

United States – Measures Affecting Trade in Large Civil Aircraft

(Second Complaint)

(DS353)

COMMENTS OF THE UNITED STATES
ON THE RESPONSES OF THE EUROPEAN COMMUNITIES
TO THE FIRST SET OF QUESTIONS FROM THE PANEL TO THE PARTIES
(Renumbered paragraphs)

December 21, 2007

TABLE OF REPORTS AND OTHER DOCUMENTS

Short Form	Full Citation
<i>Canada – Aircraft (Panel)</i>	Panel Report, <i>Canada – Measures Affecting the Export of Civilian Aircraft</i> , WT/DS70/R, adopted 20 August 1999, as modified by the Appellate Body Report, WT/DS70/AB/R
<i>Canada – Aircraft (AB)</i>	Appellate Body Report, <i>Canada – Measures Affecting the Export of Civilian Aircraft</i> , WT/DS70/AB/R, adopted 20 August 1999
<i>EC – Bed Linen (Article 21.5) (AB)</i>	Appellate Body Report, <i>European Communities – Anti-Dumping Duties on Imports Of Cotton-Type Bed Linen from India, Recourse to Article 21.5 of the DSU by India</i> , WT/DS141/AB/RW, adopted 24 April 2003
EC FWS	First Written Submission of the European Communities, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)(DS 353)</i> (Feb. 9, 2007)
EC OS1	First Non-Confidential Oral Statement by the European Communities, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)(DS353)</i> (Sept. 28, 2007)
EC OS1 (conf.)	Oral Statement by the European Communities to the First Meeting of the Panel – Confidential Session, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)(DS353)</i> (Sept. 28, 2007)
EC Panel Request	Request for the Establishment of a Panel by the European Communities, WT/DS317/5, 23 January 2006
EC RPQ1	Answers by the European Communities to Questions of the Panel Following the Panel’s First Substantive Meeting with the Parties (Dec. 5, 2007)
EC SWS	Second Written Submission of the European Communities, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)(DS 353)</i> (Nov. 19, 2007)
<i>Indonesia – Autos</i>	Panel Report, <i>Indonesia – Certain Measures Affecting the Automobile Industry</i> , WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, adopted 23 July 1998
<i>Japan – Agricultural Products (AB)</i>	Appellate Body Report, <i>Japan – Measures Affecting Agricultural Products</i> , WT/DS76/AB/R, adopted 19 March 1999

<i>Japan – DRAMs CVDs</i>	Panel Report, <i>Japan – Countervailing Duties on Dynamic Random Access Memories from Korea</i> , WT/DS336/R, adopted 17 December 2007, as modified by the Appellate Body Report, WT/DS336/AB/R
<i>Le Petit Robert</i>	<i>Le Petit Robert, Dictionnaire de la Langue Française</i> (revised ed., 2004)
<i>Mexico – Taxes on Soft Drinks (AB)</i>	Appellate Body Report, <i>Mexico - Tax Measures on Soft Drinks and Other Beverages</i> , WT/DS308/AB/R, adopted 24 March 2006
<i>Oxford Spanish Dictionary</i>	<i>Oxford Spanish Dictionary</i> (2d ed. revised, 2001)
Space Act	The National Aeronautics and Space Act, Pub.L. 85-568 (Exhibit EC-268)
<i>US – DRAMs CVDs (AB)</i>	Appellate Body Report, <i>United States – Countervailing Duty Investigation on Dynamic Random Access Memory Semiconductors (DRAMs) from Korea</i> , WT/DS296/AB/R, adopted 20 July 2005
<i>US – Export Restraints</i>	Panel Report, <i>United States – Measures Treating Export Restraints as Subsidies</i> , WT/DS194/R, adopted 23 August 2001
US FWS	First Written Submission by the United States, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint) (DS353)</i> (July 6, 2007)
US OS1	Oral Statement of the United States at the First Substantive Meeting of the Panel with the Parties, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint) (DS353)</i> (Sept. 26, 2007)
US RPQ1	Response of the United States to the First Set of Questions from the Panel to the Parties (Dec. 5, 2007)
<i>US – Shrimp (Article 21.5) (AB)</i>	Appellate Body Report, <i>United States - Import Prohibition of Certain Shrimp and Shrimp Products</i> , WT/DS58/AB/RW, adopted 21 November 2001
US SWS	Second Written Submission of the United States, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)(DS 353)</i> (Feb. 9, 2007)
<i>US – Upland Cotton (Panel)</i>	Panel Report, <i>United States – Subsidies on Upland Cotton</i> , WT/DS267/R, adopted 21 March 2005, as modified by the Appellate Body Report, WT/DS267/AB/R

<i>US – Upland Cotton (AB)</i>	Appellate Body Report, <i>United States - Subsidies on Upland Cotton</i> , WT/DS267/AB/R, adopted 21 March 2005
<i>US – Wool Shirts (AB)</i>	Appellate Body Report, <i>United States – Measure Affecting Imports of Woven Wool Shirts and Blouses from India</i> , WT/DS33/AB/R and Corr.1, adopted 23 May 1997
<i>US – Zeroing (EC) (AB)</i>	Appellate Body Report, <i>United States – Laws, Regulations and Methodology for Calculating Dumping Margins (“Zeroing”)</i> , WT/DS294/AB/R, adopted 9 May 2006

1. *In US – Upland Cotton, the panel stated that "the argument ... relating to the "amount" or "portion" of the subsidy ... is not germane to the inquiry that is to be conducted under Article 1 of the SCM Agreement. Here, we are asking whether a "financial contribution" exists, and whether a "benefit" is thereby conferred. We are not required precisely to establish, at this stage, the quantity of that benefit ...".¹ Do the parties consider this approach applicable to the present dispute?*

1. The EC states that an inquiry under Article 1 of the *Agreement on Subsidies and Countervailing Measures* ("SCM Agreement")² "does not involve the question of amount".³ As the United States explained in its response to this question, however, the panel's report in *US – Upland Cotton* does not suggest that an analysis of whether a financial contribution confers a benefit may dispense completely with quantitative analysis or evidence. In fact, this determination often requires a comparison of the terms of the financial contribution with the terms "available to the recipient on the market."⁴ And this comparison often involves numbers or some quantitative analysis, as the examples provided by the United States in its initial response demonstrate.⁵

2. *In its First Written Submission, the European Communities asks the Panel to adopt its estimates of subsidy amounts "as the best information available and, as appropriate, draw adverse inferences due to the United States' non-cooperation in the information-gathering process" (EC FWS, paras. 132, 154, 168, 182, 194, 203, 229, 245, 261, 277, 325, 336, 361, 385, 406, 431, 450, 525, 549, 573, 589, 604, 619, 632, 651, 763, 799, 848, 876, 913, 958.)*

(a) *Why does the Panel need to make a finding on whether the United States "cooperated" in the information gathering process envisaged in Annex V in order to adopt the European Communities' estimates? Does the Panel need to find that the United States failed to cooperate in the Annex V process in order to accept and rely upon the European Communities' estimates of the amount of the subsidies at issue?*

2. The U.S. response to this question explains how the United States has cooperated fully with information gathering in this proceeding. As a result, there is accurate, actual information before the Panel regarding the amount of the alleged subsidies. However, even if the United States had provided *no information at all*, the Panel could not accept the EC's estimates of the value of alleged subsidies to Boeing from DoD and NASA .

3. Article 11 of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* ("DSU") provides that "a panel should make an objective assessment of the matter

¹ *US – Upland Cotton (Panel)*, para. 7.1119.

² In this submission, all citations to Articles are to the SCM Agreement unless otherwise indicated.

³ EC RPQ1, para. 1.

⁴ *Canada – Aircraft (AB)*, para. 157.

⁵ This may be different, for example, in the case of a grant, or when the granting authority has conceded that the terms are better than those available on a commercial basis or that the measure constitutes a subsidy.

before it, including an objective assessment of the facts of the case.” An objective assessment would not permit acceptance of the EC’s estimates regarding the value of alleged payments to Boeing under NASA R&D contracts and DoD RDT&E contracts.

4. The EC based its estimate of the value of NASA R&D “grants” to Boeing under the challenged programs on calculations performed by CRA, a consulting firm hired by the EC. The evidence cited by the EC shows that CRA’s estimates are completely unreliable.

- In most cases, CRA estimated the value of NASA’s alleged subsidy to Boeing by multiplying NASA’s total aeronautics research program budgets by Boeing’s share of U.S. civil aircraft production.⁶ Its methodology is flawed in many respects, beginning with the assumption that the entirety of the considerable non-engine related NASA in-house research capability was used in support of Boeing. Its use of Boeing’s share of U.S. civil aircraft production would only be valid applied to NASA’s total contracted R&D if NASA divided its contracted aeronautics research funds among contractors proportionate to their share of the civil aircraft production. The EC provides *no evidence* to support this assumption. In fact, the NASA Annual Procurement Reports cited by the EC establishes that this was not the case. Boeing’s share of all NASA contracts was far less than Boeing’s share of civil aircraft production.⁷
- The contracts submitted by the EC with regard to the programs in question show that CRA greatly exaggerated the subsidy values.⁸
- The NASA procurement reports cited by the EC establish that CRA’s estimate of what NASA spent on Boeing aeronautics research contracts was greater than NASA’s *total* spending on *all contracts* with *all contractors* for research into aeronautics *and* space technology *combined*.⁹ Such a result is, of course, mathematically impossible.

⁶ Exhibits EC-18 and EC-25, p. 9, note 3; p. 10, note 3; p. 11, note 4; p. 12, note 3; p. 15, note 3; p. 16, note 3; p. 17, note 3; and p. 18, note 3. The only exceptions to this rule are the Aircraft Energy Efficiency Program (“ACEE”) and the High Performance Computing and Communications Program (“HPCC”).

⁷ US RPQ1, para. 74.

⁸ Compare NASA Contract NAS1-20220, p. 1 (July 15, 1994) (“High Speed Research,” estimated cost \$440 million) (Exhibit EC-347) with Exhibit EC-25, p. 10 (alleging a total payment to Boeing under the HSR Program of \$896 million). In fact, because the program terminated early, as the EC knew, the actual amount paid to Boeing under the contract was considerably less than the initial estimate. Bill Sweetman, “Make it Look Like an Accident,” *Interavia Business and Technology* (Feb. 1, 1999) (Exhibit EC-348); Modification 152 to NASA Contract NAS1-20220, p. 2 (Dec. 15, 1999) (Exhibit US-550, p. 344 of 352).

⁹ US RPQ1, para. 75.

5. The EC also based its estimate of the value of DoD RDT&E activities under the challenged PE numbers on calculations performed by CRA. The evidence cited by the EC shows that CRA's estimates are unreliable.

- **CRA conducted a keyword-based approach.** Although CRA vehemently denies basing its analysis on “keywords,”¹⁰ the most basic review of its original report – which is still the only evidence it presents for most of its analysis – reveals its reliance on what CRA itself characterizes as “Sample Keywords from FYDP Description.” There is no evidence of a “careful reading of each paragraph of the project description” – only a series of snippets from program descriptions that contain what CRA considers “generic” terms.¹¹ Without such further evidence for *all* of the allegedly dual use projects, these “keywords” (and again, that is CRA's own term) establish nothing other than that the civil and military sectors sometimes use similar terminology.
- **CRA disregards the military purpose of DoD research.** CRA makes much of its exclusion of some PEs with exclusively military application.¹² However, it disregards the evidence that the PEs included in its examination were directed to military objectives. In light of this demonstrated military purpose, a fair analysis would assume, absent other indications, that a research program had a military purpose. CRA does the opposite. Whenever it encounters a description that it considers “generic,” it assumes dual use.¹³
- **CRA assumes that where it identifies a few “generic” terms, the entire project is “dual use.”** Whenever CRA identifies just a few civil “keywords” in a program, it counts the entire value of the project as dual use regardless of the rest of the description of the project. In just one example, it asserts that “Integrated Closed-loop Environmental Control System (ICECS)” is a dual use “keyword” that justifies treating the entire “aeromechanics/vehicle subsystems project as “dual use”.¹⁴ However, it ignores that the remainder of the description, which states that the project “Includes aerodynamic technologies for safe high angle-of-attach (AOA) operation,” “short landing capability, and the reduction/elimination of fighter aircraft vertical tails,” “Develops low drag, low observable (LO) {i.e.

¹⁰ CRA Response Report, pp. 28-29 (Exhibit EC-1176).

¹¹ CRA Response Report, pp. 29-30 (Exhibit EC-1176)..

¹² CRA Response Report, p. 4 (Exhibit EC-1176)..

¹³ CRA Response Report, pp. 28-29 (Exhibit EC-1176).

¹⁴ Flight Vehicle Technology, Aeromechanics/Vehicle subsystems, CRA Report, p. 27 (Exhibit EC-7).

stealth},¹⁵ external weapons carriage concepts for incorporating air-to-surface weapons on fighter aircraft.”¹⁶ All of these are clearly military-only technologies, but CRA treats spending on them as dual use because they appear in a paragraph with six words that, in CRA’s view, suggest possible civilian application. Such conclusions are obviously entitled to no weight.

- **CRA ignored DoD funding to government employees, research institutions, and universities.** CRA ascribed between 21 and 31 percent of DoD RDT&E project expenses to Boeing, based on a calculation showing Boeing’s share of military aircraft/missile/space production.¹⁷ This methodology, of course, assumes that the remaining producers received the rest of the funding. CRA argues in its Response Report that DoD internal funding accounted for approximately 25 percent of expenses, which could have come out of the 70 percent of DoD RDT&E funds not spent on Boeing.¹⁸ However, CRA’s figure actually proves the U.S. point. If CRA were correct about DoD’s level of funding of internal research and payments to Boeing, there would be relatively less funding left for RDT&E projects with other military aircraft/missile/space producers.¹⁹ The EC’s own evidence shows that, in fact, other major defense contractors receive levels of RDT&E contracting comparable to Boeing’s.²⁰
- **CRA ignored evidence that its figures were exaggerated.** In its first written submission, the United States presented calculations showing that CRA’s figures for *dual use* funding under two program elements were between 400 and 700 percent higher than data that DoD reported for all contracts (including military-only contracts) with Boeing.²¹ In its Response Report CRA contends that these two of 14 PEs analyzed by CRA were too small to present a valid sample. It also

¹⁵ CRA claims to have omitted stealth technologies “because the primary focus of the research was for a technology area that had no immediate applicability to current-generation LCA.” CRA Response Report, pp. 4-5. (Exhibit EC-1176). It obviously did not succeed.

¹⁶ Program Element 0603205F, Aerospace Vehicle Technology, FY 1993 RDT&E Descriptive Summary, p. 366 (Exhibit EC-426, p. 4 of 109).

¹⁷ CRA Report, App. C (Exhibit EC-7).

¹⁸ CRA Response Report, pp. 33-34 (Exhibit EC-1176).

¹⁹ CRA presents data suggesting that from 1991 to 2002, DoD spent an average of 24 percent of its funding on “intramural” research, 67 percent on industrial firms, and the remaining 9 percent of FFRDCS (independent research institutions). CRA Report, App. C (Exhibit EC-7); CRA Response Report, Exh. 1 (Exhibit EC-1176). If CRA was correct that Boeing received 24 percent of total funding, the remaining 76 percent of military aircraft/missile/space producers received 43 percent of the RDT&E funding.

²⁰ Top Contractors’ Share of DOD RDT&E, FY 1991-FY 2005 (Exhibit EC-29) (showing Boeing receiving far less RDT&E spending than Lockheed Martin).

²¹ US FWS, para. 148.

claims that there were errors in the U.S. calculations that when corrected show that in one of 14 comparisons CRA underestimated, and that the overestimate was not too high on another.²² Although CRA neglects to show these corrected calculations, it is telling that it only reveals the two comparisons favorable to it. In any event, with 13 of 14 comparisons showing overestimates on CRA's part (many of them likely huge), its calculations are entitled to no weight.

6. With the evidence before the Panel demonstrating that the value of NASA R&D contracts and DoD RDT&E contracts calculated by CRA cannot be correct, an objective assessment of the evidence would not allow acceptance of those estimates, whether as "best information available" or as some sort of inference.

7. The EC also asserts that "lack of cooperation" on the part of the United States has prevented an estimate of the value of certain alleged subsidies. This is incorrect. (1) With regard to the 747 LCF, the impact of the alleged subsidies would be no different than any other Boeing aircraft and is already captured in the total amount of subsidy alleged by the EC. (2) With regard to the costs of legal proceedings for Boeing related to the Master Site Agreement ("MSA"), there have been no legal proceedings. In the event that there are legal proceedings, the State of Washington views the clause giving it control of the defense as in the state's interest,²³ and considers that it has no obligation to fund Boeing if the company decides to hire its own legal counsel. (3) With regard to the provision of trade secrets and data rights, the United States has explained that neither DoD nor NASA "provided" such rights to Boeing. We have also submitted copies of the contracts containing clauses under which *Boeing* provide such rights to *DoD and NASA*. (4) With regard to the alleged provision of equipment, facilities, and personnel pursuant to the ATP Program, the United States has explained that no such provisions occurred. To the extent evidence on these issues is available to the United States, the United States has already provided it to the Panel.

8. The United States obviously cannot be held responsible for failing to submit evidence that does not exist. Therefore, the absence of such nonexistent evidence does not suggest noncooperation.

(b) *What is the legal and factual basis for finding that the United States failed to cooperate in information-gathering process? Please respond to the United States' assertions that "[t]he EC had multiple opportunities to request findings by the panel or the Annex V Facilitator that the United States failed to cooperate. It never made such a request and, in any event, neither the DS317 panel nor the DS317 Annex V Facilitator ever made such a finding." (US FWS, para. 25)*

²² CRA Response Report, pp. 32-33 (Exhibit EC-1176).

²³ US FWS, para. 575.

9. The EC's response to this question does not dispute the accuracy of the U.S. statement quoted by the Panel. Instead, it simply again asserts that the United States engaged in "non-cooperation" in DS317 – without providing any basis for this charge – and then asserts that the degree of U.S. cooperation in the DS317 process "is not directly relevant" to the Panel's evaluation. In fact, it was the EC that first injected charges of noncooperation during the DS317 proceedings into this dispute.²⁴ To insist now that the complete lack of support for these charges is irrelevant calls into question why the EC raised the charges in the first place. Moreover, the U.S. record of cooperation with information gathering in DS317²⁵ also demonstrates the inaccuracy of the EC assertions that the United States is failing to cooperate and to provide necessary evidence with regard to the issues raised in this dispute.²⁶

(c) *Is the Panel correct in understanding that issues relating to "best information available", "adverse inferences", and "non-cooperation" in the information-gathering process arise only in connection with the European Communities' estimates of the amounts/values of the alleged subsidies?*

10. For the reasons noted in the U.S. comments regarding Question 2(a), the EC estimates of amounts/values of NASA R&D contracts and DoD RDT&E contracts are neither the "best information available" nor a valid inference. The EC argues that the Panel should accept unidentified additional assertions it has made as best information available or adverse inferences because the United States has supposedly failed to provide evidentiary support for certain facts. This is not the case. In any event, the United States has identified how *all* of the critical assertions underlying the EC arguments are either without support in evidence or directly *contrary* to the evidence. Therefore, there is no basis to accept those assertions as the "best information available" or as the basis for any type of inference.

(d) *Does the European Communities still consider the estimates of the amounts of the alleged subsidies set forth in its First Written Submission to be the "best information available", or does the European Communities accept any of the figures provided by the United States in its First Written Submission?*

11. The United States has demonstrated the inaccuracies in the EC estimates of the "amount" of the alleged subsidies at length in response to Panel Question 80.

²⁴ Request for Preliminary Rulings by the European Communities, para. 3 (Nov. 24, 2006).

