised a number of concerns with the original panel’s analysis. First, it observed the “principally for the benefit and use of” finding was also the linchpin of the original panel’s financial contribution analysis, and worried that this overlap “makes the determination of benefit almost a foregone conclusion.” 222 The Appellate Body found in this

215 US – Large Civil Aircraft (AB), paras. 664-665

216 US – Large Civil Aircraft (AB), para. 644.

217 US – Large Civil Aircraft (Panel), para. 7.1030, cited in US – Large Civil Aircraft (AB), para. 650 (“When Airbus fully funds R&D, or purchases engineering product design work from a supplier, Airbus exclusively and solely owns all foreground intellectual property.”).

218 US – Large Civil Aircraft (AB), paras. 651-652.

219 US – Large Civil Aircraft (AB), paras. 653-654.

220 US – Large Civil Aircraft (AB), paras. 664-665.

221 US – Large Civil Aircraft (Panel), para. 7.1039.

222 US – Large Civil Aircraft (AB), para. 641.
regard that “the distribution of the returns under particular NASA procurement contracts and USDOD assistance instruments does not indicate by itself what the distribution of those returns would be in the market.”

213. Second, the Appellate Body criticized the proposition that “panels can base determinations as to what would occur in the marketplace only on their own intuition of what rational economic actors would do.” It found that “the Panel could not have arrived at a conclusion as to whether a benefit was conferred within the meaning of Article 1.1(b) without empirically testing the views that it had about the market on the basis of the evidence submitted by the parties pertinent to relevant market benchmarks.” In a related point, the Appellate Body rejected the view that “a priori, it can be excluded that two market actors would enter into a transaction with each other in circumstances where the returns are unequally distributed between them.”

214. In light of the original panel’s errors, the Appellate Body sought to complete the analysis based on the evidence adduced by the parties. In particular, “we will seek to determine whether the evidence submitted by the United States shows that the disposition of intellectual property rights under the NASA/USDOD measures at issue is consistent with what occurs in transactions between two market actors.” In this effort, it evaluated the intellectual property provisions of Contracts A through F. The Appellate Body identified two ways that “the allocation of intellectual property rights in the examples of market transactions on record has been more favourable to the commissioning party and less favourable to the commissioned party than under the NASA procurement contracts and USDOD assistance instruments before us.”

- [BCI]
- [BCI]

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223 US – Large Civil Aircraft (AB), para. 641.
224 US – Large Civil Aircraft (AB), para. 643.
225 US – Large Civil Aircraft (AB), para. 644.
226 US – Large Civil Aircraft (AB), para. 646.
227 US – Large Civil Aircraft (AB), para. 653.
228 US – Large Civil Aircraft (AB), paras. 655-660.
229 US – Large Civil Aircraft (AB), paras. 662.
230 US – Large Civil Aircraft (AB), para. 659.
It found that “this conclusion is sufficient to establish that the provision by NASA and by the USDOD of funding and other support to Boeing on the terms of the joint venture arrangements that are before us conferred a benefit on Boeing.”

215. But the Appellate Body did not stop there. It continued on to address two additional arguments raised by the United States with regard to the funds committed by the parties to the agreement. First, it found that “{i}f the contribution by the recipient firm to the project is neglected, there is a risk of overestimating the value obtained by the firm from the project and, hence, a finding of benefit could be made where a benefit did not in fact exist.” The Appellate Body found that this was not the case with respect to DoD assistance instruments because “Boeing’s monetary contribution under the assistance instruments does not change the bargain over the ownership of the invention and data, it only changes the bargain as to the government’s licence over the data rights.” Second, the Appellate Body addressed the U.S. argument that the subjection of the DoD assistance instruments to competitive bidding ensured that the DoD transfer of funds was on market terms. It found that because U.S. law determined the distribution of intellectual property rights under assistance instruments, “ownership of any resulting intellectual property will not be a determinative element in how each bidder structures its proposals.”

216. Thus, the compliance Panel was mistaken in describing the Appellate Body as determining the benefit based exclusively on a comparison of the allocation of intellectual property rights. That was merely an initial conclusion that the Appellate Body tested against other evidence and argumentation.

217. The compliance Panel also erred in treating the Appellate Body’s focus on “the allocation of rights to own and use patents between NASA and Boeing” in the original proceeding as an “approach” applicable to a different body of argumentation and evidence. As a legal matter, the Appellate Body emphasized the need for “empirically testing the views that {the Panel} had about the market on the basis of the evidence submitted by the parties pertinent to the relevant market benchmarks.” It also noted carefully that it was completing the analysis within the framework of the arguments advanced by the parties and the evidence on the record, in light of what was essentially an arguendo assumption that the original panel treated evidence submitted

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231 US – Large Civil Aircraft (AB), para. 662.
232 US – Large Civil Aircraft (AB), para. 663.
233 US – Large Civil Aircraft (AB), para. 664.
234 US – Large Civil Aircraft (AB), para. 665.
235 US – Large Civil Aircraft (AB), para. 644.
236 US – Large Civil Aircraft (AB), paras. 648-653, 660, 662.
by the United States as showing the terms of market transactions. To the extent that the Appellate Body’s actions in the original proceeding suggest an approach applicable beyond this context, it is to consider all of the evidence with respect to all of the terms of the financial contributions and benchmark contracts.

218. Thus, the compliance Panel was wrong to believe that the Appellate Body’s findings in the original proceeding mandated “focusing solely on the allocation of the intellectual property rights arising from the performance of the R&D in isolation from the other terms of the transaction.” Rather, the established practice of looking at and addressing all of the relevant terms affecting the value of the financial contribution to the recipient remained applicable. The compliance Panel’s failure to do that constituted an improper application of Article 1.1(b) of the SCM Agreement.

c. The new evidence and argumentation before the compliance Panel underscored the need for a thorough evaluation of the financial contributions found to exist and the proposed benchmarks.

219. In addition to the legal requirement to address all terms of the relevant transactions, the presence of new information on the record and new arguments from the parties called for a broader evaluation of benefit than in the original proceedings. In particular, the Appellate Body’s focus on comparing financial contributions to market benchmarks led both parties to submit more examples of collaborative research arrangements that they considered comparable to the NASA and DoD instruments. Thus, where the Appellate Body had evidence on seven transactions involving a limited range of actors, the compliance Panel had evidence on 28 transactions, from a broad range of commissioning and commissioned parties. Both parties also submitted reports by technology licensing experts (Louis P. Berneman on behalf of the United States and Richard A. Razgaitis on behalf of the EU) on the terms under which commercial entities engage in joint research project. The original panel did not have any similar information.

220. Parties were also able to update the evidence to reflect evolving market practices. In particular, the United States submitted a statement by NIAR executive director John Tomblin stating that the 2002 contract submitted by the EU (and quoted in the Appellate Body report) does not reflect the institute’s contracting practices in the period covered by the compliance

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237 US – Large Civil Aircraft (AB), paras. 653, 660, 662.

238 Compliance Panel Report, para. 8.421.

239 Compliance Panel Report, Appendix 1, para. 3.
That statement provided NIAR’s current standard terms and conditions for R&D projects.

221. This broader body of agreements provided information on the terms of commercial collaborative R&D arrangements not available in the original proceeding that was more detailed and more representative. This evidence included extensive information on the types of funding committed by commercial commissioning parties, and the rights in patents that they received. (In the original proceeding, only two of the submitted benchmarks contained complete information on funding.)