²⁵ The U.S. Response to the EC preliminary ruling request lays out evidence of U.S. cooperation, which the EC has never rebutted. Response of the United States to the Request for Preliminary Rulings Submitted by the European Communities, paras. 7-17 (Mar. 22, 2007)

²⁶ Letter from the EC to the Panel, p. 2 (Dec. 7, 2007). We note that the only basis for a Panel taking adverse inferences under the SCM Agreement is if a party fails to cooperate with information gathering under Annex V of the SCM Agreement. Annex V, para. 6. There was no such finding with regard to the Annex V process with regard to the EC's claims in DS317, and there was no Annex V process in this proceeding.

- (e) *Does the European Communities mean the same thing when it asks the Panel to: (i) adopt its estimates as the "best information available"; and (ii) "as appropriate, draw adverse inferences"?*

12. The EC response to this question contends that EC assertions are the “best information available” because they are “well-supported and extensively documented.” If that were actually the case, there would be no need to attempt to give them added weight as the “best information available” or “adverse inferences.” In fact, the United States has demonstrated that the EC assertions are based on faulty assumptions, and that even the evidence put forward by the EC shows that its assertions are wrong. Absent the special evidentiary standard proposed by the EC, which focuses on a few carefully chosen phrases and numbers in a few documents, and simply dismisses all contrary evidence as “irrelevant” or not “worth any weight” because of alleged noncooperation, the EC’s arguments simply collapse.

13. In any event, the U.S. comments on question 2(a) referenced the many ways in which the United States has cooperated fully with information gathering with regard to the EC claims, and with the Panel in this process. The EC’s allegations of “non-cooperation” are unsupported. Its most recent claim – that the United States failed to submit relevant NASA and DoD contracts is obviously incorrect. The United States submitted those contracts with its first written submission and cited many of them in that submission.²⁷ The EC’s second written submission even cites some of the very documents it now claims the United States did not submit.²⁸

3. *At paragraph 72 of its Oral Statement, the European Communities argues that the United States "has offered absolutely no evidence in support of the unrealistically low figures presented in its First Written Submission. The United States cannot assert figures without any supporting evidence and expect them to be accepted at face value." At paragraph 74 of its Oral Statement, the European Communities argues that "only a complete disclosure by the United States of all NASA- and DOD-funded contracts and sub-contracts with Boeing and McDonnell Douglas under the programmes at issue will make an adequate bottom-up analysis possible".*

- (a) *Is the European Communities arguing that the only way that the United States can substantiate its assertions regarding the amount of the alleged subsidies would be for the United States to provide the European Communities and the Panel with copies of all of the relevant contracts?*

14. The EC response to this question is an example of moving the goalposts, in that its response to the United States exceeding any evidentiary requirements is not to examine the evidence, but to insist that more is necessary. In its first oral statement, the EC position appeared

²⁷ E.g., US FWS, paras. 93, 101, 102, 114, 162, and 164.

²⁸ EC SWS, para. 500, note 812.

to be that submission of NASA-Boeing and DoD-Boeing contracts was necessary. Now the EC insists that a mass of additional information is necessary, including the opinions of unspecified “experts” and overall budget figures for “cross-checking” the figures from the NASA database.

15. First, submission of “all” contracts was never “necessary” for a review of the EC’s assertions regarding NASA’s R&D contracting with Boeing. The EC itself submitted some of the relevant documents, which it apparently obtained directly from NASA. The United States submitted contracts that were available from the DS317 Annex V process. Given the age of the programs in question, some of the older materials were not available in NASA’s files, so the United States provided alternative estimates of the value of NASA contracts under those programs. Exhibit US-1202 lists the NASA programs challenged by the EC, the contracts associated with those programs, and the contract documents submitted by the United States, which cover 96 percent of NASA’s disbursements. Thus, the Panel can review the evidence regarding NASA disbursements to Boeing based upon the available materials and reach a conclusion regarding the relative accuracy of the amounts of alleged subsidies as estimated by the EC and as reflected in NASA’s records. That is all that is “necessary” to an evaluation of the EC’s claims.

16. Second, the EC’s current proposal for how to conduct a “contract-level” analysis is an utterly unnecessary and unprecedented exercise. It is unnecessary in that NASA has already indicated the source for the information it provided and its basis for considering that information reliable. It has also indicated the steps it took to produce the final numbers from the raw data produced from its databases. As for the opinions of “experts,” they simply are not relevant to the issue at hand, namely, identifying which contracts relate to the programs challenged by the EC. (NASA is the unique possessor of that expertise.) Therefore, the additional steps proposed by the EC for a contract-level analysis would add nothing, even while they increase the burden on the Panel and on the United States.

17. The EC’s proposal is unprecedented in that the United States is unaware of past panels auditing information provided by a Member in the manner suggested by the EC. Indeed, the process envisaged by the EC would serve the same purpose as an on-the-spot investigation under Article 12.6 and Annex VI of the SCM Agreement. As these procedures are not applicable to claims of actionable subsidies under Part III of the SCM Agreement, it is difficult to understand why they would be appropriate in this context.

18. Additionally, the EC has now expanded its request to include subcontracts. When the EC submitted its first list of questions to gather “necessary information” for this proceeding, the EC sought only the NASA-Boeing and DoD-Boeing *contracts*.²⁹ The EC’s first written submission

²⁹ The European Communities’ Questions for the United States Pursuant to Annex V of the *Agreement on Subsidies and Countervailing Measures*, questions 72 and 130 (Exhibit EC-1). In fact, these questions, which the EC suggested the Panel pose to the United States for purposes of this dispute, mention the word “subcontract” only once, in question 182, in reciting a general regulation regarding IR&D and B&P costs.

mentions subcontracts only twice – once in regard to the ATP Program and once in quoting a regulation relevant to IR&D and B&P reimbursements.³⁰ Thus, it is clear that the EC's claim, as laid out in the first written submission, did not extend to challenging work done by Boeing as a subcontractor in support of other contractors' work for DoD and NASA. Only in its first oral statement did the EC raise the issue of subcontracts. The United States explained in its answer to Panel Question 6 that the EC has failed to present a *prima facie* case with regard to subcontracts.³¹ In any event, it is unfortunate that the EC is using the panel process, in which parties usually narrow their claims and arguments, to raise entirely new claims.

(b) *Is the European Communities asking the Panel to find that payments made to Boeing under "sub-contracts" constitute "subsidies" within the meaning of Article 1? If so, what is the legal and factual basis for such a finding?*

19. In its response to this question, the EC for the first time requests the Panel to find that payments made to Boeing under subcontracts constitute subsidies within the meaning of Article 1.³² However, this claim is not within the Panel's terms of reference. Therefore, the DSU does not permit the EC to bring these claims before the Panel.

20. Specifically, the Panel's terms of reference are:

To examine, in light of the relevant provisions of the covered agreements cited by the European Communities in document WT/DS353/2¹, the matter referred to the DSB by the European Communities in that document, and to make such findings as will assist the DSB in making the recommendations or in giving the rulings provided for in those agreements.³³

Document WT/DS353/2, the EC's request for establishment of a panel, references contracts involving DoD and NASA only twice :

- NASA "transfers economic resources on terms more favourable than available on the market or not at arm's length to the US LCA industry, *inter alia*, by . . . entering into procurement contracts with the US LCA industry for more than adequate remuneration;" and

³⁰ EC FWS, paras. 782 and 865, n. 1553.

³¹ US RPQ1, para. 10.

³² EC RPQ1, para. 16.

³³ Constitution of the Panel Established at the Request of the European Communities, WT/DS353/3, para. 2 (4 December 2006) (footnote omitted).

- DoD “transfers economic resources to the US LCA industry on terms more favourable than available on the market or not at arm’s length, *inter alia*, by . . . entering into procurement contracts, including those for the purchase of goods, from the US LCA industry for more than adequate remuneration.”³⁴

The EC request for panel establishment defines “US LCA industry” as being “US producers of large civil aircraft,”³⁵ which during the 1989-2006 period covered by the EC allegations consisted exclusively of Boeing and McDonnell-Douglas. (Both parties to this dispute refer to these companies collectively as “Boeing.”)

21. When NASA or DoD enters into a contract with a non-LCA producer, it is not “entering into procurement contracts with the US LCA industry.” If the non-LCA producer then subcontracts with Boeing, that is a contract between the contractor and Boeing. The government is not a party to that contract. Therefore, subcontracts do not fall under the NASA or DoD “entering into procurement contracts with the US LCA industry” claims in the EC panel request. As no other portion of the EC panel request addresses contracts, let alone *subcontracts*, the EC’s claims in this regard are outside the Panel’s terms of reference.

22. Even if the EC Panel Request could be read as encompassing subcontracts, the EC has not demonstrated that Boeing subcontracts related to other enterprises’ DoD or NASA contracts represent a financial contribution to Boeing.

23. The EC first contends that subcontracts entail a “direct transfer of funds” to Boeing. The United States has already shown that the DoD and NASA contracts challenged by the EC are purchases, rather than direct transfers of funds, for purposes of Article 1.1(a)(1). The EC has presented neither evidence nor argumentation that would support the conclusion that subcontracts are substantively different. Therefore, there is no basis for the assertion that contractors’ purchases for purposes of carrying out their government contracts are “transfers of funds.”

24. Assuming, *arguendo*, that the payment portion of a government purchase could be analyzed separately as a “direct transfer of funds,” that would not make *suppliers’* use of such payments to purchase goods or services into an additional “direct transfer of funds.” The ordinary meaning of the word “direct” is, *inter alia*, “straight, undeviating in course . . . existing or occurring without intermediaries or intervention; immediate, uninterrupted.”³⁶ The word “transfer” is defined, *inter alia*, as the “conveyance of property . . . from one person to

³⁴ Request for the Establishment of a Panel by the European Communities, WT/DS317/5, sections 2.a, 2.e, 3.a, and 3.c (23 January 2006) (“EC Panel Request”).

³⁵ EC Panel Request, unnumbered paragraph preceding section 1.

³⁶ New Shorter Oxford English Dictionary, p. 679.

another.”³⁷ Thus, Art. 1.1.(a)(1)(i) requires that funds be conveyed from the government to the recipient without intermediaries or intervention. The EC concedes that, in fact, if Boeing is a subcontractor, the government transfers funds *to the actual or “prime” contractor*.³⁸ Subcontractors, including Boeing, would receive funds only from the prime contractor. This arrangement is certainly not a *direct* transfer from DoD or NASA to Boeing and, therefore, is not a “direct transfer of funds” within the meaning of Article 1.1(a)(1)(i).

25. The EC attempts to suggest the existence of a “direct transfer of funds” by asserting that “under U.S. law, there is a direct relationship between the US Government and a subcontractor.”³⁹ The EC is wrong. Under U.S. law, there is no privity⁴⁰ between the government and its contractors’ subcontractors. The U.S. Court of Appeals for the Federal Circuit, an appellate court that hears cases involving federal government procurement, has held that “the no-privity rule is synonymous with a finding that there is no express or implied contract between the government and a subcontractor.”⁴¹ One significance of this point is that the subcontractor “cannot, as a subcontractor, recover directly from the United States for amounts owed to it by the prime {contractor}.”⁴² The “no privity” principle is so strong that, where consent to a subcontract is required, the regulations prohibit consent to a subcontract that requires the contracting officer to deal directly with the subcontractor.⁴³

26. The only support the EC cites for a “direct relationship” between the U.S. government and subcontractors is the specific inclusion of subcontracts in the definition of the term “funding agreement” for purposes of U.S. law governing patent rights in inventions made under government contracts.⁴⁴ Specifically, the law provides that “‘funding agreement’ means any contract, grant, or cooperative agreement . . . Such term includes any assignment, substitution of parties, or subcontract of any type.”⁴⁵ However, the EC fails to understand the purpose of having that the definition separately *include* subcontracts. The definition does not create “a direct relationship;” instead, it includes subcontracts to ensure that, if a contractor subcontracts work, it protects the intellectual property rights that would have accrued to the government if the

³⁷ New Shorter Oxford English Dictionary, p. 3367.

³⁸ EC RPQ1, para. 17.

³⁹ EC RPQ1, para. 17.

⁴⁰ “Privity of contract” under U.S. law refers to “[t]hat connection or relationship which exists between two or more contracting parties.” *Black’s Law Dictionary*, p. 1079 (5th ed. 1979) (Exhibit US-1215).

⁴¹ *United States v. Johnson Controls, Inc.*, 713 F.2d 1541, 1550 (Fed. Cir. 1983) (Exhibit US-1216). There are limited exceptions to the “no-privity” rule, but the EC has not suggested that any are relevant to this dispute.

⁴² *United States v. Johnson Controls, Inc.*, 713 F.2d 1541, 1550 (Fed. Cir. 1983) (Exhibit US-1216).

⁴³ 48 C.F.R. § 44.203(b)(3) (Exhibit EC-1285).

⁴⁴ EC RPQ1, para. 17, *citing* 35 U.S.C. § 201(b) (Exhibit EC-558).

⁴⁵ 35 U.S.C. § 201(b) (Exhibit EC-558).

contractor had performed the work itself.⁴⁶ This is necessary precisely because there is no direct contractual relationship between the government and the subcontractor. If the contractor did not put the proper clause in its subcontracts, the government would not get its government use license to any patentable inventions made by the subcontractor. Thus, the definition of “funding agreements” does not support the assertion that government payments under procurement contracts are in fact “direct transfers” to the contractors’ subcontractors.

27. The EC also argues in the alternative that payments to subcontractors are a form of entrustment or direction under Article 1.1(a)(1)(iv). This, too, is a new claim in this dispute. (The EC first written submission, EC first oral statement, and EC second written submission do not mention Article 1.1(a)(1)(iv) at all.) Moreover, this new EC claim fails.

28. Article 1.1(a)(1)(iv) provides that a financial contribution exists where:

a government . . . entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments.

The Appellate Body explained in *US – DRAMs CVDs* that

“entrustment” occurs where a government gives responsibility to a private body, and “direction” refers to situations where the government exercises its authority over a private body. In both instances, the government uses a private body as proxy to effectuate one of the types of financial contributions listed in paragraphs (i) through (iii).⁴⁷

29. The EC puts forward three arguments in support of its assertion that subcontracting under a government contract represents entrustment or direction of government functions. It first contends that the prime contractor is a “proxy” because “when a prime contractor . . . assigns tasks and directly transfers funds to the sub-contractor, it does so in order to fulfill the objectives of the underlying NASA or DoD contract.”⁴⁸ This argument disregards the final clause of

⁴⁶ 35 U.S.C. § 207(c) (Exhibit EC-558) (“Each funding agreement with a small business firm or nonprofit organization shall contain appropriate provisions to effectuate the following: . . . {w}ith respect to any invention in which the contractor elects rights, the Federal agency shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world.”).

⁴⁷ *US – DRAMs CVDs (AB)*, para. 116.

⁴⁸ EC RPQ1, paras. 18-19.

Article 1.1(a)(1)(iv), which provides that entrustment or direction exists only when “the practice, in no real sense, differs from practices normally followed by governments.” Government practice is governed by the Federal Acquisition Regulations (FAR), which do not apply directly to subcontracts. Although the FAR does require contractors to pass some requirements on to their subcontractors, contractors entering into subcontracts have great latitude in selecting subcontractors and in deciding how to perform the contract. Thus, the contractors’ practice does differ from that of the government in a “real sense.”

30. The second argument the EC advances is that NASA or DoD have authority to approve subcontractors selected by prime contractors.⁴⁹ The EC exaggerates the significance of this authority. It is the contractor that selects the subcontractors in the first place. For most negotiated contracts, contractors are required to select subcontractors on a competitive basis, to the maximum practicable extent.⁵⁰ Except for consent requirements in the contract, the Government does not have a role in the selection of contractors. Even when there is such a consent requirement, it is used to protect the Government from the risks presented by subcontract type, complexity, or value, or because the subcontract needs special surveillance.⁵¹ The regulations spell out the considerations that the government must apply in deciding whether to consent to a contractor,⁵² and provide that “[t]he contracting officer’s consent to a subcontract or approval of the contractor’s purchasing system does not constitute a determination of the acceptability of the subcontract terms or price, or the allowability of costs, unless the consent or approval specifies otherwise.”⁵³ These considerations relate to matters that could increase the cost of the contract or impair performance of the contract, and not to directing the contractor to award to a favored subcontractor. As long as the Government assures itself that subcontracts will not significantly increase cost or impair performance of the contract, contractors have great latitude in deciding with whom to subcontract. Thus, the “consent” provisions represent a limited veto right, not a form of government direction.

31. The third argument the EC advances is that “subcontractors are subject to a variety of other government regulations regarding accounting systems and allowable costs.”⁵⁴ This simple assertion by itself is insufficient to establish entrustment or direction because, as the Appellate Body has found, “government ‘entrustment’ or ‘direction’ cannot be inadvertent or a mere by-product of government regulation.”⁵⁵ The EC, however, has provided nothing more, as it

⁴⁹ EC RPQ1, para. 19.

⁵⁰ 48 C.F.R. § 52.244-5 (Exhibit US-1237).

⁵¹ 48 C.F.R. § 44.201-1 (Exhibit EC-1285).

⁵² 48 C.F.R. § 44.202-2 (Exhibit EC-1285).

⁵³ 48 C.F.R. § 44.203(a) (Exhibit EC-1285).

⁵⁴ EC RPQ1, para. 20.

⁵⁵ *US – DRAMs CVDs*, para. 114.

neglected to cite any of the regulations that supposedly entrust or direct contractors in their relationship to subcontractors. Therefore, it has not met its burden of proof.

32. The EC closes by asserting that any Boeing subcontracts with other prime contractors convey a benefit under Article 1.2 for the same reason that contracts allegedly do. By the same token, the United States considers that the absence of such benefits would apply with even greater force to subcontracts. That is because the terms of any subcontract are the results of an arm's length negotiation between private parties. The EC provides no basis to conclude that a prime contractor would pay Boeing a price that conferred a benefit to Boeing.

33. The Panel should note that, in any event, subcontracting for other prime contractors is not a significant part of the business of Boeing's government contracting unit, Integrated Defense Systems ("IDS") or its large civil aircraft unit, Boeing Commercial Aircraft ("BCA"). For IDS, such subcontracting in 2006 was not related to DoD RDT&E or NASA aeronautics R&D. For BCA, the amount of such subcontracting was [***].⁵⁶

34. In conclusion, any subcontracts Boeing has with other prime contractors in relation to the programs identified by the EC are not financial contributions and do not confer a benefit to Boeing.

4. *At paragraph 159 of its First Written Submission, the United States sets out the criteria that it used to identify the DOD contracts that the European Communities identified as its "primary area of concern". Does the European Communities accept the criteria used by the United States to identify relevant DOD contracts?*

35. The EC's response to this question accuses the United States of not understanding the EC criteria. However, the EC has only itself to blame for this state of affairs. As the United States noted, the EC has been completely unclear as to the meaning of "dual use" technology covered by its claims. The EC's efforts to clarify its criteria only demonstrate further that its description of its claim is impossible to apply. In its second written submission, the EC states that "what is at issue in this dispute are the 13 general aircraft RDT&E PEs and 10 military aircraft RDT&E PEs that gave rise to dual-use technologies."⁵⁷ However, in the response to this question, the EC makes a much broader challenge to "research of *any kind* funded and supported by DoD through its RDT&E Program that gives rise to technology that could be (and/or was) applied on LCA."⁵⁸ The "could be . . . applied" standard adds to the confusion, as, in the hands of the EC's consultants, CRA, it is a completely subjective standard.⁵⁹

⁵⁶ Affidavit of [***] (Exhibit US-1242); Affidavit of [***] (Exhibit US-1243).

⁵⁷ EC SWS, para. 490.

⁵⁸ EC RPQ1, para. 22 (emphasis in original).

⁵⁹ US FWS, paras. 129-130 and 146-152.

36. If the EC cannot state its claim with greater consistency and clarity, it certainly cannot criticize the U.S. efforts to respond based on a reasonable interpretation of the EC's *prima facie* case. That is exactly what the United States did. It tried to express the subject matter of the EC claim in a way sufficiently precise for DoD personnel to identify contracts potentially related to those claims, and sufficiently broad so as not to exclude potentially related contracts. For the reasons set out in our responses to Panel Question 6, the United States considers the criteria it used to have met this standard.⁶⁰ In fact, they resulted in a large number of contracts. The United States considers that the contracts demonstrate that DoD conducts little research involving potential dual use technologies. However, the United States provided all of the contracts that met the criteria used by the United States, even those that do *not* involve potential dual use technologies so that the EC and the Panel could evaluate them independently.

37. The EC challenges the validity of the U.S. criteria, arguing that “the United States excluded all research with any kind of relation to space, missiles, engines, or rotorcraft.”⁶¹ However, the list of DoD Contracts (Exhibit US-41) references contracts with such titles as “Rotating Turbomachinery for Cryogenic Rocket Engines,”⁶² “Non-Oxidizing Refractory Composite Tanks and Structures,”⁶³ and “Advanced Ceramic Composites for Turbine Engines.”⁶⁴ The work under these contracts related to space vehicles and engines. Therefore, the EC's concern that the United States excluded all space, missile, engine, or rotorcraft research has no support in the evidence.

5. *The European Communities estimates that through FY 2006, DOD granted \$2.4 billion in financial contributions to Boeing's LCA division through the RDT&E Program (EC FWS, para. 763). We understand this figure to comprise not only "direct R&D funding", but also "federal personnel and research facilities to support the RDT&E Program". What are the respective amounts of each?*

38. In response to this question, the EC concedes that it cannot divide the value of alleged “federal personnel and research facilities to support the RDT&E program” from the value of “direct R&D funding.” This inability merely underscores the complete absence of evidence for its claims that DoD provided personnel and facilities support to Boeing for less than adequate remuneration. After all, if the EC had made a *prima facie* case, it should certainly be able to provide some indication of the size of the alleged benefit.

⁶⁰ US RPQ1, paras. 7-8.

⁶¹ EC RPQ1, para. 22.

⁶² DoD Contract F33615-02-C-5206 (Exhibit US-606).

⁶³ DoD Contract F33615-00-2-3002, p. 18 (Exhibit US-604) (Work covers “Systems such as the Space Operations Vehicle, Space Maneuver Vehicle, VentureStar Reusable Launch Vehicle would all benefit greatly from the potential for reduced system weight made possible by advancements in cryogenic tank technology.”)

⁶⁴ DoD Contract F33615-03-2-5201 (Exhibit US-609).

39. In its second written submission, the EC attempts to support its assertions regarding provision of personnel and facilities by noting that certain DoD contracts for the purchase of RDT&E services allowed the contractor to use DoD facilities to further the supply of those services.⁶⁵ However, as the contractor merely uses any such goods and services to provide services to the government, the government action is providing those goods and services to itself, and not to the contractor.⁶⁶ The EC also attempts to convert the statement that DoD employees “conduct” RDT&E activities into a statement meaning that DoD conducts RDT&E activities *for Boeing*.⁶⁷ The EC forgets, however, that DoD and NASA have large internal staffs of scientists that conduct research *for* their respective agencies, *independent of* contractors.⁶⁸ Thus, the fact that DoD employees “conduct” research is not evidence that they *provide* goods or services *to Boeing*.

40. The failure to separate alleged direct transfers of funds from alleged provision of goods and services (neither of which actually occurred) provides yet another reason to reject CRA’s \$2.4 billion estimate of subsidies allegedly conferred on Boeing.

10. *In its First Written Submission, the European Communities refers to "subsidies", "programmes", and "measures". Does the European Communities use these terms interchangeably?*

41. The United States has no comment on the EC’s response to this question.

11. *At page 14 of its panel request, the European Communities claims that the measures at issue are inconsistent with the provisions of the covered agreements cited therein "as such and as applied".*

(a) *Please specify: (i) which measures the European Communities is challenging "as such"; (ii) which measures the European Communities is challenging "as applied"; and (iii) which measures the European Communities is challenging both "as such" and "as applied".*

(b) *Insofar as the European Communities is challenging certain measures "as such", please explain: (i) what the European Communities means when it states that it is*

⁶⁵ EC SWS, para. 500.

⁶⁶ One such example was stitching machinery supplied to Boeing under NASA contract NAS1-20546, section G.4 (Exhibit EC-324), which was supplied to study the questions posed under that contract, and was not suitable for commercial production. US FWS, para. 231, note 333. Boeing is not using the “stitching” technology studied in the ACAS program on the 787. In fact, when the U.S. Government abandoned the machines in place after the contract, Boeing sold them for scrap. Statement of Michael Bair, para. 55 (Exhibit US-7).

⁶⁷ EC SWS, para. 498.

⁶⁸ US FWS, para. 80.

challenging a measure "as such"; and (ii) how a measure can be inconsistent "as such" with the effects-based disciplines of Part III of the SCM Agreement.

42. The EC's response appears not to answer the question posed by the Panel. Moreover, other than to say that "as such" challenges exist relative to "as applied" challenges, the EC gives no indication of the significance of its use of those terms. The EC's response does not attempt to support its "as such" claims, but rather indicates that the EC does not rely on an "as such" approach. In so doing, the EC's response indicates that it has implicitly abandoned its "as such" claims.

12. *In its First Written Submission, the United States suggests that the European Communities is challenging "future measures".*

(a) *Can the parties explain what they consider to be a "future measure"?*

(b) *Which measures in this dispute (if any) constitute "future measures"?*

43. In response to this question the EC states that a "future measure" is a measure that was "not in existence and/or not committed to at the time the Panel was established."⁶⁹ It then asserts that none of the challenged measures in the dispute are "future measures."⁷⁰ This is not correct. As the United States explained in its responses to this question, the second set of certain Industrial Revenue Bonds ("IRBs") that the City of Wichita, Kansas issued to Spirit Aerosystems, Inc. ("Spirit") are future measures outside the Panel's terms of reference. At the time the Panel was established, the second set of IRBs issued to Spirit were not in existence. Furthermore, any other IRBs that Wichita may issue to Spirit pursuant to new city ordinances that it passes are also future measures.

44. Furthermore, in its response to Panel Question 58, the EC states that it seeks "a final resolution" with regard to whether the Tax Increase Prevention and Reconciliation Act of 2005 ("TIPRA") terminated FSC/ETI benefits.⁷¹ This measure, however, was not enacted until May 17, 2006, five months after the EC requested establishment of a panel, and three months after the DSB established this Panel.⁷² Therefore, TIPRA was a future measure at the time of establishment of this Panel.

15. *In its First Written Submission, the United States argues that the "purchase of services" falls outside of the scope of Article 1.1(a)(1). At paragraph 67 of its Oral Statement, the*

⁶⁹ EC RPQ1, para. 37.

⁷⁰ EC RPQ1, para. 38.

⁷¹ EC RPQ1, para. 203.

⁷² EC Panel Request; Minutes of Meeting Held in the Centre William Rappard on 17 February 2006, WT/DSB/M/205, para. 73 (31 Mar. 2006).

European Communities argues that "[t]he NASA and DOD R&D support at issue is in fact properly characterized as a direct transfer of funds pursuant to Article 1.1(a)(1)(i) of the SCM Agreement, not as a purchase of services."

- (a) *Leaving aside the proper characterization of the NASA and DOD support at issue, does the European Communities agree or disagree with the proposition that any transaction properly characterized as the "purchase of a service" falls outside of the scope of Article 1.1(a)(1)? If the European Communities disagrees with that proposition, please respond to the United States' arguments that: (i) "services are explicitly mentioned with respect to government provisions but not purchases" (US FWS, paragraph 48); (ii) "the final version of the SCM Agreement eliminated an explicit reference to purchase of services contained in earlier drafts" (US FWS, paragraph 48); and (iii) interpreting Article 1.1(a)(1)(i) as covering purchases to the extent that they involve a direct transfer of funds would "would render Article 1.1(a)(1)(iii) inutile" (US FWS, paragraph 218).*

45. In response to this question, the EC posits a number of arguments to avoid the conclusion that transactions properly characterized as purchases of services fall outside the scope of Article 1.1(a)(1) and, therefore, are not financial contributions. Its arguments, however, fail to follow customary rules of public international law for the interpretation of treaties, and result in an interpretation that would render parts of the text inutile.

46. The EC first addresses what it considers to be the ordinary meaning of clause (i) of Article 1.1(a)(1). It argues that the four clauses of Article 1.1(a)(1) define broadly overlapping categories of transactions and concludes that the coverage under clause (i) of a "direct transfer of funds" sweeps in purchases for money, as they typically involve a payment from the buyer to the seller.⁷³ However, this interpretation disregards the context of clause (i), as provided by the remainder of its terms and clause (iii). In addition to defining "a direct transfer of funds" as a financial contribution, clause (i) provides examples: grants, loans, and equity infusions. Thus, the agreement defines types of direct transfers of funds (with different consequences for the benefit analysis under Article 14) based on what the recipient returns to the government – a grant brings nothing in return, a loan a promise to repay (and eventual repayment), and an equity infusion some form of ownership interest in the recipient. The different situation of a transaction involving the exchange of goods or services falls under clause (iii), which covers when the government "purchases goods" as a financial contributions. The explicit listing of "purchases goods" in clause (iii) and the omissions of reference to purchases of any kind in clause (i) demonstrates that "purchases" are not covered by clause (i). In other words, the context provided by clause (iii) demonstrates that clause (i) has a more limited reach than it might be given if it stood alone.

⁷³ EC RPQ1, paras. 40-41.

47. The EC sets out a number of arguments to justify an interpretation of clause (i) “broad”⁷⁴ enough to encompass purchases. None are successful.

48. It notes that clause (i) applies when “a government practice *involves* a direct transfer,” and argues that “involves” gives the clause a broad meaning, encompassing “*any* government practice that includes, contains, or calls for such a transfer.”⁷⁵ However, the breadth of this interpretation is its downfall. As the Panel observed, the United States has pointed out that an interpretation of “direct transfers of funds” to include purchases would reduce the reference to purchases in clause (iii) to inutility. The EC attempts to escape this conclusion by arguing that it is possible to interpret clause (i) as capturing only purchases for money, leaving in-kind purchases of goods covered only by “purchases of goods” under clause (iii), which would give residual content to “purchases of goods.” However, the EC fails to acknowledge the import of its own arguments. In-kind purchase of goods would involve the provision by the government of one set of goods in exchange for the recipient providing another set of goods, or perhaps a service. However, both of these transactions are also provisions of goods or provisions of services. Thus, even under the EC theory, the inclusion of purchases of goods in clause (iii) would be superfluous because all of purchases of goods could be covered either under clause (i) for purchases for money or as the *provision* of goods or *provision* of services under the first part of clause (iii), which would therefore be inutile.⁷⁶

49. An expansive reading of clause (i) would also render part of clause (iv) inutile. That clause provides that a financial contribution exists “when a government makes payments to a funding mechanism.” If the word “involves” in clause (i) broadened its meaning, as the EC believes, it would just as readily capture the entirety of the money flow in a funding mechanism transaction. After all, the sequence envisaged of Government payment to funding mechanism, then funding mechanism payment to recipient would certainly “involve a direct transfer of funds” from the government, within the broad meaning given to “involves” by the EC. This is not a theoretical problem. In response to Panel Question 3(b), the EC uses its new loose interpretation of “direct transfers” under clause (i) to justify treating U.S. government contractors’ payments to their suppliers as “direct transfers” from the government, even though it concedes that there is no payment directly from the government to the supplier.⁷⁷

⁷⁴ EC RPQ1, para. 42.

⁷⁵ EC RPQ1, para. 42.

⁷⁶ The EC also posits a transaction in which the government purchases goods in exchange for a commitment to afford preferential treatment in the future. EC RPQ1, para. 47. It gives no real world example of such transactions, but appears to consider that they fall within the category of revenue foregone. EC RPQ1, para. 52. Under the EC’s theory, this type of transaction would be covered under clause (ii) and, therefore, would not save the reference to purchases of goods in clause (iii) from inutility.

⁷⁷ EC RPQ1, para. 17.

50. The EC tries to build support for its broad reading of clause (i) by arguing that it is possible for certain measures to fall under multiple clauses of Article 1.1(a)(1). The only example it gives is an equity infusion, which the EC asserts can be treated as either an “equity infusion” under clause (i) or a purchase of goods under clause (iii) based on the Appellate Body’s finding that ownership rights can be treated as goods.⁷⁸ The EC misunderstands. The context of Article 14, which provides separate benefit valuation standards for equity infusions and purchases of goods in subparagraphs (a) and (d), indicates that equity infusions are not interchangeable with purchases of goods. The EC tries to build credence for its “broad” interpretation by asserting that the *Japan – DRAMs CVDs* panel noted that “certain . . . transactions might be covered simultaneously by different sub-paragraphs of Article 1.1(a)(1).”⁷⁹ However, the EC’s quotation left out key caveats. What the panel actually stated was that “*we do not exclude that certain . . . transactions might be covered simultaneously*”⁸⁰ – scarcely the endorsement the EC seeks to convey. In fact, the *Japan – DRAMs CVDs* panel’s next sentence state that “{t}he issue before us, though, is *not* whether loan repayment terms and debt-to-equity swaps might also be treated, for example, as government revenue foregone.”⁸¹ In other words, the panel never even considered the issue for which the EC cites it as authority.

51. The EC also seeks contextual support for its interpretation by reference to Article 8.2(a), which sets out a list of non-actionable subsidies. Nothing in this list suggests a meaning of the term “subsidy” that is broader than the meaning under Article 1. The EC asserts that a reference to “assistance for research activities conducted by firms or by higher education or research establishments on a contract basis with firms” means that “government support of R&D on a contract basis is a ‘subsidy.’”⁸² The EC fails to recognize that Article 8.2 addresses only research conducted by firms, universities, or research establishments under contract *with firms*. In other words, the assistance in question is not “government support on a contract basis,” but support from the government to an entity that is conducting research activities under contract with a firm. That would not be a purchase of services for the government, but aid for a research entity that is working for an alleged subsidy recipient. Therefore, Article 8.2 is not relevant to the question whether purchases of services by the government for the government are financial contributions.

52. The EC argues that interpreting Article 1.1(a)(1) to exclude some types of financial transaction would be contrary to the object and purpose of the *SCM Agreement*, which two

⁷⁸ EC RPQ1, para. 46.

⁷⁹ EC RPQ1, para. 45, quoting *Japan – DRAMs CVDs*, para. 7.439.

⁸⁰ *Japan – DRAMs CVDs*, para. 7.439.

⁸¹ *Japan – DRAMs CVDs*, para. 7.439.

⁸² EC RPQ1, para. 49.

panels have described as to “impose multilateral disciplines on subsidies which distort international trade.”⁸³ However, the EC disregards two *Appellate Body* findings that:

the object and purpose of the *SCM Agreement* . . . reflects a delicate balance between the Members that sought to impose more disciplines on the use of subsidies and those that sought to impose more disciplines on the application of countervailing measures. Indeed, the Appellate Body has said that the object and purpose of the *SCM Agreement* is to “strengthen and improve GATT disciplines relating to the use of both subsidies and countervailing measures, while recognizing, at the same time, the right of Members to impose such measures under certain conditions.”⁸⁴

Thus, while disciplines on subsidies are certainly part of the object and purpose of the *SCM Agreement*, so are the limitations on those disciplines, which allow Members to engage in certain types of government activities outside of the *SCM Agreement*. Indeed, the same reports noted further that

“not all government measures capable of conferring benefits would necessarily fall within Article 1.1(a)”, otherwise paragraphs (i) through (iv) of Article 1.1(a) would not be necessary “because all government measures conferring benefits, *per se*, would be subsidies.”⁸⁵

The panel in *US – Export Restraints* observed that the negotiating history supports the conclusion that the definition of “financial contribution” was *meant* to exclude some measures from the disciplines of the *SCM Agreement*:

Obviously, Article 1 as ultimately adopted incorporates the requirement of a financial contribution by a government or other public body as a necessary element of a subsidy. The submissions by participants to the negotiations suggest that the proponents’ purpose behind including this element was to limit the kinds of government actions that could fall within the scope of the subsidy and countervailing measure rules.⁸⁶

⁸³ EC RPQ1, para. 50, quoting *Brazil Aircraft*, para. 7.26.

⁸⁴ *US – DRAMs CVDs (AB)*, para. 115, quoting *US – Softwood Lumber IV (AB)*, para. 64.

⁸⁵ *US – DRAMs CVDs (AB)*, para. 114, quoting *US – Softwood Lumber IV (AB)*, para. 52, note 35.

⁸⁶ *US – Export Restraints*, para. 8.69.

Thus, the EC misconstrues the object and purpose of the SCM Agreement when it argues for reading the terms of Article 1.1(a)(1) broadly so as to capture as many transactions as possible. Properly understood, the full object and purpose of the Agreement supports an interpretation of Article 1.1(a)(1) giving effect to the Members' decision that some transactions *are* outside of the scope of Article 1, because “not all government measures capable of conferring benefits would necessarily fall within Article 1.1(a).”⁸⁷ The text establishes that purchases of services are one such type of transaction.

53. It may be that some government purchases of services, just like general infrastructure or non-specific subsidies, would “distort international trade in goods.”⁸⁸ (The EC has not established that this is the case with the U.S. measures it challenges.) If so, they are types of distortions that the Members decided the SCM Agreement would not address. Enforcing the meaning of the text does not create an “enormous loophole,” as the EC asserts. As the Panel notes, only transactions “properly characterized as the purchase of a service” would be outside the scope of Article 1.1(a)(1), as provided by the SCM Agreement. Transactions that were not properly characterized as the purchase of a service would remain subject to the disciplines of the Agreement.⁸⁹

54. The United States considers the exclusion of services from the scope of Article 1.1(a)(1) to be unambiguous, and that reference to negotiating history under Article 32 of the Vienna Convention is, therefore, unnecessary. In any event, as the United States has observed, the negotiating history only serves to confirm the conclusion reached above. The explicit references to purchases of services in early drafts of the definition of financial contribution indicate that the negotiators considered a specific inclusion to be necessary for coverage of purchases of services. The exclusion from later drafts signals exclusion from the scope.⁹⁰

55. The EC seeks to avoid this conclusion by positing alternative motives for the deletion of purchases of services. None is supported by textual or other evidence. Speculation (which is all that the EC provides) is not negotiating history. The EC first hypothesizes that the negotiators wished “to clarify that the *SCM Agreement* does not discipline subsidies that exclusively distort trade in services.”⁹¹ However, excluding purchases of services does not convey this meaning, as the negotiators retained other types of financial contributions, which could just as easily exclusively distort trade in services. In addition, one would think that if the negotiators sought to “clarify” the complete exclusion of subsidies to services, they would pick a less oblique textual

⁸⁷ *US – DRAMs CVDs (AB)*, para. 114, quoting *US – Softwood Lumber IV (AB)*, para. 52, note 35.

⁸⁸ EC RPQ1, pars. 50-51.

⁸⁹ The United States addressed this point at greater length in its response to Panel Question 17.

⁹⁰ Compare Draft Text by the Chairman, MTN.GNG/NG10/W/38/Rev.2, Art. 1.1(a)(1)(iii) (2 November 1990) with Draft Text by the Chairman, MTN.GNG/NG10/W/38/Rev.3, Art. 1.1(a)(1)(iii) (6 November 1990).

⁹¹ EC RPQ1, para. 52.

device. The EC then speculates that the negotiators sought to be clear that the SCM Agreement applies only to those purchases of services that fall within other clauses of Article 1.1(a)(1).⁹² However, the EC never explains why the negotiators would seek such a result for purchases of services, but not purchases of goods. Thus, the only defensible conclusion is the one that emerges from a review of the succession of drafts – that the negotiators deleted the explicit reference to purchases of services because they intended that those purchases not be treated as a financial contribution.

56. In sum, the EC has failed to show that the text of the SCM Agreement permits treating purchases of services as a financial contribution. Therefore, the purchases of RDT&E services by DoD and R&D services by NASA are not subsidies.