222. The United States also presented evidence that during the period covered by the compliance proceedings, NASA and DoD awarded procurement contracts and assistance instruments using competitive procedures. It provided a report from economic experts explaining that such procedures would result in the government transfer of funds being consistent with commercial considerations. 241

223. The parties developed new arguments with regard to the issues on the basis of this evidence and the Appellate Body’s guidance.

224. The United States cited the new agreements as evidence that there were differences between the non-intellectual-property terms of the DoD and NASA instruments and those of the commercial R&D arrangements. It argued that these terms represented contributions by each party that, if neglected, could – to use the Appellate Body’s words – create a “risk of overestimating the value obtained by the {commissioned party} from the project and, hence, a finding of benefit could be made where a benefit did not in fact exist.” 242

225. The United States noted that in Canada – FIT, the Appellate Body found that:

An analysis of the methodology that was used to establish the administered prices may provide evidence as to whether the price does or does not provide more than adequate remuneration. . . . If it becomes necessary to identify a market benchmark or to construct a proxy, such benchmark or proxy may be administered prices for the same product (in the country of purchase or in other countries, subject to adjustments), provided that it is determined based on a price-setting mechanism that ensures a market outcome. Alternatively, such benchmark may also be found in price-discovery mechanisms such as competitive bidding or

240 Statement of John Tomblin, para. 6 (Exhibit USA-263).
242 US – Large Civil Aircraft (AB), para. 663.
negotiated prices, which ensure that the price paid by the government is the lowest possible price offered by a willing supply contractor. 243

The United States cited the evidence of the use of competitive procedures in the award of contracts and assistance instruments by NASA and DoD. 244 It observed that these are mechanisms that commercial entities use to obtain the best terms for a transaction, and the use of these mechanisms ensures that the terms of NASA and DoD acquisitions are not more favorable than the market would apply.

226. In the original proceeding, the EU argued that “in a market transaction one entity will pay another entity to conduct research and development only if that entity acquires full ownership of any intellectual property rights to the technologies that result from the research and development.” 245 However, in these proceedings, the EU’s expert, Razgaitis, agreed with the United States that Contracts A through F [BCI]. 246 [BCI].

227. The EU submitted evidence that Airbus links [BCI]. 248 This evidence demonstrated an important linkage between the level of rights in patents and the amount of funding contributed by each of the parties.

228. The Panel recognized that it needed to incorporate this new evidence into its legal analysis, at least insofar as it pertained to allocation of patent rights, and reached a new understanding as to the nature and extent of the benefit. The Appellate Body found two ways that the terms of the NASA, DoD, and FAA instruments were more favorable to the recipient than the commercial benchmarks – [BCI]. 249 In contrast, the compliance Panel found that the new evidence demonstrated that the [BCI] under NASA, DoD, and FAA instruments was not more favorable to the recipient than under commercial agreements. 250

243 Canada – FIT, para. 5.228, cited in U.S. response to panel question 25, paras. 85-88; U.S. response to panel question 83, para. 95.

244 US RPQ 83, paras. 82-91; Competition in DoD contracts with Boeing (Exhibit USA-508); Competition in NASA contracts with Boeing (Exhibit USA-509).

245 US – Large Civil Aircraft (Panel), para. 7.1030, cited in US – Large Civil Aircraft (AB), para. 650 (“When Airbus fully funds R&D, or purchases engineering product design work from a supplier, Airbus exclusively and solely owns all foreground intellectual property.”).

246 Declaration of Richard A. Razgaitis, para. 94 (Exhibit EU-1262(BCI)).

247 Declaration of Richard A. Razgaitis, para. 58 (Exhibit EU-1262 (BCI)).

248 Compliance Panel Report, Appendix 1, para. 43.

249 US – Large Civil Aircraft (AB), para. 658.

250 Compliance Panel Report, Appendix 1, para. 49.
229. The compliance Panel found that the NASA and DoD instruments were more favorable with respect to [BCI]. This is essentially the same as the Appellate Body’s finding regarding [BCI]. Thus, the compliance Panel found the difference in allocation of patent rights between the United States government and commercial transactions to be narrower than in the original proceeding.

230. The fact that there was new evidence and argumentation, and that some of it led to a different conclusion on one aspect of the allocation of intellectual property rights, should have motivated the compliance Panel to conduct a broader inquiry into other terms of the transactions. In particular, the narrowing of the difference between the allocation of patent rights under NASA and DoD instruments as compared to commercial benchmarks increased the risk that “a finding of benefit could be made where a benefit did not in fact exist” if the Panel disregarded other terms of the transactions.

5. The Panel Failed to Make an Objective Assessment for Purposes of Article 11 of the DSU When it Disregarded the Monetary Component of the Allocation of Patent Rights.

231. The compliance Panel considered that it was “incumbent” upon it to analyze benefit “by comparing the allocation of rights to own and use patents between NASA and Boeing under post-2006 NASA procurement contracts with the evidence before us concerning the allocation of such rights in collaborative R&D arrangements between market actors.” It used the same standard for the other NASA, DoD, and FAA instruments. Assuming arguendo that this view was correct, the Panel failed to conduct an objective evaluation because funding was an integral part of the allocation of patent rights under the commercial collaborative R&D arrangements. In particular, the [BCI] that were the focus of the Panel’s benefit findings typically carried a requirement for the commissioning party to pay royalties to the commissioned party.

232. Thus, any value the commissioning party derived from obtaining greater rights would be lessened (and perhaps offset completely) by the obligation to make greater payments. As the ostensible value of those patent rights was the basis for the Panel’s finding of a benefit, excluding the monetary component from consideration resulted in an imbalanced analysis fundamentally lacking objectivity.

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251 Compliance Panel Report, Appendix 1, para. 49.
252 US – Large Civil Aircraft (AB), para. 663.
254 Compliance Panel Report, paras. 8.181, 8.185-8.186, 8.193, 8.408, 8.413, 8.535.
255 See supra, Section III.A.3.
233. The EU’s licensing expert, Razgaitis, described the commercial arrangements that he found as follows: “in exchange for an agreed combination of up-front payments, milestone payments, and research funding, the commissioning parties received non-exclusive, royalty-free research licenses, as well as royalty-free or royalty-bearing exclusive commercial licenses in some field or fields to the commissioned parties’ foreground and background IP.”

Although this observation glosses over many issues, it makes a critical overarching point – the allocation of intellectual property rights (including patent rights) in these arrangements is in exchange for money. This is most clear with regard to the [BCI] that featured in most of these transactions, under which the commissioning party provides additional funding [BCI]. But it may also be true of total funding amounts. For example, under the Airbus framework research agreement submitted by the EU, [BCI].

234. The compliance Panel noted the existence of the payments associated with these licensing rights in its finding that “where the commissioning party does not already own the intellectual property rights, it automatically receives in the overwhelming majority of cases an exclusive, royalty-bearing license in foreground intellectual property for commercial uses.” However, it nowhere takes account of how the obligation to pay a royalty affects the value of the licensing right to the recipient.

235. Most of the 15 royalty-bearing licenses cited by the Panel generally required the commissioning party to pay royalties to the commissioned party based on a percentage of sales revenue for any product embodying a patented invention resulting from the collaborative R&D project. These payments were above and beyond the commissioning party’s payments for research costs, up-front payments, and milestone payments.