(b) *Assuming that any transaction properly characterized as the "purchase of a service" does fall outside of the scope of Article 1.1(a)(1), when should a transaction be characterized as the "purchase of a service"? In other words, assuming that the "purchase of services" is excluded from the scope of the SCM Agreement, what types of transactions would in theory constitute the "purchase of a service"?*

57. In response to this question, the EC proposes a set of four “elements” for evaluating whether a transaction constitutes a purchase of a service. It provides no explanation linking these elements to the text of the Agreement. In fact, they would do little to advance the inquiry envisaged by this question.

58. To begin with, under customary rules of public international law for the interpretation of treaties, the ordinary meaning of the relevant terms, in their context and in light of the object and purpose of the agreement, would determine the scope of Article 1.1(a)(1), including the meaning of a purchase of a service not within the scope. The U.S. first written submission established that the ordinary meaning of purchase, in its context, means a payment (of money or in kind) provided as compensation for acquiring or buying something.⁹³ Therefore, a purchase of a service would be the conferral of something of value in exchange for the recipient supplying a service.⁹⁴ The United States also established that the ordinary meaning of “service” is “[t]he sector of the economy that supplies the needs of the consumer but produces no tangible goods, as banking or tourism.”⁹⁵ The United States considers that negotiating documents like the Services Sectoral Classification List,⁹⁶ international classifications schemes, such as the United Nations

⁹² EC RPQ1, para. 52.

⁹³ US FWS, paras. 44-45.

⁹⁴ US FWS, para. 48.

⁹⁵ US FWS, para. 94.

⁹⁶ Services Sectoral Classification List, MTN.GNS/W/120 (10 July 1991).

Provisional Central Product Classification, the U.S. Federal Service Classification Code, or the EC's "Common Procurement Vocabulary" may provide guidance as to whether an activity is a service.⁹⁷

59. The EC has not challenged either of these conclusions. Instead, it dispenses entirely with a consideration of the terms of the agreement, their ordinary meanings, or their context, and simply announces four "elements" that in its view "would have to be examined."⁹⁸ These "elements" do not appear in the text of the SCM Agreement, and even a cursory examination shows that Members would have needed to negotiate long and in detail before embracing any of them. The only reference the EC makes to the SCM Agreement in its argument is to attempt to link one "element" to the object and purpose of the agreement, which the EC misstates.⁹⁹ Unsurprisingly, the analysis the EC proposes is irrelevant to determining whether a transaction is a "purchase of a service" for purposes of Article 1.1(a)(1)(iii).

60. The first element proposed by the EC is "does the transaction ultimately aim at the acquisition of a service for the direct benefit and own use of the government." Although the EC never explains what it means by "ultimately aim," its response to question 5(c) suggests that this criterion would involve an inquiry into whether the "purpose" of the Member in question was the "direct benefit and own use of the government." However, Article 1.1(a)(1)(iii) frames its standard in terms of *what* the government does (namely, purchase a good or provide a good or service) and not *why* the government did so. For example, the government may pay private firms to devise contingency plans for the government (or its citizens) to deal with potential emergencies. Or the government may pay firms to research disease prevention techniques that enhance the health of its citizens or of foreign nationals. These are all services purchased by the government, even if the government itself will not use the service itself.

61. The second element proposed by the EC is "does the transaction have the typical elements of a purchase." The obvious circularity of this standard makes it highly problematic as a legal standard. The EC worsens the problem by failing to provide any indication of how it proposes to identify what is "typical" or what is an "element." The two examples it gives merely serve to demonstrate that this standard is unworkable. For example, "transfer of the entirety of the fruits of the service to the purchaser" *might* be an element to a purchase, depending on what the phrase means. However, if the purchaser could reduce its costs by buying only *some* of the fruits of the service and leaving the rest for another purchaser, or for the service supplier itself, that arrangement could still be an element of a purchase.

62. The third element proposed by the EC is "does the transaction exclusively affect trade in services." Nothing in the text of Article 1.1(a)(1)(iii) supports such a standard, and the EC cites

⁹⁷ US FWS, para. 95.

⁹⁸ EC RPQ1, para. 54.

⁹⁹ EC RPQ1, para. 57.

none. In fact, clause (iii) does not frame its definitions in terms of exclusivity. It uses objective terms – “purchase,” “provision,” “good,” and “service.” What matters is whether the transaction in question – not some hypothetical other activity that it might “affect” – is in substance purchase of a good, in which case it is a financial contribution, or a purchase of a service, in which case it is not a financial contribution. The EC asserts, without citation to any authority, that “the object and purpose of the *SCM Agreement* requires that transactions that distort international trade in goods fall with the scope of Article 1.1(a)(1).”¹⁰⁰ However, this assertion directly contradicts the Appellate Body’s articulation of the object and purpose of the *SCM Agreement* as “to “strengthen and improve GATT disciplines relating to the use of both subsidies and countervailing measures, while recognizing, at the same time, the right of Members to impose such measures under certain conditions.”¹⁰¹ (The U.S. comments above with regard to Panel Question 15(a) address this point in more detail.) In any event, it is unlikely that any purchase could meet the EC’s “exclusively affect” standard. At some point most measures affecting services also affect goods, and *vice versa*. To use the EC’s example of government purchase of legal services related to the constitutionality of legislation, it is likely that the legislation will have *some* effect on goods, which, under the EC standard, would preclude treatment as the purchase of services.

63. The fourth element proposed by the EC is “is the service rendered by a genuine service provider.” Once again, nothing in the text supports this standard. In fact, Article 1.1(a)(1)(iii) does not even mention the supplier of the service (or the good) purchased by the government. As a conceptual matter, however, manufacturers often supply services tangential to core goods trade. They may wholesale or retail their products. They may provide transportation to customers’ places of business. A large enterprise like Boeing has entire units devoted to supplying services.¹⁰²

64. In conclusion, the “elements” that the EC asserts “would have to be examined” are, in fact, irrelevant to an evaluation of whether a transaction is a purchase of a service for purposes of Article 1.1(a)(1)(iii). They have no basis in the text of the *SCM Agreement*, no support in evidence, and no relationship to the substantive question of whether a transaction is a purchase of services.

¹⁰⁰ EC RPQ1, para. 57.

¹⁰¹ *US – DRAMs CVDs(AB)*, para. 115, quoting *US – Softwood Lumber IV (AB)*, para. 64.

¹⁰² *E.g.*, The Boeing Company, 2006 Annual Report, p. 77 (“Our BCC segment is primarily engaged in supporting our major operating units by facilitating, arranging, structuring and providing selective financing solutions to our customers and managing our overall financial exposures.”) (Exhibit US-126). In addition, Boeing’s Commercial Aviation Systems unit “provides airline business solutions that help improve efficiency with digital productivity tools, product and industry expertise and the power of aviation’s leading integrated supply chain.” Boeing, Lifecycle Solutions and Support (Exhibit US-1217).

- (c) Please explain, on the basis of the European Communities' answers to questions (a) and (b) above, why the support at issue should not be characterized as the "purchase of a service".

65. As the EC criteria have no basis in the text of the agreement, no support in evidence, and no relationship to the substantive question of whether a transaction is a purchase of services, there is not much utility to applying them to the facts of this dispute. We do feel obliged to correct several misstatements in the EC analysis:

- NASA's purchases of research services from Boeing are ultimately used by NASA and the U.S. government to advance the agency objective of the expansion of human knowledge of the Earth and of phenomena in the atmosphere and space and the improvement of the usefulness, performance, speed, safety, and efficiency of aeronautical vehicles.¹⁰³ They also provide knowledge relevant to the functions of other government agencies, including the Federal Aviation Administration and DoD.¹⁰⁴
- Services performed under DoD RDT&E contracts may lead to development of a weapons system, to improvements to an existing system, to improvements to services performed by or for DoD, or to greater knowledge about scientific principles. Thus, it is impossible to generalize that these contracts have purchase of goods as their "ultimate purpose."¹⁰⁵ In fact, many are not directly related to particular products.
- Purchases of services under DoD RDT&E contracts cannot be divided into a "portion" that has military utility and a "portion" that has civil utility. Each contract establishes a set of objectives and steps the contractor must take to reach those objectives.¹⁰⁶ Even where there is a "dual use" for a resulting technology, that means that it has concurrent uses in the civil and military sectors, not that the technology (or the R&D service that produced it) can be divided into separate military and civil "portions."

¹⁰³ US SWS, para. 67.

¹⁰⁴ US SWS, para. 68.

¹⁰⁵ EC RPQ1, para. 62.

¹⁰⁶ E.g. DoD Contract F33615-93-C-4334 (Large Composite Structure – Commercial/Military Integration), pp. 4-6 (May 31, 1994) (Exhibit EC-510). The EC cites this contract as an example of "dual use" technology. In fact, it is clear that the effort aims "to migrate positive change throughout the Department of Defense (DOD) and the commercial sector by encouraging the use of 'dual use' commercial processes, practices, and factories." *Ibid.*, p. 2 (emphasis added). Thus, it is bringing commercial techniques into the military sector, and not the other way around. It is a single R&D project – there are neither separate civil and military tasks nor civil and military results.

- DoD buys weapons systems that are based on large civil aircraft airframes.¹⁰⁷
- Boeing does offer services to customers other than the government, including financing services and lifecycle solution and support services.¹⁰⁸

16. *At paragraph 457 of its First Written Submission, the European Communities asserts that "NASA and DOD generally provide funding for LCA-related R&D through what they call "contracts," but what are in reality "grants" to Boeing/MD for LCA-related R&D expenses." At paragraph 69 of its Oral Statement, the European Communities states that the United States' characterization of NASA R&D contracts as purchases of services "is in fact a sham". What does the European Communities mean by its assertion that the United States' characterization of NASA R&D contracts as purchases of services "is in fact a sham"?*

66. In its response to this question, the EC appears to ask the Panel to find that, because the EC provides R&D grants to Airbus, the United States must do the same for Boeing. Although the EC has conceded elsewhere that the particular form of EC Framework Program funding it provides to Airbus is a grant under Article 1.1(a)(1)(i), that concession does not constitute evidence that the fundamentally different NASA measures before the Panel in this case are likewise grants.¹⁰⁹ Similarly, the EC's characterization of how "governments all over the world" fund R&D, for which it has provided absolutely no evidence, is irrelevant to the legal question before the Panel in this dispute – whether NASA R&D measures are appropriately characterized as purchases of services.

67. In this dispute, the EC has agreed with the United States that "{w}hat counts is the substance of the transaction, not its form."¹¹⁰ The United States has demonstrated that the substance of the transactions between NASA and Boeing constitute government purchases of services. In particular, the United States has demonstrated that in exchange for payment, the U.S. government receives the R&D services it requests, the results of that R&D, and licenses to use the resulting data and inventions for the purposes for which the R&D services were

¹⁰⁷ For example, the EC panel request references the Airborne Warning and Control System ("AWACS") aircraft and Multi-Mission Aircraft (now known as the "P-8"), both aircraft made by starting with an unfinished civil airframe and "militarizing" it by adding military technologies. The EC did not pursue its claims with regard to these aircraft.

¹⁰⁸ E.g., The Boeing Company, 2006 Annual Report, p. 77 ("Our BCC segment is primarily engaged in supporting our major operating units by facilitating, arranging, structuring and providing selective financing solutions to our customers and managing our overall financial exposures.") (Exhibit US-126); Boeing, Lifecycle Solutions and Support (Exhibit US-1217).

¹⁰⁹ The United States notes that because the EC has conceded in DS316 that funding provided to Airbus under the EC Framework Program constitutes a grant, the Panel hearing that dispute is not called upon to make findings as to when a measure constitutes a government purchase.

¹¹⁰ EC RPQ1, para 74.

purchased – namely, dissemination and internal government use.¹¹¹ The EC does not dispute these facts.

68. As the EC itself recognizes in its response, the substance of the EC-Airbus transaction under the EC Framework programs is fundamentally different than the substance of the transaction that occurs under a NASA R&D contract. Specifically, the EC states that companies receiving Framework funding “own the research results and intellectual property rights, and must in exchange provide the Commission with a number of reports on the progress and conclusions of their work.”¹¹² Importantly, however, the government (the EC) does not obtain the intellectual property rights that would allow it to *use* what it receives in exchange for its funds.

69. Consider, for example, the difference in how the EC and United States governments have approached the study of composites use in aircraft structures. Under the Fifth Framework Programme, the EC provided funding to an Airbus-led consortium for the TANGO (Technology Application to Near-term Business Goals and Objectives of the Aerospace Industry) project to study and construct composite lateral and center wing boxes and a composite fuselage section, as well as to develop new design and testing methodologies.¹¹³ As the EC acknowledged, the Airbus-led consortia owns any data and inventions made with the government funding, and the EC receives no license in the intellectual property.¹¹⁴ By contrast, under the Advanced Composites Technology program, NASA paid Boeing and McDonnell Douglas (which subcontracted work packages to a broad group of other aerospace companies) to perform fundamental R&D to solve difficult aerospace technology issues, and not to achieve specific, near-term business-related objectives for Boeing or any other company. NASA received unlimited rights in the data developed and a royalty-free license in all inventions made with its funding¹¹⁵ and sought to disseminate data as widely as possible.

¹¹¹ US SWS, paras. 62-64.

¹¹² EC RPQ1, para. 70

¹¹³ “Getting advanced aircraft technologies off the ground” (July 6, 2001) at <http://ec.europa.eu/research/growth/gcc/projects/in-action-tango.html> and Poster 1 and 2 (April 1, 2000) (Exhibit US-1218).

¹¹⁴ EC RPQ1, para. 70 and COUNCIL DECISION of 22 December 1998 concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the fifth framework programme of the European Community (1998-2002), Art. 15, (knowledge resulting from “actions the full cost of which is not borne by the Community shall, as a general rule, be the property of the contractors who have carried out the work”) available at <ftp://ftp.cordis.europa.eu/pub/fp5/docs/en-ec-r.pdf> (Exhibit US-1219).

¹¹⁵ Contract NAS1-18889, Section H-5 and Section I (incorporating Rights in Data clause at FAR 18-52.227-14 and New Technology clause at FAR 18-52,227-70) (Exhibit EC-329). Section H-9 (For Early Domestic Distribution) prohibits the contractor (Boeing) from disseminating certain data outside of the United States for 2 years after publication, although the U.S. government reserves the right to release the data to foreign governments for fulfillment of Government purposes.

70. As noted above, NASA's purchases include, importantly, the right to use what it purchases. In its response to the Panel's question, the EC repeats its argument that challenged NASA-Boeing transactions are not purchases on the theory that NASA has "no use for the 'services' because it is not engaged in LCA manufacture".¹¹⁶ The addition of the fact that the EC also does not manufacture LCA does not make the argument any more relevant to the determination of whether the NASA-Boeing transaction is a purchase. As the United States has previously discussed, the question of whether a transaction constitutes a government purchase cannot turn on whether the government has a commercial use for what it purchases; otherwise, most government purchases (*e.g.*, purchases of services made for the administration of social security) would automatically become grants.¹¹⁷

71. Moreover, the United States has not argued that NASA purchases R&D services from Boeing for the purpose of manufacturing LCA; rather, NASA purchases R&D services from Boeing for the purpose of carrying out its government functions, which include: "the improvement of the usefulness, performance, speed, safety, and efficiency of aeronautical and space vehicles"; "the making available to agencies directly concerned with national defense of discoveries that have military value or significance, and the furnishing by such agencies, to the civilian agency established to direct and control nonmilitary aeronautical and space activities, of information as to discoveries which have value or significance to that agency"; and "the establishment of long-range studies of the potential benefits to be gained from, the opportunities for, and the problems involved in the utilization of aeronautical and space activities for peaceful and scientific purposes."¹¹⁸ And the United States has demonstrated that the results of the R&D purchased from Boeing were used by the U.S. government for these purposes, *i.e.*, as the basis for NASA, DoD, and FAA research, product development and regulation, as well as wide dissemination (and frequent citation by academic and industry scientists and engineers working around the globe) of raw research results, interim findings and final reports through conferences, peer-reviewed journals and the internet.¹¹⁹

19. *At paragraph 67 of its Oral Statement, the European Communities argues that the NASA and DOD R&D support at issue is in fact properly characterized as a "direct transfer of funds" and not as a purchase of services because "the true purpose of these programmes is to convey resources to Boeing to promote the development of LCA-related or dual-use technologies" (emphasis added). Should a determination of whether or not the NASA and DOD R&D support at issue is in fact properly characterized as a "direct transfer of funds", as opposed to the "purchase of services", be undertaken at the level of:*

¹¹⁶ EC RPQ1, para 70.

¹¹⁷ US RPQ1, para 77.

¹¹⁸ Space Act of 1958, Section 102(d) (Exhibit EC-268).

¹¹⁹ US SWS, paras. 64, 67-68.

- (a) *the purpose of the those programmes at issue;*
- (b) *the types of instruments through which payments and other funding were made;
or*
- (c) *the terms of each individual contract?*

72. As an initial point, the United States disagrees with the EC's premise that a "purchase of services" can be analyzed under Article 1.1(a)(1)(i) as a "direct transfer of funds." Our comments on the EC's response to Panel Question 15 lay out the errors with the EC's reasoning in greater detail.

73. As the United States explained in its response to this question, the appropriate level at which to determine the existence of a financial contribution is a fact-specific inquiry that requires an examination of the substance of the particular alleged subsidies.¹²⁰ The EC appears to agree with this conclusion. In arguing against an analysis of a financial contribution at the level of the types of instruments involved, it states, "{w}hat counts is the substance of the transaction, not the form."¹²¹

74. Yet, the EC has failed to look to the substance of the alleged subsidies. The EC does not address subparagraph (a) as posed by the Panel but, instead, simply states that "a determination of the issues needs to be undertaken at the program level." It adds that an analysis at "the level of the terms of each individual contract" is also needed. The Panel should note that the EC has not performed either of these analyses. At the program level, it has merely quoted snippets of statements out of context in an attempt to devise a "purpose" for each program, without addressing how the programs actually operate. At the contract level, the EC has simply ignored the individual documents other than as sources for quotations that supposedly support its assertion as to the "purpose" of the program in question.¹²²

75. As the United States has explained, there is sufficient uniformity among the individual DoD and NASA contracts to permit an evaluation of whether they convey a financial

¹²⁰ US RPQ1, paras. 43-44.

¹²¹ EC RPQ1, para. 74. The EC's response to Question 19 references its answer to Question 20. EC RPQ1, para. 73.

¹²² This is not, as the EC would have the Panel believe, a question of whether the United States submitted contracts or cited them with precision. The EC also ignores the terms of the contracts in its possession, which it submitted with its own first written submission. *E.g.* Air Force Contract F33615-97-2-3400 with Boeing regarding Next Generation Transparency, 16 July 1997 (Exhibit EC-406). The United States first written submission demonstrated that those documents were purchases of services that yielded valuable research for the government, thereby disproving the EC assertions that DoD contracts for alleged dual use technology were grants for which the government received nothing in return. US FWS, paras. 91-92 and 101-102. The EC has not yet addressed this evidence.

contribution.¹²³ The EC, however, rejects a consideration of the types of payments instrument as “too formalistic to guide the analysis.”¹²⁴ It is difficult to square this position with the EC view that the terms of the contracts are relevant, since under the U.S. system, the type of instrument will determine which contract clauses are available. Furthermore, the United States has not rested on formalistic distinctions. Rather, the United States has urged the Panel to look to the substance of the cooperative agreements and Other Transaction Agreements, which demonstrates that they are, in fact, purchases of services for purposes of Article 1.1(a)(1).¹²⁵

20. At footnotes 75 and 100 of its First Written Submission, the United States makes reference to the differences between different types of instruments used US government procurement law, including “procurement contracts” and “cooperative agreements”. 32 C.F.R. §22.205 (Exhibit US-22) reads in part:

“§ 22.205 Distinguishing assistance from procurement.

Before using a grant or cooperative agreement, the grants officer shall make a positive judgment that an assistance instrument, rather than a procurement contract, is the appropriate instrument, based on the following:

(a) *Purpose.* (1) The grants officer must judge that the principal purpose of the activity to be carried out under the instrument is to stimulate or support a public purpose (i.e., to provide assistance), rather than acquisition (i.e., to acquire goods and services for the direct benefit of the United States Government). If the principal purpose is acquisition, then the grants officer shall judge that a procurement contract is the appropriate instrument, in accordance with 31 U.S.C. chapter 63 (“Using Procurement Contracts and Grant and Cooperative Agreements”). [...]” (emphasis added)

48 C.F.R. §35.005(a) (Exhibit US-23) provides, along the same lines, that:

“(a) Use of contracts. Contracts shall be used only when the principal purpose is the acquisition of supplies or services for the direct benefit or use of the Federal Government. Grants or cooperative agreements should be used when the principal purpose of the transaction is to stimulate or support research and development for another public purpose.” (emphasis added)

Finally, §1260.12(f)(1) of the NASA Grant and Cooperate Agreement Handbook (Exhibit US-94) provides, again along the same lines, that:

¹²³ US RPQ1, para. 44

¹²⁴ EC RPQ1, para. 73.

¹²⁵ US RPQ1, para. 45.

"(1) The decision whether to use a contract, grant or cooperative agreement as an award instrument must be based on the principal purpose of the relationship. When NASA, within its authority, enters into a transaction where the principal purpose is to accomplish a public purpose of support or stimulation authorized by Federal statute, a grant or a cooperative agreement is the appropriate instrument. Conversely, if the principal purpose of a transaction is to accomplish a NASA requirement, i.e., to produce something for NASA's own use, a procurement contract is the appropriate instrument. Two essential questions must be asked to ensure that a grant or cooperative agreement is the appropriate instrument. The first question is: Will NASA be directly harmed in furthering a specific NASA mission requirement if the effort is not accomplished? The answer to this question must be "no." The second question is: Is the work being performed by the recipient primarily for its own purposes, which NASA is merely supporting with financial or other assistance? The answer to this question must be "yes." If these criteria are met, then the effort is not a NASA requirement, and can then be considered as to whether it supports or stimulates a public purpose."¹²⁶ (emphasis added)

In light of the foregoing:

- (a) To the United States: For the purpose of determining whether certain NASA/DOD R&D funding involved a purchase of services, what is the relevance, if any, of whether that funding was provided under a "procurement contract" as opposed to a "cooperative agreement"? Could the United States please explain how payments and other funding provided to Boeing under "cooperative agreements" or other "assistance instruments" constitute the "purchase of a service" for the purpose of Article 1.1(a)(1)?
- (b) To the European Communities: For the purpose of determining whether certain NASA/DOD R&D funding involved a purchase of services, what is the relevance, if any, of whether that funding was provided under a "procurement contract" as opposed to a "cooperative agreement"? Could the European Communities please explain how payments to Boeing under "procurement contracts" constitute "grants" within the meaning of Article 1.1(a)(1)(i)?

76. The United States agrees with the EC that the substance of the transaction must guide the analysis of whether it provides a financial contribution and, if so, what kind. However, the EC fails to recognize that the type of vehicle (that is, cooperative agreement, procurement contract, or Other Transaction) used will determine some of the substantive features of the contract. For example, a cooperative agreement can never provide a "fee" (which precludes any profit

¹²⁶ See <http://ec.msfc.nasa.gov/hq/grcover.htm> [last visited 6 November 2007].

element), but allows the U.S. government to require formal contributions of resources by the private party.¹²⁷

77. In its response, the EC accuses NASA of illegally treating its transactions with Boeing as procurement contracts when they should have been treated as grants or cooperative agreements. It provides *no* support for this assertion. In fact, the NASA R&D contracts were acquisitions of services to advance the agency’s missions to develop and disseminate scientific knowledge.¹²⁸ By contrast, Space Act Agreements were used to provide services in exchange for adequate remuneration.¹²⁹

21. *Is there a market benchmark against which the terms of any financial contributions provided to Boeing under NASA/DOD R&D programs could be compared for the purpose of determining whether those financial contributions conferred a "benefit" within the meaning of Article 1.1(b)?*

78. In its response to this question, the EC puts forward four principles that it asserts are “the terms of a commercial transaction in which one entity pays another entity to conduct R&D.” Namely, in the EC’s view, a commercial entity would:

- “{p}ay for R&D only when it plans to actually utilize the technology”;
- “pay for R&D that is within its own interest, but not for R&D that is of primary benefit to the company performing the R&D;”
- pay for R&D “in order to obtain the full rights to the technologies that result;” and
- would not allow “the entity performing the R&D . . . to keep and utilize the technology for itself without negotiating some form of compensation in return.”¹³⁰

As support for these assertions, the EC cites only two segments of its second written submission, paragraphs 374-382 and 470-486. The only *evidence* cited (as opposed to arguments advanced) in these segments consists of two citations to the Declaration of Regina Dieu and two citations to an article by Sean O’Connor on intellectual property rights in the biotechnology industry.¹³¹

¹²⁷ US RPQ1, paras. 49-50, *citing* 32 C.F.R. §§ 34.13(a) and 34.18(a) (Exhibits US-1203 and US-1204).

¹²⁸ The U.S. comment on the EC’s response to Panel Question 16 discusses this point in greater detail.

¹²⁹ US FWS, paras. 230-261 and US RPQ1, para. 39.

¹³⁰ EC RPQ1, para. 76.

¹³¹ EC SWS, para. 376, notes 620 and 621 and para. 483, note 793.

79. As an initial point, the United States questions whether the sources cited by the EC in response to this question establish a benchmark of any kind. Both provide only generalized narrative descriptions of commercial practice in limited situations. Mme. Dieu's seven years at Airbus¹³² scarcely make her an authoritative source from which to generalize about the contracting practice of all commercial entities in the United States. As for the O'Connor article, its title, "Intellectual Property Rights and Stem Cell Research: Who Owns the Medical Breakthroughs" – recognizes that its conclusions are limited to a niche field, and that it offers no answer to the question of intellectual property ownership.¹³³ Moreover, O'Connor discusses no particular transaction, but rather offers a broad generalization about the competing claims that may be made on ownership of intellectual property rights where stem cell research is funded by multiple sources. These highly limited descriptions do not provide sufficient detail about the transactions involved to serve as a "benchmark" for the evaluating the purchase of RDT&E or R&D services by DoD or NASA.

80. In any event, the O'Connor article does not support the propositions put forward by the EC. It offers no support for any of the "principles" of R&D purchasing asserted by the EC. In fact, Professor O'Connor asserts only that commercial entities "rarely sponsor research without requiring assignment of any resultant IP."¹³⁴ This single sentence is an extremely broad characterization of a complex concept. "Assignment" may involve all rights, some rights, or only those rights the purchaser needs. Professor O'Connor's subsequent analysis makes clear that commercial entities that fund research often get less than full ownership rights. For example, when the researcher receives funding from several sources, it "has to bring the affected parties to the table and hope that they will be able to reach a negotiated compromise."¹³⁵ If one of those funding sources is the government, "the university will not be able to assign free and clear title to resultant IP in advance."¹³⁶ In short, even in the area of stem cell research, commercial firms purchasing research services may accept less than full rights – exactly the result the EC is arguing that they would never tolerate.

81. In its answer to Panel Question 22, the EC also references its citation to another academic article, this one by Rochelle Cooper Dreyfuss entitled "Collaborative Research: Conflicts on

¹³² Dieu Declaration, para. 1 (Exhibit EC-1178).

¹³³ Sean M. O'Connor, "Intellectual Property Rights and Stem Cell Research: Who Owns the Medical Breakthroughs?" 39 *New England L. Rev.* 665 (Exhibit EC-1212).

¹³⁴ Sean M. O'Connor, "Intellectual Property Rights and Stem Cell Research: Who Owns the Medical Breakthroughs?" 39 *New England L. Rev.* 665, 669 (Exhibit EC-1212).

¹³⁵ Sean M. O'Connor, "Intellectual Property Rights and Stem Cell Research: Who Owns the Medical Breakthroughs?" 39 *New England L. Rev.* 665, 669 (Exhibit EC-1212).

¹³⁶ Sean M. O'Connor, "Intellectual Property Rights and Stem Cell Research: Who Owns the Medical Breakthroughs?" 39 *New England L. Rev.* 665, 669 (Exhibit EC-1212).

Authorship, Ownership and Accountability.”¹³⁷ Again, the title demonstrates that there are no set rules when discussing intellectual property, merely complex transactional situations in which assignment of intellectual property rights must be negotiated. In particular, the first excerpt cited by the EC does not discuss a transaction in which a commercial entity funds research done by another entity, but rather investment in a collaborative research project, where there are multiple claims on inventorship (and therefore on exploitation).¹³⁸ In the end, in the second excerpt cited by the EC, Dreyfuss recognizes that in the collaborative research situations she is examining, the collaborators will ultimately “devise agreements ... tailored to their own interests.”¹³⁹ While “commercial entities tend to prefer – sometimes to insist upon – sole ownership of the intellectual products that their investment produce ... Universities are not likely to lose their interest in controlling faculty output.”¹⁴⁰ Dreyfuss confirms that commercial preference does not always align with the commercial reality in any given transaction, and ultimately commercial entities will negotiate the contractual terms that satisfy their interests in the transaction (or walk away from the deal).

82. Thus, the background material cited by the EC confirms that intellectual property rights are negotiated in the context of particular transactions. In the transaction memorialized by the Boeing contract with Wichita State University cited by the EC, Boeing obtained ownership of any intellectual property developed with its funding.¹⁴¹ In the transactions memorialized by the four research contracts submitted by the United States, Boeing obtained only a limited license to use the intellectual property developed with its funding.¹⁴² Thus, the evidence proves that, contrary to the EC’s view, commercial contracting for R&D services in the United States entails a variety of dispositions of any resulting intellectual property rights, including an arrangement comparable to (and in some respect *less* advantageous than) the disposition of rights under the DoD and NASA transactions that the EC challenges.

22. *The European Communities asserts, at paragraphs 81 and 85 of its Oral Statement, that “in normal commercial practice [...] companies contracting for R&D with another company normally maintain full rights to the IP generated under these contracts”, and that “relevant market benchmarks [...] indicate that a commercial entity funding R&D typically retains full rights to the IP that is developed”.*

(a) *Could the European Communities please explain the basis for those assertions.*

¹³⁷ Rochelle Cooper Dreyfuss, “Collaborative Research: Conflicts on Authorship, Ownership and Accountability, 53 Vand. L. Rev. 1161 (2000) (Exhibit EC-1228).

¹³⁸ Dreyfuss, Collaborative Research, p. 1212 (Exhibit EC-1228).

¹³⁹ Dreyfuss, Collaborative Research, p. 1227 (Exhibit EC-1228).

¹⁴⁰ Dreyfuss, Collaborative Research, p. 1227 (Exhibit EC-1228).

¹⁴¹ Exhibit EC-1231

¹⁴² See US RPQ1, paras. 64-65 and Exhibits US-1208, US-1209, US-1210, and US-1211.

(b) *How does the United States respond to those assertions?*

83. In response to this question, the EC refers the Panel to paragraphs 549-567 of its second written submission. The United States considers that its comments on the EC response to Panel Question 21, along with its response to this question, fully rebut the arguments made in the EC's second written submission.

23. *At paragraphs 462ff of its First Written Submission, the European Communities asserts, under the heading "benefits of R&D subsidies flow principally to Boeing", that NASA and DOD disseminate certain R&D results that have significant commercial potential to domestic entities about two years in advance of general release. What is the legal relevance of whether, and if so when, the results of research carried out under NASA and DOD R&D programmes are widely disseminated? Is this germane to the inquiry that is to be conducted under Article 1.1(b)? Or does this relate to the inquiries under Article 1.1(a)(1), or Articles 5 and 6?*

84. The EC's response to this question adds nothing new. In focusing repeatedly on the limitations to what NASA may disseminate immediately, the EC ignores the much greater volume of information that NASA disseminates, which would not be in the public sphere absent its contracts with Boeing. For example, the more than 600 pages of Boeing reports made public under the ATCAS contract, which the United States submitted as Exhibits US-1157 through US-1163 and US-1185, provide a wealth of information that would otherwise be unavailable had NASA not purchased the R&D services from Boeing.

85. The United States otherwise refers the Panel to its response to this question.

24. *At paragraph 155ff of its First Written Submission, the United States argues that "speculation as to the existence of theoretical "dual uses" for the technology Boeing develops for DoD is irrelevant to the Panel's analysis of whether DoD's contracts with Boeing confer a benefit". What is the legal relevance of whether or not some or all of the research carried out under DOD RDT&E projects had "dual use" applications to large civil aircraft? Is this germane to the inquiry that is to be conducted under Article 1.1(b)? Or does this relate to the inquiries under Article 1.1(a)(1), or Articles 5 and 6?*

86. In its response to this question, the EC contends that the alleged "dual use" of technologies researched under some DoD projects is relevant to the financial contribution and benefit inquiries under Article 1.1(a) and 1.2.

87. The EC provides no rationale for why an alleged dual use is relevant to Article 1.1(a). In fact, there is none. Even if the EC had demonstrated that technology researched under an RDT&E contract had a potential civil use, that would not change or lessen the known military use that led DoD to purchase research related to that technology in the first place. It also would not change the nature of the transaction as the purchase of a service. Therefore, a potential civil

use would not affect the analysis as to whether the transaction was a financial contribution within the scope of Article 1.1(a).

88. The EC then continues to assert that the CRA analysis of dual use would be relevant to the question of benefit and adverse effects.¹⁴³ The United States has demonstrated that the CRA analysis is not reliable. However, should the Panel decide to accept CRA's conclusion that research under certain DoD contracts involved "dual use" technologies, it could not assume that this conclusion was relevant to the benefit analysis under Article 1.1(b). The question with regard to a benefit is whether the recipient received something from the government on terms better than available in the market. DoD purchases RDT&E services from a number of commercial entities that do not produce large civil aircraft, using terms derived, like those of the Boeing contracts, from the Federal Acquisition Regulations. The fact that other companies that can get no benefit from technology that is dual use with regard to large civil aircraft enter into DoD contracts on the same terms as Boeing demonstrates that Boeing's contracts do not provide terms more favorable than available in the market.

89. Any analysis of "dual use" contracts would also have to take into account the magnitude of the alleged subsidy. On the basis of the CRA analysis, the EC contends that a commercial entity funding dual use RDT&E projects would insist that a researcher like Boeing pay 55 percent of the cost, and that DoD's failure to do so represents a subsidy in that amount. But CRA forgets that even if DoD considered a 55 percent cost share appropriate – an allegation CRA has nowhere supported – DoD cannot force a contractor to take a job. It has to negotiate a price that the contractor will accept.

90. And, finally, any analysis of the effect of contracts involving research into "dual use" technology would have to take account of the fact that U.S. export control laws and Boeing policy would prevent use of defense technology and data on large civil aircraft or in the production of the 787.

25. *At paragraph 53 of its Oral Statement, the European Communities states that "it is the accumulated knowledge and experience from engaging in R&D at all levels and with respect to all forms of flight vehicles that provides benefit to an LCA manufacturer". Is the EC claiming that this "knowledge and experience" constitute a "benefit" within the meaning of Article 1.1(b)?*

91. In its response to this question, the EC asserts that "knowledge and experience" constitute some of the benefits within the meaning of Article 1.1(b) of DoD RDT&E programs and NASA R&D. This analysis confuses one potential *effect* of a subsidy with the *benefit*. As the Appellate Body has stated,

¹⁴³ EC RPQ1, paras. 81 and 82.

We also believe that 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.¹⁴⁴

Thus, the appropriate question in evaluating the existence of a benefit is not whether Boeing obtains knowledge and experience under its contracts with the government, but whether any such knowledge and experience would render the transaction non-commercial. The EC has provided absolutely no evidence to address this question.

92. In fact, its assertions lead to the opposite conclusion. The EC’s theory is that in the absence of NASA research contracts, Boeing would have had to pay to perform additional research to produce the 787. But, in that event, it would have amassed the knowledge and experience necessary to build the aircraft. Thus, the only benefit – to the extent there is any – is the money Boeing saved.

93. Another assertion central to the EC case is that a commercial purchaser of research services would insist on receiving back all of the intellectual property arising from the service. The United States disagrees with this contention – the evidence shows that commercial entities split rights with suppliers or other funders in some circumstances. However, even under the EC’s extreme position that the researcher conveys all patent and data rights to the purchaser, *the researcher keeps the knowledge and experience*. In fact, it is difficult to conceive of how a commercial purchaser could prevent its suppliers from gaining and retaining knowledge and experience. Basic skills the researcher develops remain those of the researcher.

26. *At paragraph 499 of its First Written Submission, the European Communities states that "institutional support" includes "costs for NASA employee salaries, benefits, travel expenses, facilities, business management functions, and basic centre operations". At paragraph 502 of its First Written Submission, the European Communities indicates that it has calculated the "institutional support" costs associated with each of the NASA aeronautics R&D programmes that have provided benefit to Boeing’s LCA division, and includes them in the overall subsidy figures discussed below for each programme. However, at paragraphs 524, 548, 572, 588, 603, 618, 631, and 650 of its First Written*

¹⁴⁴ Canada – Aircraft (AB), para. 157.

Submission, the European Communities alleges that in addition to providing "institutional support", NASA also "furnished government-owned property, [...] and dedicated federal scientists, engineers, and research facilities" to support the NASA R&D programmes at issue. Is all of this not covered by "institutional support"? Please clarify.

94. In its response to this question, the EC characterizes NASA's "institutional support" expenses as "indirect R&D costs."¹⁴⁵ This is incorrect. Institutional support included direct research costs for NASA in-house research in the form of civil service salaries, as well as administrative and construction costs.

95. The EC then asserts that the "institutional support" calculation represents "*part of the value* of the goods and services provided by NASA to Boeing" because it excludes "access to wind tunnels and supercomputers" and funding for NASA engineers who "conduct R&D collaboratively."¹⁴⁶ The EC's own description of its methodology establishes that this is incorrect. The EC first written submission states that the "institutional support" consists of three expenses tracked by NASA prior to its adoption of full cost budgeting – "research and program management," "research operations support" and construction of facilities.¹⁴⁷ The documents on which the EC relies indicate that research and program management expenses would include civil service salaries, which would cover the salaries of NASA scientists engaged in collaborative research with contractors.¹⁴⁸ Costs for facilities and support services also fell under institutional infrastructure.¹⁴⁹ Of all of the costs referenced by the EC, only wind tunnel and supercomputer use *related to a program* fell within any program budgets.

27. *At paragraph 798 of its First Written Submission, the European Communities asserts that "DOC provides ATP recipients with organizational and technical advice, and makes available federal equipment, facilities, and personnel. The provision of these goods and services by the US Government constitutes financial contributions within the meaning of Article 1.1(a)(1)(iii) of the SCM Agreement."*

(a) *Are these measures identified in the European Communities' panel request?*

(b) *Does the European Communities include the value of these goods and services in its estimate that "through FY 2004, DOC granted \$4.6 million in financial*

¹⁴⁵ EC RPQ1, para. 86.

¹⁴⁶ EC RPQ1, para. 87.

¹⁴⁷ Exhibit EC-25, p. 7.

¹⁴⁸ NASA Full Cost Budgeting, p. 2-2 (Exhibit EC-315).

¹⁴⁹ NASA Full Cost Budgeting, p. 2-1 (Exhibit EC-315); e.g. NASA R&PM FY1990 Budget, p. SUM-8 (Exhibit EC-316).

contributions to Boeing's LCA division through the Advanced Technology Program"?