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256 Declaration of Richard Razgaitis, para. 58 (Exhibit EU-1262(BCI)).
257 Compliance Panel Report, Appendix 1, para. 43.
258 Compliance Panel Report, Appendix 1, para. 31 (emphasis added).
259 Compliance Panel Report, Appendix 1, para. 31, note 44.
260 Pfizer-T Cell Sciences Contract, (Exhibit USA-353), Exclusive patent licence agreement, pdf p. 38, section 4.1, and Exclusive technology licence agreement, pdf p. 62, section 4.1; Sigma-Sangamo Contract, (Exhibit USA-376), section 7.7; Bayer-Oxford Glyco Sciences Contract, (Exhibit USA-352), section 4.4; BMS-Isis Contract, (Exhibit USA-378), section 5.4; Schering-Aveo Contract, (Exhibit USA-377), section 7.6; Merck-Archemix Contract, (Exhibit USA-379), sections 7.2 and 7.1.1; Roche-Synta Contract, (Exhibit USA-375), section 7.6; Pfizer Icagen Contract, (Exhibit EU-1330), section 4.6; Astellas-Maxygen Contract, (Exhibit EU-1328), Financial Exhibit, Art. 2; Aventis-Regeneron Contract, (Exhibit USA-497), section 2.6(d) (“If an Opt-Out Product is Commercialized by the Sole Developer . . . then the Sole Developer shall pay the Opt-Out Partner royalties based on Net Sales of such Opt-Out Product and the stage of Development of the Licensed Product at the time it became an Opt-Out Product,”); Meiji-Acadia Contract, (Exhibit EU-1292), section 5.4; Roche-Metabasis Contract, (Exhibit EU-1331), section 5.5; and Monsanto-Myriad Contract, (Exhibit USA-351), section 4.3
236. In the abstract, and considered “in isolation” as the compliance Panel did, the commissioning party’s exclusive license for commercial uses would appear to lessen the value of the output of collaborative R&D arrangement to the commissioned party. And, as the Panel noted, when viewed in terms of commercial uses, that commissioned party in a commercial transaction would appear to have narrower rights in the patents than Boeing received under the NASA, DoD, and FAA instruments.

237. However, from a monetary perspective, the situation reverses. The commissioned party in the commercial R&D arrangements received an additional stream of revenue in the form of royalties, which were unavailable to Boeing under the government instruments. In other words, from a monetary perspective, the royalty-bearing licenses under the commercial arrangements were more favorable to the commissioned party than the terms of the financial contribution were to Boeing. As noted above, the monetary terms of the commercial arrangements were more favorable to the commissioned party than the government transactions in other ways, in that most of them received up-front payments\(^{261}\) and milestone payments\(^{262}\) in addition to cost reimbursements.

238. It is clear that each of these views of the license is incomplete because the financial component is linked to the intellectual property component. For most of the transactions, that link is direct because the more the commissioning party used its rights to generate sales revenue, the more it paid in royalties.

239. These are not the only explicit exchanges of money for patent rights in the commercial collaborative R&D arrangements cited by the Panel. For example, some agreements link up-

\(^{261}\) Bayer-Oxford Glyco Sciences Contract, (Exhibit USA-352), section 4.1; BMS-Isis Contract, (Exhibit USA-378), section 5.1; Merck-Archemix Contract, (Exhibit USA-379), sections 5.1; Roche-Synta Contract, (Exhibit USA-375), section 7.1; Pfizer Icagen Contract, (Exhibit EU-1330), section 4.1; Astellas-Maxygen Contract, (Exhibit EU-1328), section 8.1.1; Roche-Metabasis Contract, (Exhibit EU-1331), section 5.1; and Monsanto-Myriad Contract, (Exhibit USA-351), section 4.1.

\(^{262}\) Sigma-Sangamo Contract, (Exhibit USA-376), sections 7.3 and 7.4; Bayer-Oxford Glyco Sciences Contract, (Exhibit USA-352), section 4.4; BMS-Isis Contract, (Exhibit USA-378), section 5.3; Schering-Aveo Contract, (Exhibit USA-377), section 7.5; Merck-Archemix Contract, (Exhibit USA-379), section 5.4; Roche-Synta Contract, (Exhibit USA-375), sections 7.4 and 7.5; Pfizer-Icagen Contract, (Exhibit EU-1330), sections 4.4 and 4.5; Astellas-Maxygen Contract, (Exhibit EU-1328), section 8.1.2; Aventis-Regeneron Contract, (Exhibit USA-497), section 9.2; Meiji-Acadia Contract, (Exhibit EU-1292), section 5.3; Roche-Metabasis Contract, (Exhibit EU-1331), section 5.3; and Monsanto-Myriad Contract, (Exhibit USA-351), section 4.2.
front payments to the use of the commissioned party’s background intellectual property rights. Other agreements tie certain milestone payments to the development of technical know-how.

240. The compliance Panel’s failure to address the funding component of the allocation of patent rights meant that its conclusion was one-sided and lacked objectivity. Taking the [BCI] clauses of the commercial collaborative R&D arrangements as an example, if the royalties were greater than or equal to the value of the patent rights, the allocation of patent rights did not reduce the net value of the arrangement to the commissioned party. In that case, the absence of a comparable licensing clause from the NASA, DoD, and FAA instruments would not make them more favorable for the recipient than the commercial benchmark, and would not support a finding that the financial contribution conferred a benefit. In refusing to address the monetary component of the allocation of patent rights, the Panel ignored this possibility, and failed to provide an objective assessment of the facts for purposes of Article 11 of the DSU.

B. Conditional appeal: If the Appellate Body Finds that DoD Research Contracts are Collaborative R&D Arrangements that Confer a Benefit, then the Subsidies Found to Exist because of NASA, DoD, and FAA R&D Instruments are Not Specific.

241. The Panel analyzed each administrative agency – NASA, DoD, and FAA – separately in determining whether subsidies granted by those agencies were specific. The Panel’s reason for doing this, stems from its finding that DoD procurement contracts create a different type of financial contribution from the DoD assistance instruments, NASA instruments, and the FAA’s Boeing CLEEN Agreement. If the Panel had adopted the EU’s view that DoD procurement contracts created the same type of financial contribution, with the same benefit, as the other instruments, the Appellate Body’s guidance in US – Large Civil Aircraft would call for treating all of them as being “the same subsidy” for purposes of the specificity analysis. That would have led to their consideration in the broader context of U.S. rules governing R&D contracting, and established that they were not specific.

263 Bayer-Oxford Glyco Sciences Contract, (Exhibit USA-352), section 4.1; BMS-Isis Contract, (Exhibit USA-378), section 5.1; Schering-Aveo Contract, (Exhibit USA-377), section 7.1; Merck-Archemix Contract, (Exhibit USA-379), sections 5.1; Roche-Synta Contract, (Exhibit USA-375), section 7.1; Pfizer-Icagen Contract, (Exhibit EU-1330), section 4.1; Astellas-Maxygen Contract, (Exhibit EU-1328), section 8.1.1; and Monsanto-Myriad Contract, (Exhibit USA-351), section 4.1.

264 Sigma-Sangamo Contract, (Exhibit USA-376), sections 7.3; Bayer-Oxford Glyco Sciences Contract, (Exhibit USA-352), section 4.4; BMS-Isis Contract, (Exhibit USA-378), section 5.3; Schering-Aveo Contract, (Exhibit USA-377), section 7.5; Merck-Archemix Contract, (Exhibit USA-379), section 5.4; Roche-Synta Contract, (Exhibit USA-375), section 7.4; Pfizer-Icagen Contract, (Exhibit EU-1330), section 4.4; Astellas-Maxygen Contract, (Exhibit EU-1328), section 8.1.2; Meiji-Acadia Contract, (Exhibit EU-1292), section 5.3; Roche-Metabasis Contract, (Exhibit EU-1331), section 5.3; and Monsanto-Myriad Contract, (Exhibit USA-351), section 4.2.