96. The EC complains that it lacked adequate information to include the value of organizational and technical advice, or the use of federal equipment, facilities, and personnel in its financial contribution figure for the Department of Commerce's Advanced Technology Program ("ATP"). But the value of these goods and services cannot properly be counted as a financial contribution from ATP to Boeing because according to available ATP records, Boeing received no such goods and services from ATP as part of the eight consortia projects in which it participated.¹⁵⁰

97. In any event, as the United States explained in its first written submission, the EC has vastly overstated the financial contribution from ATP that can be attributed to Boeing's LCA division. The EC originally estimated the financial contribution at \$4.6 million using a methodology that was only a proxy for the real disbursement figures, but asked that the Panel adopt this figure as the "best information available."¹² In its first written submission, the United States provided the actual disbursement figures under ATP to Boeing, which amount to an estimated [***].¹⁵¹ The U.S. actual disbursement amount should be used rather than the EC's figure derived from proxy calculations.

28. *The European Communities argues that the "direct R&D funding" and support that Boeing allegedly received under the NASA and DOD R&D programmes at issue constitute subsidies, on the basis that Boeing "is not required to pay anything in return" for those financial contributions. According to the European Communities, because Boeing is "not required to pay anything in return" for this funding and support, the entirety of those financial contributions to Boeing's LCA division can be considered to confer benefits. The European Communities also claims that Boeing's acquisition/retention of rights over the intellectual property that it develops under these NASA/DOD R&D programs constitutes an additional subsidy. Does this not amount to double-counting the subsidies provided to Boeing under the NASA/DOD R&D programmes at issue?*

¹⁵⁰ Although the ATP statute mentions that the program may provide organizational and technical advice and the use of the equipment, facilities, and personnel, *see* 15 U.S.C. § 278n(b)(1) (Exhibit EC-532), ATP does not itself provide such goods and services. Rather, the National Institute of Standards and Technology ("NIST") offers such goods and services to the general public through its laboratories. On occasion, ATP project monitors may facilitate interactions between NIST scientists and labs and ATP project recipients. But, the goods and services that ATP recipients may request from NIST are the same as those available to the general public.

¹² EC FWS, para. 799 and n.1420. The EC describes its methodology to estimate payments in Exhibit EC-25, at 21-23.

¹⁵¹ Exhibit US-160.

98. In response to this question, the EC appears to argue that it is challenging *all* patents conceived under *all* DoD RDT&E and NASA R&D contracts, including those under NASA and DoD programs that it is not challenging. If this understanding is correct, the EC has not even attempted to make a *prima facie* case with regards to the new patents and, therefore, not met its burden of proof.

99. The EC argues that there is no double counting to the extent that any patents relate to inventions made outside of the eight NASA R&D programs and 23 DoD RDT&E program elements challenged by the EC. However, if this is the case, the United States considers that the issue is one of *overcounting*, not *double counting*, as the EC's total patent value would include a patent unrelated to the programs it challenged. For accuracy, the value of any such patent would have to be removed from the total.¹⁵²

100. The EC, however, appears to believe that the inclusion of patents unrelated to challenged programs is appropriate. It is not.

101. Rights to a patent for an invention made under a DoD or NASA contract do not arise spontaneously or autonomously. Under DoD and NASA regulations, the only way that a contractor obtains title to a patent for an invention made during agency-funded research is if the contractor's employee was working on the research as part of a contract. Contractors gain these rights because DoD and NASA contracts contain patent rights clauses under which, if the contractor makes a patentable invention while working on the contract, it takes title to the patent and gives a government use license to the government. That, however, is only one of many provisions that make up the overall deal between the government and the contractor. The price agreed between the parties covers all of them. Since it is this transaction that gives rise to any patent rights, no conclusion regarding a financial contribution or benefit is possible without an analysis applicable to the transaction.

102. However, the EC has not even alleged that any DoD or NASA program other than the eight specifically listed aeronautics research programs and 23 DoD PEs conferred a financial contribution or a benefit. Nor has it argued that types of contractual vehicles or particular contracts under those programs conferred a financial contribution or benefit. Therefore, it has provided no support for the assertion that patent rights conferred to DoD or NASA or retained by the contractor under those programs were a financial contribution or conferred a benefit.

¹⁵² This is, in fact, the case with Patent Number 6,920,790, made under NASA Cooperative Agreement NCC8-399, which addressed Technology Development of Reusable Composite Liquid Hydrogen Tank System. Ross Messinger and John Pulley, Thermal-Mechanical Cyclic Test of a Composite Cryogenic Tank for Reusable Launch Vehicles (Exhibit US-1220). This cooperative agreement was obviously not related to the aeronautics research programs challenged by the EC. In addition to the title, the prefix "8" in the contract number indicates that the work was not performed at any of the NASA research centers that performed work under the challenged programs.

Accordingly, it has failed to meet its burden of proof with regard to patents for inventions made under contracts outside the challenged NASA and DoD programs.

103. For patents issued as a result of work done under contracts related to the eight NASA programs and 23 DoD RDT&E PEs listed in its first written submission, the EC’s treatment of patent rights leads to double counting because it treats the value of the research work and the value of any patent rights that result as separate from one another when, in fact, they arise from the same transaction.

104. As noted above, any patent rights under a government contract arise from the standard patent rights clauses in the contract. As such, those *rights* are part of the overall deal that the parties reach in agreeing to the contract. Thus, they are factored into the price that the parties agree upon. Three scenarios illustrate why. If the contract (or the underlying law) provided that the contractor held rights to any patent arising from research under the contract, the contractor would factor the perceived value of the chance of making a patentable invention into the price it would be willing to accept. However, if the contract (or law) changed so that the payer received *some* of any patent rights, the value of the rights remaining to the contractor would decrease, and the contractor would accordingly demand a higher price. If the contract (or law) changed so that the contractor would obtain *none* of the patent rights, the value of those rights would not enter into the contractor’s calculus at all, and it would demand a still higher price. Thus, the possibility of patent rights is something that the parties factor into the value each of them ascribes to the transaction.

105. The EC argues that because the possibility of a patentable invention being made and its value if made are unknown in advance, the “value and benefit” of a DoD or NASA contract “does not depend on whether or not an actual patent results.”¹⁵³ This statement is correct, although the EC does not recognize its implications. Because the parties cannot know at the time they sign the contract whether it will result in a patentable invention, they decide in advance how to apportion the rights if a patent does arise. If there is no patent, that does not retroactively decrease the “value” of the original contract. It means simply that one eventuality envisaged by the parties did not occur. Similarly, if a patent does result, it does not change the retroactively increase the value of the original contract. The same holds true of the “benefit” for purposes of the SCM Agreement. If parties enter into a research contract at a commercial price providing rights for possible patents, that contract does not retroactively become non-commercial because the researcher makes a patentable invention.

106. However, this is exactly the result that the EC urges when it argues that “{i}f a technology is patented, additional benefits flow from having rights to this patent.”¹⁵⁴ There may indeed be benefits in the colloquial sense, in that patent holders consider their rights valuable,

¹⁵³ EC RPQ1, para. 94.

¹⁵⁴ EC RPQ1, para. 95.

but there is not a benefit in the sense of Article 1.1(b) if the patent rights arise from a transaction on market terms. That is because the parties bargained for a division of patent rights at the time of the transaction, and the actual issuance of a patent (or the failure to make a patentable invention) does not retroactively change the fact that the transaction was on terms available in the market.

107. The United States noted in its first written submission that the EC's treatment of patent rights is exactly the type of *ex post* analysis of benefit that the panel in *Korea – Shipbuilding* rejected. The EC does not contest this observation, but argues in its second written submission that the parties to a transaction would consider the value of patents that had issued under similar transactions in valuing the patent attribution rights under the contract.¹⁵⁵ However, that evaluation would be built into the terms of the original contract. There would be no reason to treat it as a separate and additional benefit. In any event, the EC's observation simply points out an additional flaw in its reasoning. If parties would consider the value of previous issued patents in their negotiations, patents unrelated to the program in question would not be a factor. As the United States explains below, three of the five patents cited by the EC were for inventions made under contracts unrelated to the challenged programs.

108. The EC's response to this question also asserts that it has been unable to value the provision of trade secrets and data rights. As we have explained before, neither NASA nor DoD provides trade secrets. In fact, the standard data rights clause in government contracts prohibit contractors from treating the results of government-funded work as trade secrets. The standard clause, at 48 C.F.R. § 52.227-14, gives the government "unlimited rights" to "use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly" with regard to any data first produced in the performance of the contract."¹⁵⁶ Conversely, the clause allows the government to provide some protections for "limited rights data," defined as "data (other than computer software) that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications thereof."¹⁵⁷ Thus, the government may protect trade secrets only to the extent they relate to

¹⁵⁵ EC SWS, para. 562.

¹⁵⁶ 48 C.F.R. § 52.227-14(a) and (b) (Exhibit US-103). The analogous clause for DoD appears at 48 C.F.R. § 252.227-7013, and provides that the government shall have unlimited rights in "{d}ata pertaining to an item component or process which has been or will be developed exclusively with government funds" or "{c}reated exclusively with Government funds in the performance of a contract that does not require the development, manufacture, construction, or production of items, components or processes." 48 C.F.R. § 252.227-7103(b)(1)(i) and (iii) (Exhibit US-1221).

¹⁵⁷ 48 C.F.R. § 52.227-14(a) (Exhibit US-103). The analogous clause for DoD contracts gives the government limited rights in technical data "{d}eveloped exclusively at private expense" or "{c}reated exclusively at private expense in the performance of a contract that does not require the development, manufacture, construction, or production of items, components or properties. 48 C.F.R. § 252.227-7013(b)(3). DoD also provides a temporary, five-year limitation on dissemination of data developed with joint government and private funding. After expiration

items developed with private funding.¹⁵⁸ Conversely, the government has unlimited right to disseminate data developed with government funds.¹⁵⁹ Since the government is not required to maintain the confidentiality of data developed with government funds, these do not constitute trade secrets, and any development of such data by the contractor is not the provision of a trade secret. Therefore, there is no need to value “government provision of trade secrets,” as it is a null set.

109. The EC also claims that it is unable to value data rights. These, too, are not a subsidy, so there is nothing to value.¹⁶⁰

110. Finally, the EC says the United States has prevented an evaluation of whether the EC’s patent value allegations relate to the programs it has challenged by failing to provide information with regard to those programs.¹⁶¹ This is an example of the EC failing to understand its own evidence. Its first written submission provides values for five patents – all of them obtained from the U.S. government. Two of these (6,840,750 and 5,902,535) state on their faces that they were funded under NASA Contract NAS1-20546.¹⁶² The EC submitted a copy of this contract as an exhibit to its first written submission as an example of research conducted under the ACT program.¹⁶³ Therefore, any confusion on the part of the EC as to whether these patents related to programs it challenged is the result of its own oversight.

29. *At paragraph 876 of its First Written Submission, the EC estimates that through FY 2006, NASA and DOD provided financial contributions worth \$3.1 billion to Boeing’s LCA division through IR&D and B&P reimbursements.*

(a) *Is this estimate limited to the amount IR&D and B&P reimbursements to Boeing under the NASA and DOD R&D programmes at issue in this dispute, or does this estimate include all IR&D and B&P reimbursements to Boeing by NASA and DOD, i.e. including but not limited to reimbursements made under the R&D programmes at issue in this dispute, through FY 2006?*

of that period, the government assumes unlimited rights with regard to such data. 48 C.F.R. § 252.227-7013(b)(2) (Exhibit US-1221).

¹⁵⁸ NASA’s LERD clause represented a limited exception to this rule, limited both in scope and in duration.

¹⁵⁹ For DoD, this unlimited right accrues after five years for data developed jointly with government and private funds. 48 C.F.R. § 252.227-7013(b)(2) (Exhibit US-1221).

¹⁶⁰ US FWS, paras. 355-359.

¹⁶¹ EC RPQ1, para. 93.

¹⁶² EC FWS, paras. 826 and 828.

¹⁶³ EC FWS, para. 504, note 783. The remaining patents also indicated contract numbers, one of them a NASA cooperative agreement clearly unrelated to aeronautics research, as the United States indicated above.

- (b) *On the basis of the figures provided in Exhibits EC-005 (Appendix B) and EC-018, it appears that DOD reimbursements of IR&D and B&P comprise approximately 99% of this amount. Please specify the respective amounts of: (i) NASA IR&D reimbursements; (ii) NASA B&P reimbursements; (iii) DOD IR&D reimbursements; and (iv) DOD B&P reimbursements.*

111. The United States notes that DoD IR&D and B&P policy would not allow the allocation of LCA-related expenses to DoD contracts.¹⁶⁴

30. *The European Communities asserts that Boeing will continue to receive financial contributions/benefits from FSC/ETI-related measures after 2006. However, we understand the European Communities to exclude any financial contributions/benefits from the FSC/ETI-related measures that Boeing will allegedly receive after 2006 from its estimate of the total financial contributions/benefits to Boeing from the FSC/ETI-related measures (EC FWS, para. 957). If this is correct, then please explain whether and if so why it is necessary for the Panel to reach a conclusion on whether Boeing will continue to receive financial contributions/benefits under FSC/ETI-related measures after 2006.*

112. In its response to this question, the EC argues that the Panel should apply adverse inference to estimate a value of FSC/ETI benefits after 2006 “in light of the US non-cooperation with Annex V and otherwise.”¹⁶⁵ The United States has submitted all of the information on this topic available to it, namely, the statement in Boeing’s Annual Report that it will not receive FSC/ETI benefits after the 2006 tax year.¹⁶⁶ No party can submit unavailable evidence, and the absence of that evidence supports only the conclusion that the party has cooperated to the best of its ability. Therefore, the EC has provided no basis for its request that the Panel apply adverse inferences.

33. *Must there always be a "generally applicable tax rate" within the meaning of Article 2.2? If so, what is the "generally applicable tax rate" under Washington State's B&O tax system?*

113. Notably, in its response to Panel Question 33, the EC does not actually state that there must always be a “generally applicable tax rate” within the meaning of Article 2.2. As the United States stated in its response, whether such a rate exists or not depends on a Member’s tax system. The EC, on the other hand, merely repeats several inaccurate assertions regarding the Washington State B&O tax regime that the EC has made in prior submissions.

¹⁶⁴ US SWS, paras. 79-81.

¹⁶⁵ EC RPQ1, para. 100.

¹⁶⁶ US FWS, para. 423.

114. In its response, the EC continues to ignore the fundamental characteristic of the Washington State tax system that must be the basis for analyzing the EC's subsidy claim: Washington State has adopted a multi-rate taxation system in which different categories of business activities are taxed at different rates, as discussed more fully elsewhere.¹⁶⁷

34. *At paragraph 28 of its Oral Statement, the European Communities argues that "the United States' specificity analysis with respect to the HB 2294 B&O tax rate reductions is flawed because it addresses the wrong measure. The measure at issue is HB 2294, not the entire Washington State B&O tax system." Is the EC arguing that a proper analysis of whether or not the subsidy allegedly granted under HB 2294 is specific would exclude consideration of any B&O tax rate reductions in other sectors?*

115. In response to Question 34, the EC contends that an analysis of specificity with respect to the B&O tax adjustment should exclude consideration of any B&O tax adjustments in other sectors. In support of this assertion, the EC maintains that various provisions of Article 2 of the SCM Agreement refer to "a subsidy," and therefore, "the specificity analysis is exclusive to the 'subsidy' at issue, not to other legislation or acts of the granting authority or other entities."¹⁶⁸ In fact, there is no basis for the EC's argument.

116. The EC's argument confuses the issue of an element of a claim (whether a measure is a subsidy) and the evidence (what needs to be shown to establish the claim). The United States does not contest that the measure that the EC has challenged is HB 2294, but it sees no basis in the text of the SCM Agreement, logic, or past Appellate Body and panel reports to limit the evidence of specificity to the measure itself. HB 2294 is an Act "amending," "reenacting," and "adding new sections," to the existing tax code in Washington State.¹⁶⁹ The EC itself refers to the other provisions of the tax code in order to analyze the B&O tax rate for aerospace.¹⁷⁰ Thus, the EC implicitly acknowledges that the B&O tax rate for aerospace cannot be analyzed independently of the rest of the B&O tax regime.

117. A review of the Washington State tax code makes clear that the establishment of a B&O tax rate for aerospace is not a specific subsidy, even if it could be considered a subsidy. Washington provides for taxation based on business activity, and aerospace manufacturing and sales are one of among more than 40 business activities that have an individual rate of taxation. The State periodically provides or adjusts individual rates, and uses this system in lieu of providing for a generally applicable rate. The new rate for aerospace manufacturing and sales falls in the range of nominal B&O rates that the State applies. Moreover, as discussed, the new

¹⁶⁷ US SWS, paras. 123-140; US RPQ1, paras. 89-90.

¹⁶⁸ EC RPQ1, para. 105.

¹⁶⁹ Preamble to HB 2294 (Exhibit EC-54).

¹⁷⁰ EC FWS, para. 105, n. 149.

nominal rate eliminates an extraordinarily high effective rate that aerospace manufacturing and sales were previously subject to (as a result of “pyramiding” of input taxes); with the enactment of HB2294, aerospace’s effective rate is now in line with other business activities in the State.¹⁷¹

35. How does a determination of whether infrastructure is “general” for the purposes of Article 1.1(a)(1)(iii) differ from the determination as to whether a subsidy is “specific” within the meaning of Article 2?

118. In its response, the EC posits a test for what infrastructure is general for purposes of Article 1.1(a)(1)(iii) that has no basis in the text of the provision.

119. Article 1.1(a)(1)(iii) provides that a government is providing a financial contribution where a government “provides goods or services other than general infrastructure . . .” As the United States has set forth in its prior submissions, based on the ordinary meaning of the term “general,” infrastructure is “general” if it is universally available to all or nearly all inhabitants or users of the relevant area.¹⁷² Moreover, the complaining party, in establishing its *prima facie* case that a government has provided a financial contribution under Article 1.1(a)(1)(iii) has the burden of establishing that the infrastructure measures challenged by the complaining party are “other than general.” The EC, however, sets forth a legal standard that, if accepted, would lower the complaining party’s burden with respect to establishing that infrastructure is “other than general,” while raising the evidentiary standard that a responding party must meet to rebut a *prima facie* case.

120. Specifically, the EC states, “where it is clear and unambiguous that the measure at issue relates to infrastructure that is not ‘partial’ or ‘particular’ in some way, then such a measure should be excluded as ‘general infrastructure’ from the scope of application of the *SCM Agreement*. Such a determination should be a rather straightforward factual exercise. If it is not straightforward – *i.e.*, if there are facts suggesting that the infrastructure might be particular in some way – then the measure at issue should not be excluded from the scope of application of the *SCM Agreement* at the initial financial contribution analysis.”¹⁷³

121. The EC would thus alter the relative burdens of both the complaining party and the responding party. First, rather than establishing that government-provided goods or services are other than general infrastructure, a complaining party merely would have to provide “facts suggesting that the infrastructure *might* be particular *in some way*.”¹⁷⁴ The EC does not even explain how such facts would need to be analyzed; in fact, the EC appears to assert that no

¹⁷¹ U.S. FWS, paras. 440-62.

¹⁷² US RPQ1, para. 91; US FWS, para 46.

¹⁷³ EC RPQ1, para. 114 (emphasis original).

¹⁷⁴ EC RPQ1, para. 114 (emphases added).

examination of the facts would be required at all. Instead, based on the EC's incorrect statement of the legal standard, merely the *existence* of facts that *suggest* – but not necessarily *establish* – that “the infrastructure *might be* particular in some way”¹⁷⁵ is sufficient to establish non-generality. This is quite far from the proper standard. As the Appellate Body has found, in a WTO dispute, if the party asserting a proposition “adduces evidence sufficient to raise a presumption that what is claimed is true, the burden then shifts to the other party, who will fail unless it adduces sufficient evidence to rebut the presumption.”¹⁷⁶

122. Second, once a complaining party has established a *prima facie* case under the EC's lowered evidentiary standard, the responding party would be able to rebut that case only if the evidence it brings to bear is “clear and unambiguous” and “straightforward.” This standard finds support in neither the SCM Agreement nor the DSU. Thus, a party seeking to establish that a transaction provides “general infrastructure” does not need to have “clear and unambiguous” proof. It needs only evidence sufficient to raise a presumption that the transaction provides general infrastructure.

123. The EC then argues that “where an examination of the totality of facts suggests that the infrastructure at issue is particular in some way, such infrastructure cannot be regarded as ‘general’ within the meaning of Article 1.1(a)(1)(iii) of the *SCM Agreement*.”¹⁷⁷ While the EC is correct that an analysis of whether infrastructure is general should be based on “an examination of the totality of the facts,” there is no basis for the suggestion that as long as the infrastructure at issue is “particular in some way, such infrastructure cannot be regarded as general.” The EC provides no explanation for its meaning of “particular in some way.” Absent such an explanation, it is impossible to tell why a finding that infrastructure is “particular in some way” should lead to a finding that infrastructure is other than general (which is the test that WTO Members actually agreed to in the *SCM Agreement*). Under the *SCM Agreement*, infrastructure is “other than general” if it is not universally available. The EC, a party challenging infrastructure as a subsidy, bears the burden of proving under Article 1.1(a)(1)(iii), that the infrastructure is “other than general.” Merely asserting that the infrastructure is “particular’ in some way” does not satisfy the EC's burden.

124. While it would be convenient for the EC to establish non-generality merely by asserting that there exist facts *suggesting* that the infrastructure “*might be* particular in some way,”¹⁷⁸ in fact the EC's burden is to *establish*, based on an examination of the totality of the facts, that the infrastructure measures it challenges are not universally available. The EC has failed to meet

¹⁷⁵ EC RPQ1, para. 114 (emphasis added).

¹⁷⁶ *US – Wool Shirts (AB)*, p. 14.

¹⁷⁷ EC RPQ1, para. 115.

¹⁷⁸ EC RPQ1, para. 114 (emphasis added).

this burden with respect to any of the infrastructure measures it challenges. Accordingly, the EC's infrastructure-related claims fail.

125. In a thinly veiled attempt to discuss the I-5 and SR-527 road improvements conducted by Washington State, the EC provides an “example” of highway road improvements and asserts that such road improvements are not general infrastructure.¹⁷⁹ The EC posits that where “a specific improvement to a particular part of that highway done in the vicinity of, according to the specifications of, and to the satisfaction of one particular company, which also enjoys an ongoing contractual performance guarantee with respect to the highway improvement, can hardly be qualified in the same way. The latter corresponds to the needs of a *particular company*, rather than of the country, regardless of whether anybody else also uses that highway.”¹⁸⁰

126. As the United States has set forth in its previous submissions,¹⁸¹ the EC mischaracterizes the I-5 and SR-527 improvements. Even if the facts asserted by the EC were accurate, the EC has failed to establish that these road improvements are not universally available. First, the EC refers to a “specific improvement to a particular part of that highway done in the vicinity of...one particular company.”¹⁸² Under the EC's logic, any improvement to a public road would be non-general infrastructure merely because it is near a particular company.¹⁸³ If this were true, virtually all improvements to public roads would constitute non-general infrastructure. Such a result is not supported by the SCM Agreement.

127. The EC also asserts that it would be relevant if the improvement were “done . . . according to the specifications of, and to the satisfaction of one particular company.”¹⁸⁴ While this may be a relevant factor in itself, this is not an accurate characterization of the I-5 and SR-527 improvements. The United States understands the EC to be referring to the Project Olympus Master Site Agreement (“MSA”)’s provisions relating to highway improvements. These provisions provide only for “*consultation* with Boeing,” and that such improvements must meet the American Association of State Highway Transportation Officials and State standards for heavy-duty truck traffic.¹⁸⁵ Washington State consults with a wide range of citizens, businesses, and other users in designing road improvements. Such “consultation” alone does not make

¹⁷⁹ EC RPQ1, para. 114, n. 105.

¹⁸⁰ EC RPQ1, para. 114, n. 105 (emphasis original).

¹⁸¹ See US RPQ1, paras. 100-01.

¹⁸² EC RPQ1, para. 114, n. 105.

¹⁸³ US RPQ1, para. 101.

¹⁸⁴ EC RPQ1, para. 114, n. 105.

¹⁸⁵ Master Site Agreement, Article 6.11.1 (Exhibit EC-58) (Emphasis added).

infrastructure “non-general.” What is more, even before any such “consultation” took place, plans for the improvements had already been on the table.¹⁸⁶

128. Finally, the EC erroneously asserts that Boeing “enjoys an ongoing contractual performance guarantee with respect to the highway improvement.” As the United States has shown there is in fact no such “guarantee”; the Agreement contemplates the possibility of a change in circumstances in the “Make Whole” provision. Moreover, as the United States has set forth in detail, the State of Washington identified the I-5 and SR-527 improvement projects as necessary prior to the MSA and long before the conception of the 787. Moreover, both improvements were ultimately funded as a part of a broad transportation package covering more than 150 projects throughout the State.¹⁸⁷

129. Based on these erroneous assertions, the EC reaches the erroneous conclusion that the type of infrastructure improvement described by the EC “corresponds to the needs of a *particular company*, rather than of the country, regardless of whether anybody else also uses that highway.”¹⁸⁸ There is no basis for assessing whether infrastructure “corresponds to the needs . . . of the country” as part of the general infrastructure analysis. Instead, the question is whether the infrastructure is universally available to all or nearly all inhabitants or users in the relevant area. I-5 and SR-527 are both main highways that are used by businesses, tourists, and citizens throughout Washington State. As such, they constitute general infrastructure and are excluded from the scope of Article 1.1(a)(1)(iii).

130. The EC has also failed to establish that any of the other infrastructure measures it challenges in this dispute are “other than general.” Instead of repeating the U.S. arguments with respect to those measures, the United States respectfully refers the Panel to the U.S. prior submissions.¹⁸⁹

36. *If the Panel were to conclude that particular infrastructure constitutes "general infrastructure", would it follow that any improvements made to that infrastructure would constitute the provision of "general infrastructure" as well?*

131. The EC claims that “confusion arises from the US First Written Submission, in which the United States points, in its defence, to many facts relating to the *underlying infrastructure* as a whole (which the European Communities has not challenged), while failing to distinguish those pertinent facts that relate only to the *improvements at issue*.”¹⁹⁰

¹⁸⁶ US FWS, paras. 525-26.

¹⁸⁷ US FWS, para. 542; US RPQ1, para. 109.

¹⁸⁸ EC RPQ1, para. 114, n. 105.

¹⁸⁹ US FWS, paras. 544-553; US SWS, para. 143.

¹⁹⁰ EC RPQ1, para. 118 (emphasis original).

132. The EC mischaracterizes the U.S. arguments and evidence that it has put forward in its first written submission, which do address the infrastructure improvements in detail and are not limited, as the EC suggests, to facts relating to the underlying infrastructure as a whole.¹⁹¹ Notably, the EC does not provide a *single* citation to any of the U.S. submissions in support of this allegation.

133. The United States agrees with the EC that the fact that infrastructure is general does not necessarily mean that improvements to that infrastructure are also necessarily general. The legal standard for determining whether the infrastructure improvement is general is the same as the determination for whether the underlying infrastructure is general i.e., whether the particular improvement is universally available to all inhabitants or users of the relevant area. The United States has established that each of the improvements at issue in this dispute constitutes general infrastructure, because the improvements created no limitations on the availability of the infrastructure at issue.¹⁹²

37. *In determining whether improvements to particular infrastructure constitute "general" infrastructure within the meaning of Article 1.1(a)(1)(iii), what is the relevance of whether or not:*

- (a) *the government undertook the project as part of an agreement with a specific company; (see EC FWS, para. 235)*
- (b) *the government had rejected previous efforts to make the improvements in question prior to an enterprise committing to a large scale investment (see EC FWS, para. 227);*
- (c) *a single enterprise agreed to cover a significant portion of the costs incurred in making the improvements (see US FWS, para. 547);*
- (d) *the project is of the type that governments "often undertake" (US FWS, para. 550)?*

134. With respect to the U.S. view regarding sub-question 37(a) through (d), the United States refers the Panel to the U.S. response to Question 37.¹⁹³

135. With respect to sub-question 37(d) in particular, the EC again misstates the legal standard for analyzing general infrastructure by stating “{t}he question is whether the totality of the facts

¹⁹¹ See e.g., US FWS, paras. 521-28; 545; 551/.

¹⁹² US RPQ1, paras. 101-03.

¹⁹³ US RPQ1, paras. 105-11.

suggests that the infrastructure improvement being challenged is partial or particular *in some way*.”¹⁹⁴ As set forth above, this is an incorrect statement of the legal standard.¹⁹⁵

39. *Is the European Communities requesting the Panel to make any findings in respect of the Master Site Agreement as a whole, or is the European Communities asking the Panel only to make findings in respect of those incentives referred to in paragraphs 163 and 164 of its First Written Submission? Is the European Communities requesting the Panel to consider each of those individual incentives as a "measure"?*

136. The EC does not actually answer the Panel’s question regarding the Master Site Agreement (“MSA”). The EC merely states that the document “as a whole” “may also be considered” an “illegal”¹⁹⁶ subsidy, but the EC provides no basis in the *SCM Agreement* for this claim.

137. In any event, the reasoning behind the EC position has neither factual nor legal support. In the EC view, “{t}he nature of the financial contribution, benefit, and specificity for each of the individual incentives is reinforced and clarified by other provisions of the Master Site Agreement, such as the “Make Whole” provision, which are inseparable from the rest of the Agreement.”

138. It is not even clear what the EC means in saying that the MSA “reinforce{s}” and “clarifie{s}” the individual incentives. To bring a claim that the MSA “as a whole” is an actionable subsidy, the EC would have to establish that (a) a government has provided a financial contribution under Article 1.1; (b) the financial contribution conferred a benefit under Article 1.2; and (c) the subsidy is specific within the meaning of Article 2. The EC has failed to provide any evidence or argumentation that would prove any of those points, and thus the EC has failed to satisfy its burden.

139. To the extent that the EC is arguing that the “Make Whole” provision makes the Agreement as a whole an actionable subsidy, the United States also refers the Panel the U.S. response to Question 43.¹⁹⁷

40. *With regard to utilities, how does the European Communities respond to the United States' assertion that Boeing pays the same rates as other industrial customers?*

¹⁹⁴ EC RPQ1, para. 123 (emphasis added).

¹⁹⁵ *See supra.*, paras. 121-24.

¹⁹⁶ It is entirely unclear what the meaning of the word “illegal” is in this context. The *SCM Agreement* only refers to “actionable” or “prohibited” subsidies. As there is no such concept as an “illegal” subsidy under the *SCM Agreement*, the United States understands the EC to be referring to an “actionable” subsidy.

¹⁹⁷ US RPQ1, paras. 114-21.

140. The EC's arguments with respect to the utility rates paid by Boeing are without merit. First, the EC asserts that the MSA freezes Boeing's utility rates. The EC points to Exhibits C-1 through C-4 of the MSA, which provide that Boeing's rate shall be the "{a}pplicable regulated tariff rate," and the EC claims that this "must mean the rates in place as of 19 December 2003."¹⁹⁸ As the United States has set forth in prior submissions, the "applicable regulated tariff rate" is not a special rate for Boeing; it is the rate applicable to the class of customers that includes Boeing and is set by ordinance of the City of Everett.¹⁹⁹ Thus, there is no basis for the EC's assertion that the "applicable regulated tariff rate" "must mean" the rate in place as of December 19, 2003.

141. The EC has provided no evidence that the utility rates applicable to Boeing have actually been frozen at the 2003 rate. The United States, on the other hand, did provide evidence, in Exhibit US-230 to the U.S. first written submission, that Boeing's utility rates have increased since 2003.²⁰⁰

142. Finally, the EC claims that even if Boeing is paying the same utility rates as other industrial customers, "it has an enforceable right under the Project Olympus MSA to seek refunds for any amounts it has paid in excess of what it would owe at 2003 rates."²⁰¹ The EC does not provide a citation to any specific provision of the MSA to support this erroneous proposition. Indeed, there is no factual or legal support for such an assertion.

41. *At paragraphs 194 and 203 of its First Written Submission, the European Communities asks the Panel to find that the value of the incentives at issue is "large". If the Panel were to accept that these incentives constitute subsidies, and that the amount of those subsidies is "large", how would this affect the Panel's findings, given that the European Communities has based its claims of serious prejudice on a quantification of the amount for all other subsidies at issue in this dispute?*

143. In contrast to paragraphs 194 and 203 of the EC's first written submission, the EC does not state, in response to Panel Question 41, that the value of the two measures at issue²⁰² is "large." The EC instead states that the magnitude of all the alleged subsidies at issue in this dispute is "large."²⁰³ This is confirmed by the fact that the EC goes on to discuss the

¹⁹⁸ EC SWS, para. 193.

¹⁹⁹ US FWS paras. 554-55.

²⁰⁰ Everett Utilities Rate Tables for 2004, 2006 and 2007 (Exhibit US-230).

²⁰¹ EC RPQ1, para. 126,

²⁰² The two measures identified by the Panel in Question 41 are the tax measures for the 747 LCF and Article 11.3 ("Legal Proceedings") of the MSA.

²⁰³ EC RPQ1, para. 128. The citations to the record that the EC provides in support of this proposition are to arguments the EC has made that the value of all alleged subsidies together is large, not that the value of the two

“{c}onsideration of these omitted subsidies in combination with the magnitude of *other subsidies* – which have been quantified, and which have been demonstrated to be very large.”²⁰⁴ Accordingly, it is reasonable to infer from the EC’s response to Panel Question 41 that the EC no longer claims that the value of these two measures is large. With respect to the EC’s claims about the magnitude of all of the subsidies at issue in this dispute, the United States has rebutted these claims in detail.²⁰⁵

44. *We understand the European Communities to be alleging that the benefit of the financial contributions provided to Spirit through IRBs and K DFA bonds passes through to Boeing exclusively via discounted prices of goods and services that Spirit supplies to Boeing under the long-term supply agreements in question, and not through any other elements of the price that Onex Corporation paid to Boeing for Boeing Wichita. Is our understanding correct?*

144. In its response, the EC continues to argue, “{b}ased on the available evidence”, that “Boeing captured the full value of the expected subsidies for itself by ensuring discounted prices in the supply of goods and services from Spirit.”²⁰⁶ The EC seems to concede that it does not have evidence sufficient to show pass-through, but suggests that pass-through must be assumed in lieu of such evidence: “In view of the refusal of the United States to provide these documents, the European Communities asks the Panel to based its findings on the *assumption* that the benefit passes through to Boeing in the form of lower prices for supplies.”²⁰⁷ It asks the Panel to make this assumption even though it concedes that Spirit and Boeing are independent, unrelated parties that entered into the agreement for the sale of the business on an arms-length basis.²⁰⁸ As the complaining party, the EC has the burden of proving that pass-through actually occurred, and it has failed to do so.

145. The entire premise of the EC’s theory is that there was certainty or firm expectations about future bond issuances to Spirit and the amounts thereof; as the United States demonstrated in its first written submission, this was not the case.²⁰⁹ Thus, even under its own theory, the EC

measures at issue in Question 41 is large. The EC cites to paragraphs 142-149 of its opening oral statement and paragraphs 706-732 of its first written submission.

²⁰⁴ EC RPQ1, para. 129.

²⁰⁵ See e.g., U.S. Comment on EC Response to Panel Question 78.

²⁰⁶ EC RPQ1, para. 135.

²⁰⁷ EC RPQ1, para. 136 (emphasis added).

²⁰⁸ EC RPQ1, para. 137.

²⁰⁹ US FWS, paras. 628-31. In fact, the EC now seems to acknowledge that the future amount of the K DFA bonds was uncertain: “the precise amount of the first tranche of bonds was unknown at the time the deal closed.” (EC SWS, para. 260). The EC nevertheless asserts that the parties could have formulated credible expectations regarding future benefits – in particular, the parties could have anticipated the number of employees and salaries in the future based on the long-term supply agreements and Spirit’s overall business plan, and accordingly could have

provides no basis to conclude that the value of IRBs or KDFAs bonds that might have been issued in the future is reflected in the terms of the long-term supply contracts, as the EC contends, or more broadly in the consideration paid by Spirit to Boeing.

146. The United States also noted in its First Written Submission the fallacy of the EC's reasoning, even if it had a valid factual basis – if in the sale of a business, the net present value of all expected future cash flows were simply transferred from the buyer to the seller, there would be no reason for a buyer to invest in a company.²¹⁰

147. The EC seeks to rebut this by noting that “among the many issues the parties *consider* in coming to a negotiated ‘price’ is the current fair value – rather than the historical prices – of the assets and liabilities to be acquired.”²¹¹ It then cites accounting principles requiring that a buyer record the fair value of the assets and liabilities of the acquired firm.²¹²

148. These points do not save the EC's pass-through argument. Parties of course generally consider the future value of assets in an asset purchase transaction, but that does not come close to establishing pass-through of a future possible or even expected subsidy benefit. First, as noted, there was no firm expectation of future IRB and KDFAs bond issuance to Spirit. Second, even if there had been a firm expectation, the EC does not establish that the parties considered such future expected values in their pricing negotiations; that the expected values were reflected in the price or terms of the long-term supply contract; or that it was Boeing that captured the full value of those benefits. Indeed, even the EC acknowledges that the financial accounting principles establish only that the fair value of the Boeing Wichita facility “*could have included* the expected value of future subsidies.”²¹³ The EC's claim relies on speculation alone.

computed the expected benefit from future KDFAs bonds. This is pure speculation. It would have required, at a minimum, full knowledge by Boeing of Spirit's future business plans at the time of the transaction, and it would have required full knowledge of the extent of supply under the long-term supply contracts. However, the EC has shown neither of these things, and in fact, the long-term supply contracts are “requirements contracts” under which Boeing committed to purchase its future, and by definition uncertain, requirements for particular aircraft models. Thus, while the financial terms of the future purchases were set, the extent of Boeing's future requirements could not have been known at the time of the sale of the Wichita assets. (Spirit Prospectus, Exhibit EC-165, pp. 85, 88).

²¹⁰ US FWS, para. 636.

²¹¹ EC SWS, para 235 (emphasis added).

²¹² EC SWS, para 235.

²¹³ EC RPQ1, para. 136 n.128 (emphasis added). In any event, the EC's reliance on accounting principles is misplaced. The issue is not how the value of assets subject to the transaction should be valued for purposes of the purchaser's or the seller's books, but what price was actually paid for those assets and if that price did or did not include any value for potential future IRB and KDFAs bond issuances. Whatever accounting standards provide for inclusion in fair value does not say anything about whether or not the alleged value of any potential future benefits was actually received by Boeing.

149. Finally, in a last-ditch effort to find evidence to show pass-through, the EC contends that it lacks access to the long-term supply contracts that would make its case. As the United States noted in its answer to Question 47, the EC already has access to the core transaction documents of the Spirit acquisition, including the Asset Purchase Agreement and long-term supply contracts between Spirit and Boeing. None of these establish the EC's case.

45. *At paragraphs 290-292 of its First Written Submission, the European Communities asserts that Boeing and Spirit have a "close" and "special" relationship. At paragraph 292 of its First Written Submission, the European Communities asserts that "[t]his situation is relevant to the legal analysis for both the City of Wichita and State of Kansas subsidies." Is the European Communities alleging that Spirit does not operate at "arm's length" from Boeing? If not, please explain how the relationship between Boeing and Spirit is "relevant to the legal analysis" to be undertaken by the Panel.*

150. In its response to this Question, the EC acknowledges that the purchase of BCA's Wichita assets by Spirit AeroSystems, Inc. ("Spirit") was an "arm's length fair market value transaction", and that one part of that transaction was the establishment of long-term supply agreements with "prices ... contractually set" through 2013 and 2021.²¹⁴

151. After acknowledging these facts, the EC somehow concludes that "the companies did essentially agree on 16 June 2005 not to operate at arm's length for purposes of fulfilling the long-term supply commitments."²¹⁵ Given the EC's concession of the arm's-length nature of the entire transaction, this statement about one part of that transaction is a *non-sequitur*. The EC's claim would make sense only if a long-term supply contract is by definition not arms length – which is manifestly absurd.