265 US – Large Civil Aircraft (AB), para. 750-751.
242. The compliance Panel found that, in its analytical framework, the characterization of a transaction as a collaborative R&D arrangement or purchase of services determined whether to analyze the benefit based exclusively on the allocation of intellectual property rights. This reasoning led the Panel to conclude that while NASA and DoD procurement contracts were identical in form and provided essentially the same allocation of intellectual property rights, they resulted in different financial contributions subject to different benefit analyses. The Panel carried this differentiation into its specificity analysis, concluding that a separate specificity analysis is warranted for each administrative agency.

243. However, if the Appellate Body finds that DoD procurement contracts create the same type of financial contribution as the DoD assistance instruments, NASA instruments, and the FAA’s Boeing CLEEN Agreement – as the EU argues that the Appellate Body should do – then the rationale for separate specificity analyses collapses. The United States asserts a conditional appeal in the event that the Appellate Body makes such a finding.

244. The Panel stated clearly that the only benefit it found to exist in these instruments was from the allocation of patent rights. As the Appellate Body found in US – Large Civil Aircraft, that allocation of rights is common to all U.S. government contracts, cooperative agreements, and assistance instruments that call for research, regardless of the agency, the private signatory of the agreement, or the topic of the research. It is dictated by the same set of authorizing legislation – the Bayh-Dole Act, related legislative instruments, and implementing regulations.

245. In this situation, the Appellate Body’s guidance in US – Large Civil Aircraft calls for a specificity analysis at the level of “the broader legal framework pursuant to which the particular subsidy is granted and the relevant granting authorities operate.” That analysis establishes that the United States has not limited access to the subsidy to an enterprise or industry or group of enterprises or industries for purposes of Article 2.1 of the SCM Agreement, and the EU has never argued otherwise.

268 19 U.S.C. §§ 200-212, (Exhibit EU-220); Executive Order 12591, Facilitating Access to Science and Technology, 10 April 1987 (Exhibit EU-238); Memorandum to the Heads of Executive Departments and Agencies: Government Patent Policy, Public Papers 248, 18 February 1983 (Exhibit EU-1062); 48 CFR § 27.300-27.306 (Exhibit EU-221); US – Large Civil Aircraft (AB), paras. 764-767, 769-773, 779-780.
269 US – Large Civil Aircraft (AB), para. 757.
1. **The Appellate Body has Found that the Specificity Analysis Must Start with the “Subsidy Scheme” and Take Account of the “Broader Legal Framework Pursuant to Which the Subsidy is Granted.”**

246. The original panel concluded that the subsidies it found to result from NASA contracts and DoD assistance instruments were specific, and neither party appealed those findings. The original panel also addressed the EU’s assertion that the standard allocation of patent rights under U.S. government contracts, cooperative agreements, and assistance instruments was a separate subsidy. In the specificity analysis for that subsidy, the original panel assumed *arguendo* that this was the case, and found that any such subsidy would not be specific.\(^{270}\) The EU appealed this finding. In rejecting the EU’s appeal, the Appellate Body made a number of observations relevant to the subsidy analysis in this proceeding.

247. The Appellate Body found that “the reference in subparagraphs (a) and (b) of Article 2.1 to ‘the granting authority, or the legislation pursuant to which the granting authority operates’, is critical because it situates the analysis for assessing any limitations on eligibility in the particular legal instrument or government conduct effecting such limitations.”\(^{271}\) It noted that both “subsidy” and “granting authority” are in the singular, but did not consider the grammatical number of these nouns to be restrictive.

248. With respect to the use of “subsidy” in the singular, it found that “if construed too narrowly, any individual subsidy transaction would be, by definition, specific to the recipient,” and that the context of the remainder of Article 2 “entails consideration of the broader framework pursuant to which a particular challenged subsidy has been issued.”\(^{272}\) The Appellate Body also found that “[t]he use of the term ‘granting authority’, in our view, does not preclude there being multiple granting authorities. Rather, this is likely where a subsidy is part of a broader scheme.”\(^{273}\)

249. The Appellate Body observed that Members might structure the distribution of subsidy in a number of ways, but that this structure “cannot predetermine the outcome of the specificity analysis”:\(^{274}\)

For instance, a Member may choose to authorize the distribution of subsidies to eligible enterprises or industries in the same legal instrument. In such cases, the inquiry may focus solely on that legal instrument. In other circumstances, a

\(^{270}\) *US – Large Civil Aircraft (AB)*, para. 738.

\(^{271}\) *US – Large Civil Aircraft (AB)*, para. 748.

\(^{272}\) *US – Large Civil Aircraft (AB)*, para. 749.

\(^{273}\) *US – Large Civil Aircraft (AB)*, para. 749.

\(^{274}\) *US – Large Civil Aircraft (AB)*, para. 750.
Member may set up a more complex regime by which the same subsidy is provided to different recipients through different legal instruments. It may also be that a Member may administer the distribution of subsidies through multiple granting authorities. In these cases, the inquiry may have to take into account this legal framework. This framework may be set out in laws, regulations, or other official documents, all of which may be part of the “legislation” pursuant to which the granting authority operates.\textsuperscript{275}

Finally, the Appellate Body found that “the assessment of specificity is framed by the particular subsidy found to exist under Article 1.1,”\textsuperscript{276} including the possibility that “multiple subsidies are part of the same subsidy.”\textsuperscript{277} After identifying the “proper subsidy scheme,” such examination must seek from the legislation and/or the express acts of the granting authority(ies) which enterprises are eligible to receive the subsidy and which are not. This inquiry focuses not only on whether the subsidy was provided to the particular recipients identified in the complaint, but focuses also on all enterprises or industries eligible to receive that same subsidy. Thus, even where a complaining Member has focused its complaint on the grant of a subsidy to one or more enterprises or industries, the inquiry may have to extend beyond the complaint to determine what other enterprises or industries also have access to that same subsidy under that subsidy scheme.\textsuperscript{278}

\textbf{2. The Compliance Panel Based its Specificity Findings on its Conclusion that the Programs Challenged by the EU Resulted in Different Types of Financial Contribution, Subject to Different Benefit Analyses.}

The compliance Panel concluded that the original panel’s findings of specificity for all NASA instruments and the DoD assistance instruments were no longer applicable because “we have found these measures to constitute subsidies on a legal basis that differs from the basis upon which the {original panel} found the measures to be subsidies.”\textsuperscript{279} It undertook a new specificity analysis for each agency, and concluded that, with the exception of DoD procurement contracts, all three agencies conferred specific subsidies through the instruments challenged by the EU.

\textsuperscript{275} US – Large Civil Aircraft (AB), para. 750.
\textsuperscript{276} US – Large Civil Aircraft (AB), para. 751.
\textsuperscript{277} US – Large Civil Aircraft (AB), para. 751.
\textsuperscript{278} US – Large Civil Aircraft (AB), para. 753.
\textsuperscript{279} US – Large Civil Aircraft (21.5) (Panel), para. 8.223.
252. In line with the Appellate Body’s reasoning in *US – Large Civil Aircraft*, the compliance Panel began by identifying the subsidy found to exist:

In this proceeding, we have found that the financial contributions provided under the NASA aeronautics R&D measures confer a benefit on the basis that the allocation of rights to own and use patents under those measures is more favourable to Boeing as the commissioned party than the allocation of rights to own and use patents to commissioned parties under collaborative R&D agreements between private parties.\(^{280}\)

The compliance Panel explained that “{s}ince a subsidy within the meaning of Article 1 is defined in terms of financial contribution and benefit, it stands to reason that both financial contribution and benefit must be taken into consideration in an analysis of whether access to the subsidy is explicitly limited.”\(^{281}\)

253. The compliance Panel went on to observe that it had found the NASA measures to be “collaborative R&D arrangements . . . that have characteristics analogous to equity infusions” and that the relationship of the parties “was essentially one of partnership.”\(^{282}\) It then recalled that “{i}n light of this particular characterization of the NASA aeronautics R&D measures, we consider it appropriate to assess whether the financial contributions provide a benefit on the basis of an examination of the allocation of intellectual property rights.”\(^{283}\) The Panel contrasted this reasoning with its finding that for DoD contracts, “the same allocation of patent rights that applies by virtue of the Bayh-Dole Act and related legislative instruments and implementing regulations, would not result in the measures in question being subsidies.”\(^{284}\)

254. The Panel drew the following conclusion:

Because the role of the allocation of intellectual property rights in our analysis of whether a measure constitutes a subsidy depends upon the particular context, we consider that, in ascertaining whether access to the subsidy is subject to explicit limitations, we cannot treat the allocation of intellectual property rights on terms

\(^{280}\) Compliance Panel Report, para. 8.224.
\(^{281}\) Compliance Panel Report, para. 8.225.
\(^{282}\) Compliance Panel Report, para. 8.226.
\(^{283}\) Compliance Panel Report, para. 8.227.
\(^{284}\) Compliance Panel Report, para. 8.227.
more favourable than available in the market as being the relevant subsidy in and of itself.\textsuperscript{285}

This reasoning led the compliance Panel to examine, for each agency, the objectives of the programs that funded the R&D instruments challenged by the EU. It concluded that each agency’s programs would only authorize funding to a limited class of entities: “enterprises that participate in aeronautics-related R&D” for NASA and the FAA\textsuperscript{286} and “research to meet current and future military needs in relation to the development of specific weapon systems” for DoD.\textsuperscript{287}

\section*{3. If the Appellate Body Finds that DoD Research Contracts are Collaborative R&D Arrangements that Conferred a Benefit, then There is No Basis to Find that Any Subsidies Conferred by the NASA, DoD, and FAA R&D Instruments are Specific.}

255. If the Appellate Body finds that the DoD research contracts are collaborative R&D arrangements and that they conferred a benefit, then the rationale behind the compliance Panel’s specificity analysis would fall apart. If DoD research contracts are collaborative R&D arrangements, then all of the challenged R&D measures would result in the same financial contribution. And if the Appellate Body concluded that the DoD research contracts conferred a benefit on the same basis as the other instruments, it would no longer be the case that “the role of the allocation of intellectual property rights in our analysis of whether a measure constitutes a subsidy depends upon the particular context.”\textsuperscript{288}

256. Rather, all of the measures would create the same type of financial contribution and confer a benefit in the same terms. As differentiation among the measures was the only support the compliance Panel advanced for evaluating specificity separately for each agency, the absence of differentiation would vitiate the Panel’s analysis, and leave the ultimate conclusion without support. Therefore, the United States respectfully requests that the Appellate Body reverse the Panel’s findings of specificity for the NASA, DoD, and FAA R&D measures.

\textsuperscript{285} Compliance Panel Report, para. 8.228.

\textsuperscript{286} Compliance Panel Report, paras. 8.229 and 8.552. The United States notes that under the framework laid out by the Appellate Body in \textit{US – Large Civil Aircraft}, the Panel should have treated all NASA instruments, DoD assistance instrument, and the FAA CLEEN agreement as “multiple subsidies” that “are part of the same subsidy” because of their many commonalities. \textit{US – Large Civil Aircraft (AB)}, para. 752. However, correcting that error would not change the ultimate outcome, because it would not affect the compliance Panel’s conclusion that the DoD contracts were a type of different financial contribution that did not confer a benefit. Therefore, to avoid needlessly prolonging this proceeding, the United States has not appealed this aspect of the Panel’s findings.

\textsuperscript{287} Compliance Panel Report, para. 8.467.

\textsuperscript{288} Compliance Panel Report, para. 8.228.
257. Application of the analytical framework used by the Appellate Body in *US – Large Civil Aircraft* confirms this conclusion. The analysis starts with identification of the proper subsidy, including the possibility that multiple subsidies are part of a single “subsidy scheme.” In the event that the Appellate Body reverses the compliance Panel’s findings regarding DoD contracts, the R&D subsidies would consist of a number of instruments of formally different types – procurement contracts, cooperative agreements, other assistance instruments, and SAAs – funded by three agencies under different budgetary authorities. In spite of formal differences, all instruments would reflect a partnership relationship, and result in cooperative research arrangements analogous to equity infusions.

258. In the event that the Appellate Body finds that the DoD procurement contracts confer a benefit on the same terms as the Panel found for other instruments, that benefit would consist of more favorable terms regarding allocation of patent rights and related licensing rights. As the original panel and the Appellate Body found, the allocation of these rights under *all* of the NASA and DoD instruments (with the exception of the SAAs) derives from the Bayh-Dole Act and the related executive order, Presidential memorandum, and regulations. Those measures put in place a single regime for the assignment of rights in inventions discovered in the course of work funded through a U.S. government contract or cooperative agreement. Thus, if the DoD procurement contracts are a financial contribution similar to the measures the Panel found to be subsidies, they are part of a single subsidy scheme.

259. In the Appellate Body’s framework, the next step is to seek to discern from the legislation and/or the express acts of the granting authority(ies) which enterprises are eligible to receive the subsidy and which are not. This inquiry focuses not only on whether the subsidy was provided to the particular recipients identified in the complaint, but focuses also on all enterprises or industries eligible to receive that same subsidy.

The Bayh-Dole Act and subsequent documents are quite clear that the allocation of intellectual property that forms the core of the compliance Panel’s benefit finding is accorded to any entity that performs research and development services under a contract or cooperative agreement with any U.S. government agency.

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289 19 U.S.C. §§ 200-212, (Exhibit EU-220); Executive Order 12591, Facilitating Access to Science and Technology, 10 April 1987 (Exhibit EU-238); Memorandum to the Heads of Executive Departments and Agencies: Government Patent Policy, Public Papers 248, 18 February 1983 (Exhibit EU-1062); 48 CFR § 27.300-27.306 (Exhibit EU-221); *US – Large Civil Aircraft (AB)*, paras. 764-767, 769-773, 779-780.

290 *US – Large Civil Aircraft (AB)*, paras. 764-780.

291 *US – Large Civil Aircraft (AB)*, para.753.
260. If DoD R&D contracts are found to result in cooperative research arrangements analogous to equity infusions, there is no basis on the record to consider that other R&D contracts and cooperative agreements awarded by other agencies would create a different financial contribution. Thus, in the situation that would trigger this appeal, the financial contribution and benefit alleged by the EU is available to any entity that conducts research funded by any U.S. government agency on any topic. In the terms of Article 2.1 of the SCM Agreement, that would mean that there is no limitation on access to the subsidy on the part of any enterprise or industry or group of enterprises or industries and, accordingly, no specificity.
IV. **CONDITIONAL APPEAL: THE COMPLIANCE PANEL, IN FINDING THAT SOUTH CAROLINA PAYMENTS CONFERRED A SUBSIDY TO BOEING, FAILED TO MAKE AN OBJECTIVE ASSESSMENT AS CALLED FOR UNDER ARTICLE 11 OF THE DSU.**

261. In this appeal, the European Union has challenged the compliance Panel’s finding that the State of South Carolina’s payment to Boeing of $270 million in Economic Development Bond and Air Hub Bond proceeds did not cause adverse effects to the interests of the EU or its member States. If the Appellate Body reverses this finding and finds that any portion of the payments causes adverse effects, then the United States appeals the Panel’s finding in paragraph 8.823 that the payments confer a benefit within the meaning of Article 1.1(b) of the SCM Agreement, as well as related findings in paragraphs 8.849 and 11.7(b)(ix).

262. The Panel finding in paragraph 8.823 relies upon the incorrect premise that “there is no evidence that any remuneration for the direct transfers of funds was foreseen in the agreement between South Carolina and Boeing that could be construed to offset any benefit conferred.” To the contrary, there was significant evidence to that effect, yet the Panel did not take that evidence into account. Accordingly, the finding that the payments confer a benefit to Boeing was not based on an “objective assessment of the facts of the case” for purposes of Article 11 of the DSU.

263. Article 11 provides that a panel should “make an objective assessment of the matter before it, including an objective assessment of the facts of the case.” The Appellate Body has recognized that “if a panel were to ignore or disregard other relevant facts {i.e., facts other than those that a party refused to provide}, it would fail to make an ‘objective assessment’ under Article 11 of the DSU.” Here, the Panel failed to make an objective assessment under Article 11 because it ignored facts demonstrating that South Carolina and Boeing foresaw that Boeing would make investments in the Project Site that constituted remuneration to South Carolina.

264. The Panel, in conducting its benefit analysis, considered that the value of any benefit to Boeing was equal to the value of the payments themselves, minus any remuneration from Boeing to South Carolina that was foreseen, ex ante. In addition, the Panel recognized that any Boeing investment in real property at the Project Site resulted in a remuneration to South Carolina, because when Boeing’s sublease for the Project Site expires in 2041, the real property on the Project Site will become the property of South Carolina.

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292 See EU Appellant Submission, paras. 8, 14.

293 Compliance Panel Report, para. 8.822.


296 See Compliance Panel Report, para. 8.822; see also id., paras. 8.797-8.798.
265. The Panel found that as a factual matter, Boeing invested a total of USD [BCI] in real property at the Project Site, of which only USD 270 million was reimbursed by South Carolina (USD 50 million Air Hub Bonds and USD 220 million for Economic Development Bonds). In other words, the Panel found that Boeing invested a net amount of USD [BCI] in real property at the Project Site—above and beyond what South Carolina reimbursed. By the Panel’s own logic, this USD [BCI] resulted in remuneration from Boeing to South Carolina. However, the Panel also found that none of this remuneration “was foreseen in the {January 1, 2010 Project Gemini} agreement between South Carolina and Boeing,” and therefore it should not affect the benefit analysis.  

266. Yet in making this finding, the Panel ignored critical evidence regarding South Carolina’s expectations prior to the January 1, 2010 Project Gemini Agreement. In particular, in October 2009, the South Carolina Department of Commerce (“SCDOC”) and the State Board of Economic Advisors (“SCBEA”) conducted two cost-benefit analyses that took into account the value to South Carolina of Boeing’s anticipated investment at the Project Site. The SCDOC analysis stated that Boeing’s planned capital investment in Project Gemini was $1,025,300,000, including $625,300,000 in “New Building”—i.e., real property. Separately, the SCBEA analysis stated that Boeing’s planned capital investment in Project Gemini was $1,000,000,000, including $250,000,000 in “New Building”—i.e., real property.

267. These analyses show that South Carolina foresaw, ex ante, that Boeing would make an investment of hundreds of millions of dollars in the Project Site, and the Panel’s failure to consider them reflects its failure to make an objective assessment on this issue. These analyses were not only on the record before the Panel, but were discussed by the EU. In its own submission, the EU recognized that, “{a}ccording to SCDOC, Boeing’s investment in Project Gemini includes $625.3 million in new buildings and $400 million in machinery and equipment {,}” for a total of $1,025,300,000. The EU further acknowledged that “{b}oth
analyses agree that Boeing’s announced capital investment is approximately $1 billion.” This was consistent with the actual level of investment: from 2010 through the third quarter of 2012, Boeing’s total investment in South Carolina was [BCI]. The importance of the SCBEA and SCDOC analyses in showing South Carolina’s ability to foresee Boeing’s level of investment at the Project Site is reinforced by the fact that the South Carolina legislative instrument approving the issuance of Economic Development Bonds to fund Project Gemini (i.e., H3130) refers explicitly to the SCBEA analysis. In addition, the text of the Project Gemini Agreement refers explicitly to the legislative findings in H3130 regarding prior cost benefit analyses.

268. The Panel should have addressed the SCBEA and SCDOC evidence in its benefit analysis, and considered whether the amount of Boeing’s anticipated investment in the Project Site was equal to or greater than the anticipated bond-funded payments to Boeing. The EU itself considers that SCDOC’s estimate is “more accurate” than that provided by SCBEA. Based on SCDOC’s estimate, Boeing’s planned investment of $1,025,300,000 in the Project Site as a whole, including $625,300,000 in “New Building,” far exceeded the $270 million in bond-funded payments that South Carolina made to Boeing. The Panel’s failure to consider any of this evidence — which runs contrary to its finding that no remuneration was foreseen — amounts to a failure to make an objective assessment under Article 11.

269. Accordingly, the Appellate Body should reverse the Panel’s finding at paragraph 8.823 that South Carolina payments confer a benefit to Boeing. In addition, the Appellate Body should reverse the Panel’s finding at paragraph 8.849 that the amount of the specific subsidy to Boeing as to Air Hub Bonds is USD 50 million, as well as a corresponding finding in paragraph 11.7(b)(ix).

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305 EU FWS, para. 599. In addition, the United States noted that in exchange for South Carolina’s issuance of EDBs, “Boeing committed to an investment of $750 million in the state of South Carolina.” US SWS, para. 495 (citing Project Gemini Agreement, p.4 (Exhibit EU-467)).

306 Boeing Investment in South Carolina (2010-3Q2012) (Exhibit USA-324(BCI).


308 Project Gemini Agreement, Preamble (Exhibit EU-467) (“WHEREAS, the South Carolina General Assembly has made legislative findings of fact in 2009 Act No. 124, § 5.A., effective October 30, 2009. . . concluding that the construction of infrastructure . . . provides significant and substantial direct and indirect benefits to the State and its residents . . . ”).

309 EU FWS, para. 599.
V. **Conditional Appeal: The Panel Erred Under Article 6.3(c) of the SCM Agreement and Article 11 of the DSU in Finding that the European Union Had Not Failed to Make a Prima Facie Case of Significant Price Suppression with Respect to the A330.**

270. The Panel found that the European Union failed to establish that “the original adverse effects of the pre-2007 aeronautics R&D subsidies in respect of the A330 and Original A350 continue in the post-implementation period as significant price suppression of the A330 and A350XWB . . .” 310 On appeal, the EU alleges several errors with respect to its unsuccessful claim that subsidies have caused adverse effects in the form of price suppression allegedly suffered by the A330. 311

271. To the extent that the Appellate Body disturbs any of the compliance Panel’s findings with respect to the A330, the United States appeals the Panel’s intermediate finding that the EU made a *prima facie* case of significant price suppression under Article 6.3(c) of the SCM Agreement, despite the EU’s consistent insistence that, as of the end of the implementation period, the A330 is in a monopoly market and, therefore, not engaged in actual or potential competition with any Boeing LCA. 312 In refusing to reject the EU’s price suppression claim for failure to make a *prima facie* case, the Panel erred in interpreting and applying Article 6.3(c). It also failed to conduct an objective assessment as required under Article 11 of the DSU.

272. The Appellate Body has explained with respect to Article 6.3 of the SCM Agreement that the “phrase ‘in the same market’ suggests that the subsidized product in question…and the relevant product of the complaining Member must be ‘in the same market’.” 313 The Appellate Body has further explained regarding “the phrase ‘in the same market’, it is clear to us from a plain reading of Article 6.3(c) that this phrase applies to all four situations covered in that provision, namely, ‘significant price undercutting’, ‘significant price suppression, price

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310 Compliance Panel Report, para. 11.8(b).
311 EU Appellant Submission, para.
312 Compliance Panel Report, para. 9.316 footnote 3153. See also *ibid.*, para. 9.28 (depicting the EU’s proposed market delineations, including the supposed monopoly market for the A330).
313 *US – Upland Cotton (AB)*, para. 407. See also *US – Upland Cotton (Panel)*, para. 7.1248 (“Therefore, this does not mean that we cannot also conduct another inquiry into other geographical areas within the world market, which meet the definition of ‘same market’ in the sense of Article 6.3(c). This would not, however, permit, for example, coupling an examination of Brazil’s product under the conditions of competition prevailing in one Member’s market with an examination of the United States’ product under the conditions of competition prevailing in another Member's market. This would not meet the definition of ‘same market’ because the frame of reference would necessarily have to be, at that level, either one or the other Member’s market in which both Brazilian and United States upland cotton were present and competing for sales. Applying the frame of reference of a geographic region consisting of a particular Member’s market, it could not be two different such ‘markets’.”) (emphasis added).
depression \{and\} lost sales’.”\textsuperscript{314} In addition, the Appellate Body has clarified that “two products would be in the same market if they were engaged in actual or potential competition in the market,”\textsuperscript{315} which would be the case when two products are “sufficiently substitutable so as to create competitive constraints on each other.”\textsuperscript{316}

273. Moreover, as the complaining party, the EU bore the burden of establishing that the A330 and a subsidized Boeing product are “in the same market.” “\{A\}t a minimum, \{the\} complainant must adduce arguments and evidence that, in the absence of effective refutation by the respondent, would enable a panel to rule in its favour.”\textsuperscript{317} As the Appellate Body has stated:

\begin{quote}
It is for the complaining party to identify the market where it alleges significant price suppression and to establish that that market exists. In doing so, it is for the complaining party to establish that the subsidized product and its product are in actual or potential competition in that alleged market.\textsuperscript{318}
\end{quote}

274. The EU never attempted to meet its burden in this respect. The EU did not even allege that the A330 is in the same market as any other product, much less an allegedly subsidized product. Indeed, the EU repeatedly insisted it is \textit{not} in a market with any other product. For example, the EU asserted that “\textit{no other aircraft} exercise significant \textit{competitive constraints} on the A330 or are considered by customers \textit{substitutable} for the A330.”\textsuperscript{319} The Panel itself recognized that “\{t\}he European Union’s claim of significant price suppression in relation to the A330 is not based on the existence of current competition between the A330 and any subsidized Boeing aircraft.”\textsuperscript{320}

275. When the United States argued that the EU’s claim failed as a matter of law, the EU did not dispute or modify its position that the A330 is in a monopoly market with no other competing aircraft. Instead, the EU argued that “price suppression may be established where the effects of a subsidy arise in a product market separate from the market in which the subsidized product competes.”\textsuperscript{321} As discussed above, this is flatly wrong. The Appellate Body has explicitly stated that the subsidized product and the product alleged to suffer adverse effects

\textsuperscript{314} US – \textit{Upland Cotton (AB)}, para. 407.
\textsuperscript{315} EC – \textit{Large Civil Aircraft (AB)}, para. 1122.
\textsuperscript{316} EC – \textit{Large Civil Aircraft (AB)}, para. 1120.
\textsuperscript{317} US – \textit{Tuna II (21.5) (AB)}, para. 7.176.
\textsuperscript{318} US – \textit{Upland Cotton (AB)}, para. 409.
\textsuperscript{319} EU FWS, para. 906 (emphasis added).
\textsuperscript{320} Compliance Panel Report, note 3173.
\textsuperscript{321} Compliance Panel Report, note 3152 (citing EU RPQ 40, paras. 229-250; EU Comments on US RPQ 40, paras. 233-247).
“must be engaged in actual or potential competition in the market in which the effect of the challenged subsidy is alleged to be significant price suppression.” Accordingly, the Panel should have found that the EU’s claim with respect to the A330 fails as a matter of law due to its failure to make a prima facie case of adverse effects.

276. However, the Panel refused to do so based on the EU’s “particular causation theory” – that the price suppression experienced by the A330 in the 2004-2006 period has “lingered,” even if the A330 and 787 are not, as of the end of the implementation period, in the same market. The Panel’s articulation of the EU’s causation theory fails to address the facial flaw in the EU’s claim. Significant price suppression under Article 6.3(c) can only be found if it is established that price suppression is occurring (a) after the end of the implementation period, and (b) in the “same market” in which the allegedly subsidized product and the complaining Member’s product are engaged in actual or potential competition.

277. According to the EU’s own arguments, as of the end of the implementation period, the A330 and the 787 are no longer in the “same market” and, by definition, are no longer engaged in actual or potential competition or capable of constraining each other’s prices. Accordingly, the Panel erred in interpreting and applying Article 6.3(c) to mean that a complaining Member need not allege that the allegedly subsidized product is in the “same market” as the product allegedly experiencing price suppression.

278. The Panel also failed to make an objective assessment under Article 11 of the DSU when it excused the EU’s clear failure to make a prima facie case. A Panel may not “make the case for the complainant, nor {} make good the absence of argumentation on a party’s behalf.” The EU did not even attempt to adduce evidence and argumentation with respect to “each of the elements of its claim {}” – namely, that that the A330 and the 787 are in the “same market” for purposes of its claim of significant price suppression under Article 6.3(c). As discussed above, the EU specifically, consistently, and clearly argued the opposite.

279. The Panel should have rejected the EU’s claim on this basis. By excusing the EU’s failure, the Panel acted contrary to its obligation to not “make the case for the complainant, nor {} make good the absence of argumentation on a party’s behalf.” Thus, in the event that the condition for this appeal is satisfied, the Panel’s finding that the EU made a prima facie case of

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322 US – Upland Cotton (AB), para. 412.
323 Compliance Panel Report, note 3173.
324 US – Tuna II (21.5) (AB), para. 7.176 (citing US – Zeroing (AB), para. 343; Japan – Agricultural Products II (AB), para. 129; EC – Fasteners (AB), para. 566).
325 US – Tuna II (21.5) (AB), para. 7.176 (internal citations omitted).
326 US – Tuna II (21.5) (AB), para. 7.176.
price suppression regarding the A330 should be reversed, and there is no basis for any finding of adverse effects with respect to the A330.
APPENDIX A

1. The per-aircraft magnitude of the subsidy – which has been discussed as a measure of the additional B&O tax Boeing would owe if the rate were higher but the price remained the same – is a slightly different number from the amount of the maximum price increase in the absence of the subsidy. The magnitude of the subsidy is calculated by multiplying the difference between the unsubsidized B&O tax rate and the subsidized rate (0.1936 percent), by the actual purchase price to determine the additional amount Boeing would be required to pay in B&O tax if the unsubsidized higher rate were applicable.

2. However, the EU’s theory is not that, in the absence of the subsidy, Boeing would have charged the same price and paid more of the resulting revenues in taxes. Rather, the Appellate Body’s findings indicate that, to preserve its profitability, Boeing may raise the price in the absence of the subsidy. However, a higher price results in additional B&O tax liability even if the rate were not changed. To account for this fact, the additional amount Boeing would need to charge in the absence of the subsidy to maintain the same level of profitability is very slightly higher than the magnitude of the subsidy based on the actual sale price subject to the unsubsidized B&O tax rate.

3. Specifically, the magnitude of the subsidy is 0.1936 percent of the actual purchase price. The amount of the maximum counterfactual price increase is 0.1945 percent of the actual purchase price. This means that the maximum counterfactual price Boeing potentially would charge in the absence of the subsidy is 1.001945 times the price it charged when the subsidized B&O tax rate was applicable.

4. To calculate the maximum counterfactual price, one assumes that Boeing’s counterfactual post-tax revenue equals Boeing’s actual post-tax revenue that it paid based on the subsidized B&O tax rate. Boeing’s actual post-tax revenue can be represented, where $p$ is sale price, as $p - 0.002904p$, or $0.997096p$. Boeing’s counterfactual post-tax revenue can be represented, where $p^*$ is the counterfactual sale price, as $p^* - 0.00484p^*$, or $0.99516p^*$. Because these must be equal to one another in the scenario imagined, we can solve for $p^*$ in the following equation:

$$0.99516p^* = 0.997096p$$

Therefore:

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327 The tax owed is 0.002904 multiplied by $p$. Therefore, the net revenue is equal to the sale price ($p$) minus the tax owed ($0.002904p$). Another way of understanding this is that Boeing’s net revenue, after accounting for the B&O tax it owes, is equal to 99.7096 percent of the sale price.
\[ p^* = (0.997096/0.99516)p \]

Or:

\[ p^* = 1.001945p \]

5. This equation shows that the maximum purchase price Boeing would conceivably charge in the absence of the subsidy is 1.001945\(^{\text{328}}\) times the price it actually charged. This percentage can be turned into a whole dollar figure with just one input – the purchase price. Thus, if Boeing charged $50 million with a subsidized B&O tax rate of 0.2904 percent, it would have demanded, at most, 1.001945 times $50 million, or $50,097,271,\(^{\text{329}}\) in the absence of the subsidies.

6. Simple math can confirm this. At a B&O tax rate of 0.2904 percent and a sale price of $50 million, Boeing would owe $145,200 in B&O tax, leaving it $49,854,800 in post-tax revenue. At a B&O tax rate of 0.484 percent and a sale price of $50,097,271, Boeing would owe $242,471 in B&O tax, leaving it with the exact same $49,854,800 in post-tax revenue.

7. Therefore if, in light of all of the considerations and other terms relevant to a particular sales campaign, Boeing were willing to sell single-aisle aircraft at $50 million per aircraft with a B&O tax rate of 0.2904 percent, it is indisputable that Boeing would prefer to sell those same aircraft at a price of $50,097,271 per aircraft in the absence of the subsidy (i.e., with a B&O tax rate of 0.484 percent) rather than lose the sale. The subsidy thus allows Boeing to lower its price, at most, by about $97,000 for aircraft selling for around $50 million.

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\(^{\text{328}}\) This is rounded to the sixth decimal place. The counterfactual price below is calculated using the unrounded multiplier.

\(^{\text{329}}\) This is based on an unrounded multiplier (i.e., 0.0019454158…).
APPENDIX B

1. In this Appendix, the United States provides a modified version of Table 14 from the compliance Panel’s report. The original aspects of the Table appear in the first six rows corresponding to the 777, 777X, 787, 737 MAX, 737NG, and “Total value of orders.” The 787 order and value totals have been divided in half to reflect the conservative assumption that half of the orders will be produced in South Carolina, and therefore are not subject to the Washington B&O tax. The new reduced 787 order and value totals are highlighted in yellow.

2. The United States adds rows for the 767 and 747. Consistent with the Panel’s methodology, the United States used the order totals reported in Exhibit EU-1658. The United States then multiplied the same 44 percent discount rate by the 2012 list price reported in Exhibit EU-25. The 767 list price was $182.8 million, and the 747 list price was $351.4. Once the 44 percent discount rate was applied, the average prices for the 767 and 747 were $102.4 million and $196.8 million, respectively.

3. The United States added a row for the “Value of all Washington orders.” This reflects the reduction in 787 values to account for the assumed South Carolina production as well as the 767 and 747 values that were added.

4. The United States then, for each year, added the 737 MAX and 737NG order values to get a single-aisle aircraft order value, and divided it by the “Value of all Washington orders” to calculate the percentage of value attributable to single-aisle aircraft orders. This row is labeled “Single-aisle pct.”

5. In the next row, the United States reproduced the Washington B&O tax totals estimated by the Panel for sales of all Boeing aircraft families.

6. In the final row, the United States multiplied the Single-aisle pct. by the Panel subsidy total to calculate the amount of subsidy to single-aisle aircraft. This resulted in $60.4 million for 2013, $55.7 million for 2014, and $59.2 million for 2015. This results in an annual average of $58.4 million.
### Modified Table 14: Number and estimated value of orders of Boeing LCA 2013-2015

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of orders</th>
<th>Estimated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>777</td>
<td>55 orders, USD 8.7 billion</td>
<td>63 orders, USD 10 billion</td>
</tr>
<tr>
<td>777X</td>
<td>66 orders, USD 13.7 billion</td>
<td>220 orders, USD 45.5 billion</td>
</tr>
<tr>
<td>787</td>
<td>183 orders, USD 23.1 billion</td>
<td>50 orders, USD 6.3 billion</td>
</tr>
<tr>
<td>737 MAX</td>
<td>699 orders, USD 37.8 billion</td>
<td>900 orders, USD 48.7 billion</td>
</tr>
<tr>
<td>737NG</td>
<td>498 orders, USD 24.1 billion</td>
<td>305 orders, USD 14.7 billion</td>
</tr>
<tr>
<td>Total value of orders</td>
<td>USD 107.4 billion</td>
<td>USD 125.2 billion</td>
</tr>
<tr>
<td>767</td>
<td>2 orders, USD 0.2 billion</td>
<td>4 orders, USD 0.4 billion</td>
</tr>
<tr>
<td>747</td>
<td>17 orders, USD 3.3 billion</td>
<td>2 orders, USD 0.4 billion</td>
</tr>
<tr>
<td>Value of all Washington orders</td>
<td>USD 99.4 billion</td>
<td>USD 122.8 billion</td>
</tr>
<tr>
<td>Single-aisle pct.</td>
<td>62.3%</td>
<td>51.6%</td>
</tr>
<tr>
<td>Panel subsidy total</td>
<td>USD 97 million</td>
<td>USD 108 million</td>
</tr>
<tr>
<td>Subsidy to Single-Aisle Aircraft</td>
<td>USD 60.4 million</td>
<td>USD 55.7 million</td>
</tr>
<tr>
<td>Annual Average</td>
<td>USD 58.4 million</td>
<td></td>
</tr>
</tbody>
</table>

Panel note 3302: As explained in fn 3298 above, the estimated value of the orders each year is calculated by multiplying the number of orders of each LCA model by an estimate of the actual price of that LCA model (as opposed to list prices). The estimate of the actual price of each LCA model is obtained by applying a 44% discount rate to the average 2012 list price of each model. The estimated discount rate of 44% is obtained from the International Trade Resources Report submitted by the European Union. (See ITR Report, (Exhibit EU-25)). The number of orders of each LCA model per year is based on the Ascend database submitted by the European Union. (See Ascend database, Orders, data request as of 29 September 2015, (Exhibit EU-1658)).

Panel note 3303: Includes orders until September 2015. (See Ascend database, Orders, data request as of 29 September 2015, (Exhibit EU-1658)).

Panel note 3304: This reflects the figures that appear in the panel report and has not been modified to subtract the excluded 787 values.