152. The EC appears to seek to show that the long-term supply contracts are not arms-length because it believes that this will relieve it of its burden to establish pass-through. The EC fails to show that the long-term supply contracts were anything other than arms-length transactions. Instead, the EC's pass-through argument is based on the assertion that there was an expectation that IRBs and KDFAs would be issued to Spirit in the future, and the speculation that the value must have been reflected in the long-term supply contract negotiated as part of the transaction and that Boeing must have captured that future value. As discussed in response to Question 44 and earlier submissions, the EC's argument requires the Panel simply to presume that there was pass-through. The Panel cannot and should not do so.

48. *At paragraph 16 of its Third Party Submission, Brazil submits that the Panel should not interpret the term "group of enterprises or industries" in Article 2.1 too narrowly in analyzing whether subsidies in the aircraft sector are specific. According to Brazil,*

²¹⁴ EC RPQ1, paras. 137-138.

²¹⁵ EC RPQ1, para. 141.

"even if the group is large and diverse", the Panel should find that it constitutes a "group of enterprises or industries" within the plain meaning of Article 2.1. At paragraphs 31ff of its Third Party Submission, Canada argues that the European Communities' claim that the ATP Program is specific to a "group of enterprises or industries" fails because, inter alia, the universe of companies and industries that potentially fall within the limits identified by the EC is "highly indeterminate and extraordinarily diverse", and because the European Communities makes "no effort to establish any commonality" among the industries or groups of industries that are eligible for ATP funding "by reference to the products they produce". Could the parties please elaborate their views as to the meaning of "a group of enterprises or industries" in the chapeau of Article 2.1?

153. The EC takes such an expansive view of the meaning of the phrase “group of enterprises or industries” as to render it meaningless for purposes of determining specificity. As the United States explained in its response to this question, the meaning of this phrase must be understood in the context in which it appears – that is Article 2, which addresses specificity.²¹⁶ Specificity is an important limiting principle in the SCM Agreement because it distinguishes subsidies that are actionable from those that are not. If specificity were to be understood as broadly as the EC claims it is, then virtually all subsidies would be found to be specific, and the specificity inquiry in Article 2.1 would place no limits on which subsidies are or are not actionable.

154. For a subsidy to be *specific*, the “group of enterprises or industries” that receive it must be something more limited than *general*. The EC argues that a “group of enterprises or industries” exists if “there is some identifiable common relationship or similarity among those enterprises and industries.”²¹⁷ Despite the EC’s attempt to characterize the “group” that results from its interpretation as simply “large and diverse,”²¹⁸ in fact, the resulting group is potentially unlimited, or in other words, *general*, because it can be based on any similarity. The EC’s interpretation of a “group of enterprises or industries” is clearly at odds with the language and context of Article 2, which requires *some* specificity, or in other words, some limitation on the “group.” This is evidenced by the chapeau of Article 2.1 which refers to a subsidy that is “specific to” an enterprise or industry and group of enterprises or industries and Article 2.1(a), which addresses the situation of a granting authority that “explicitly limits” a subsidy. Accordingly, the EC’s potentially unlimited interpretation of the phrase “group of enterprises” eviscerates the disciplines of Article 2.

155. The EC’s interpretation of “group of enterprises or industries” poses further difficulties when understood in the context of Article 2.1(b) and footnote 2. To take one example, applying the EC’s interpretation, all enterprises with 500 or more employees would be considered a

²¹⁶ US RPQ1, paras. 131-136.

²¹⁷ EC RPQ1, para. 144.

²¹⁸ EC RPQ1, para. 144.

“group of enterprises” based on the similarity of having 500 or more employees. Furthermore, under the EC’s formulation, a subsidy that was limited by law to those enterprises with 500 or more employees would be *de jure* specific under Article 2.1(a). But, pursuant to Article 2.1(b) and footnote 2, a subsidy based on objective criteria, such as the number of employees, is *de jure non-specific*. Another example of the absurd consequences that result from the EC’s interpretation of “group of enterprises or industries” is a measure that subsidizes corporations. Under the EC’s formulation, “corporations” would be a “group of enterprises,” but this group covers virtually all sectors of the economy.

156. As the two examples above demonstrate, the EC’s interpretation of “group of enterprises or industries” leads to the anomalous result that the very criteria that may be used to find non-specificity become the basis for a finding of specificity. Put differently, the ability of enterprises to meet objective criteria that are supposed to serve as the basis for finding that a subsidy is *not* specific becomes the similarity that renders an otherwise disparate collection of enterprises a “group” that may receive a specific subsidy. In this regard, the EC’s understanding of a “group of enterprises or industries” renders Article 2.1(b) and footnote 2 meaningless and must be rejected.

49. *At paragraphs 89, 305, 334, 516, 559, 591, 601, 604, and 670 of its First Written Submission, the United States argues that certain alleged subsidies were governed by "objective" conditions and criteria within the meaning of Article 2.1(b) and footnote 2. Could the parties please elaborate their views as to the meaning of "objective" criteria or conditions within the meaning of Article 2.1(b) and footnote 2?*

157. The United States refers the Panel to its response to this question.

50. *At paragraph 77 of its Oral Statement, the European Communities states, "it could be argued that what is at issue in this dispute are 23 particular RDT&E PEs, and an examination at the PE level confirms that each PE was explicitly limited to the group of enterprises capable of conducting RDT&E in the narrow areas defined by each PE" (emphasis added). At paragraph 79 of its Oral Statement, the European Communities likewise states that "it could be argued that what is at issue in this dispute are the eight ATP projects in which Boeing participated, and an examination at the project level confirms that each of these projects was explicitly limited to a group of enterprises. Thus, ATP, as well as each of the ATP projects at issue, is specific."*

(a) *Could the European Communities please clarify whether it is arguing that the Panel should examine specificity at the PE/project level.*

(b) *Could the United States please respond to these statements.*

158. In its response to this question, the EC clarifies that it is *not* arguing that the DoD RDT&E should be examined at the PE level and that the ATP should be examined at the project

level. Rather, the EC states that “the specificity of R&D programmes should be primarily examined at the programme level.”²¹⁹ The United States agrees that in the instance of DoD RDT&E and ATP, the program level is the correct level at which to examine specificity. DoD RDT&E must be analyzed at the program level in order to understand the large variety of topics and the numerous enterprises and industries that are covered, whereas the PE level does not provide an appropriate frame of reference for understanding DoD RDT&E, as explained in the U.S. response to this question. ATP must be analyzed at the program level because ATP funding is awarded across numerous technology fields and the Department of Commerce makes no sub-program distinctions in granting funding.

159. The United States, however, notes that it is not always the case that specificity should be examined at the program level, or the highest level of aggregation of the activities of the granting authority, as the case may be. Rather, as the United States explained in its response to this question, specificity may be examined at some lower level, so long as the complaining party provides a reasoned basis for conducting the specificity inquiry at that level.²²⁰ In the case of both DoD RDT&E and ATP, the EC has failed to provide a reasoned basis for analyzing specificity at the PE level and the project level, respectively, nor does such a basis exist.

51. *Could the European Communities please elaborate on its view that the relevant baseline for the purpose of determining whether “disproportionately large” amounts of subsidy have been granted to certain enterprises is “the jurisdiction of the granting authority” (Oral Statement, paras. 36, 77, 87). To what extent does this baseline differ from that proposed by the United States at paragraphs 64-67 of its First Written Submission?*

160. The EC’s argument regarding the relevant baseline for determining whether disproportionately large amounts of a subsidy have been granted to certain enterprises lacks merit. The EC claims that the relevant baseline “is the recipients’ economic position ‘within the jurisdiction of the granting authority.’”²²¹ In other words, under the EC’s formulation, if the granting authority is an agency of the federal Government of the United States, such as DoD or NASA, that has a national scope, then a disproportionality analysis must compare the amount of a subsidy granted to a recipient with the recipient’s economic position in the United States. But such a test would render virtually all subsidies *de facto* specific, as further explained below. Although the United States has already provided a detailed explanation of the flaws in the EC’s baseline for determining disproportionality in paragraphs 21-30 of its second written submission, a few points merit further discussion here.

161. To begin, the United States and the EC appear to agree that a disproportionality analysis requires a comparison between two ratios. We also appear to agree that the numerator of the first

²¹⁹ EC RPQ1, para. 152.

²²⁰ US RPQ1, paras. 143-144.

²²¹ EC RQP1, para. 157.

ratio is the total amount of the alleged subsidy granted to Boeing and the denominator is the total amount of the alleged subsidy that is granted to all recipients. But the United States and the EC disagree as to the second ratio. The U.S. position is that the numerator of the second ratio must consist of some information about Boeing, such as its size as measured by annual revenue, while the denominator must consist of comparable information about the group of recipients of the alleged subsidy as a whole. Thus, following the U.S. view, the group from which the denominator is derived is the same in both ratios – the group comprised of all recipients of the alleged subsidy. In colloquial terms, this means that the comparison of the two ratios is an apples-to-apples comparison.

162. In contrast, the EC’s position leads to an apples-to-oranges comparison. Like the United States, the EC contends that the numerator of the second ratio should be some information about Boeing, such as its size. Unlike the United States, however, the EC would derive the denominator of the second ratio from a different group than the denominator of the first ratio. Whereas the denominator of the first ratio would be based on information about all alleged subsidy recipients, the denominator of the second ratio, according to the EC, would be the total U.S. economy. Thus, the comparison between the two ratios that the EC would make is a quintessential apples-to-oranges comparison.

163. Furthermore, the EC mistakenly claims that its proposed baseline – “the jurisdiction of the granting authority” – is grounded in the text of Article 2.1, both in the chapeau and in Article 2.1(c). But the text of Article 2.1 does not support the EC’s conclusion. The phrase “within the jurisdiction of the granting authority” in the chapeau of Article 2.1 serves to delimit the enterprises that are potentially subject to the specificity inquiry. In other words, it makes clear that enterprises outside the jurisdiction are not relevant. This phrase does not suggest that the specificity inquiry must always be based on *all* enterprises within the jurisdiction. To the contrary, other factors that are considered as part of the Article 2.1 specificity analysis indicate that this analysis looks to something less than *all* enterprises within the jurisdiction, as set forth fully in paragraph 27 of the U.S. second written submission. For example, footnote 2 of Article 2.1(b) provides that a subsidy may be non-specific where eligibility for the subsidy is based on the size of the recipient, which means that a subsidy may be non-specific even if it is provided only to a subset of companies that fall within a given size range within the jurisdiction of the granting authority.²²²

164. The language “within the jurisdiction of the granting authority” in the third sentence of Article 2.1(c) also does not have the meaning that the EC attempts to ascribe to it. This sentence reads, in full: “In applying this subparagraph, account shall be taken of the extent of diversification of economic activities within the jurisdiction of the granting authority, as well as

²²² The United States notes that simply because it agrees that the term “jurisdiction” in the chapeau of Article 2.1 refers to geographic jurisdiction does not mean that it agrees with the EC’s position that the baseline for a disproportionality analysis is the jurisdiction of the granting authority.

the length of time during which the subsidy programme has been in operation.” The EC places great weight on the language “{i}n applying this subparagraph” – arguing that it must mean that the phrase “within the jurisdiction of the granting authority” applies to the “granting of disproportionately large amounts of a subsidy to certain enterprises.” However, the context of Article 2.1(c) indicates otherwise.

165. Article 2.1(c) addresses those situations in which it may appear from an examination of the terms of the relevant legislation that a subsidy is not specific, but the subsidy may, in fact, be specific based on an examination of other factors. The second sentence of Article 2.1(c) lists factors that may render a seemingly non-specific subsidy *de facto* specific. The third sentence of Article 2.1(c) counsels that “{i}n applying this subparagraph”, or in other words, before finding that a subsidy is *de facto* specific, it is important to consider the “extent of diversification of economic activities within the jurisdiction of the granting authority” and “the length of time during which the subsidy programme has been in operation.” If a particular economy lacks diversification, a subsidy that appears specific may not actually be specific when considered in the context of the economy. Likewise, a subsidy program that has been in operation for a short time may appear specific because only a few enterprises have had the opportunity to participate in the program, but as the program continues, it may be the case that it will be used by many enterprises. In other words, the factors listed in the third sentence are additional considerations to be taken into account at the same time as the factors listed in the second sentence are examined – contrary to the EC’s position, the factors in the third sentence do not describe how the factors in the second sentence are to be analyzed. Thus, the phrase in the third sentence of Article 2.1(c) “within the jurisdiction of the granting authority” does not condition a disproportionality analysis, as the EC contends.

166. Not only is the EC’s reading of the chapeau of Article 2.1 and Article 2.1(c) flawed, the EC’s interpretation would also render the disproportionality factor in Article 2.1(c) inutile. This is because under the EC’s test, the amount of alleged subsidies granted to classes of subsidy recipients would always be found to be disproportionate because the subsidy recipients would represent 100 percent of the amount of the subsidy granted, but less than 100 percent of the overall economy. In other words, the factor pertaining to the “granting of disproportionately large amounts of subsidy to certain enterprises” is meaningless if the same conclusion is reached every time this factor is applied, as would be the case under the EC’s proposed baseline.

167. The EC claims that the baseline proposed by the United States – *i.e.* the group of all enterprises that received the subsidy²²³ – is invalid because it fails to take into account the situation where there is only one recipient of a subsidy, citing as examples the alleged subsidies that Boeing received for relocation expenses under the Illinois Corporate Headquarters Relocation Act and the Kansas Development Finance Authority Bonds that Spirit received.²²⁴

²²³ US FWS, paras. 64-67, and US SWS, paras. 21-30.

²²⁴ EC RPQ1, paras. 163-170.

The EC argues that the U.S. baseline is unworkable because it allows for a circumvention of a specificity finding when there is only one company in the baseline.²²⁵ But, if an alleged subsidy is only provided to one company, then a disproportionality analysis is not the relevant inquiry under the “other factors” set forth in Article 2.1(c). Rather, in that situation, it would be more appropriate to consider the “predominant use” or the use “by a limited number of certain enterprises” of an alleged subsidy. Accordingly, the baseline proposed by the United States for a disproportionality analysis is not invalid simply because it may not be applicable in one situation that is better captured by different factors enumerated in Article 2.1(c). Indeed, such a fact-specific analysis is the essence of the *de facto* specificity inquiry found in Article 2.1(c).

52. *At paragraph 76 of its First Written Submission, the European Communities argues that "consideration of specificity depends on whether the subsidy is limited to a certain number of industries that may be involved in different trades or manufacturing processes" (emphasis added). However, there are numerous instances in its First Written Submission where the European Communities advances its specificity arguments in terms of whether the alleged subsidy is specific to an enterprise, i.e. Boeing. With respect to each of the alleged subsidies, please clarify whether the European Communities is claiming that the alleged subsidy is (a) *de jure* and/or (b) *de facto* specific to: (i) an enterprise; (ii) an industry; (iii) a group of enterprises; and/or (iv) a group of industries.*

168. In its prior submissions, the United States has fully set forth its response to the EC’s specificity arguments regarding each of the alleged subsidies at issue in this dispute. The United States notes, however, that the EC made no claims in its first written submission of *de jure* specificity with respect to the Kansas Development Finance Authority Bonds or the Illinois reimbursement of relocation expenses and EDGE tax credits. In arguing in its second written submission that these three programs are *de jure* specific, the EC erroneously conflates the *de jure* and *de facto* specificity analysis.²²⁶ The EC’s *de jure* specificity claims are based on the argument that the criteria in the relevant legislation made it impossible for any other entity to qualify for the programs. The EC’s argument, however, is actually one of *de facto* specificity, with which the United States disagrees.

53. *At paragraphs 143, 188, 200, 209, 236-237, 251, 283, and 340 of its First Written Submission, the European Communities argues that certain subsidies are specific within the meaning of Article 2.1(c) because Boeing is or will be the "predominant beneficiary" of those subsidies. Does "predominant beneficiary" mean the same thing as "predominant use" in Article 2.1(c)?*

²²⁵ EC RPQ1, para. 169.

²²⁶ EC SWS, paras. 267, 285, 296.

169. The EC states that “predominant beneficiary” has the same meaning as “predominant use” in Article 2.1(c).²²⁷ Although the distinction between the phrases “predominant beneficiary” and “predominant use” is not relevant for purposes of this dispute, it is possible to conceive of a situation where the distinction between the two phrases could be important. For this reason, the United States urges the EC and the Panel to use the language found in the text of Article 2.1(c) – *i.e.* “predominant use” – rather than the non-text based formulation suggested by the EC.

54. *At paragraph 687 of its First Written Submission, the United States argues that "HB 2294 does not require the commercial airplane final assembly facility to actually produce 36 airplanes per year; it only requires that this facility have the capacity to produce that number of planes per year. The EC fails to understand this crucial distinction". Please explain why this distinction is or is not crucial for the purposes of Article 3.1(a), in light of the dynamics of LCA production and the LCA industry/market more generally.*

170. As a preliminary matter, the United States notes that in addressing export contingency in response to the Panel’s questions, the EC devotes several pages to an “interpretation” of Article 3.1 of the SCM Agreement that the EC itself states it is not actually advancing in this dispute.²²⁸ Indeed, the EC refers to this argument as “mooted.”²²⁹ It is not clear to the United States why the EC thought it appropriate to request the Panel and the United States to consider a “mooted” argument that it is not actually advancing. In any event, neither the EC’s mooted interpretation nor its actual argumentation in this dispute is based on an accurate construction of Article 3.1(a) of the SCM Agreement. As the EC is not advancing the “mooted interpretation” as an argument in this dispute, there is no reason for the United States to rebut it, nor is there any reason for the Panel to address it. The United States has therefore not provided a point-by-point rebuttal of this mooted argument except where incorporated into arguments the EC actually is advancing in this dispute. To the extent the Panel indicates that such a point-by-point rebuttal will assist in the analysis of the export contingency claim in this dispute, the United States will provide it.

171. HB 2294 does not constitute a subsidy for the reasons set forth by the United States in prior submissions; thus, it cannot be a subsidy contingent on export. Even if it was a subsidy, HB 2294 is neither *de jure* nor *de facto* contingent upon export performance.

172. In paragraph 174, the EC asserts that, based on its mooted interpretation, which it does not even advance in this dispute, “the meaning of ‘actual or anticipated’ is ‘past or future,’ not ‘real or potential.’” Beyond the fact that it is not clear why the EC even addresses an argument that is mooted, the EC’s interpretation of these terms is severely flawed. With respect to the meaning of “actual” in the context of footnote 4, it clearly means “real” and not “past.” An

²²⁷ EC RPQ1, para. 172.

²²⁸ EC RPQ1, paras. 184-89.

²²⁹ EC RPQ1, para. 183.

examination of the Spanish and French texts of the SCM Agreement confirms this interpretation. The Spanish text uses “reales,” and the French text uses “effective.”²³⁰ With respect to “anticipated” exportation, the EC is incorrect that “anticipated” refers to “future.” In *Canada—Aircraft*, the Appellate Body clarified that “anticipated” in footnote 4 means “expected.”²³¹ This is reinforced by the Spanish and French texts’ use of the words “previstos” and “prévues” respectively.

173. Next, the EC posits that the distinction between a requirement to establish certain production capacity and a requirement to produce a certain number of airplanes is not crucial in the context of HB 2294.²³² This is because, in the EC’s view, large civil aircraft production capacity equals large civil aircraft production. The EC does not cite to a single piece of evidence for this proposition.

174. Even if the EC’s assertion were correct, the EC still would not have established the “tie” that Article 3.1(a) requires. Under Article 3.1(a), as illuminated by footnote 4, for a subsidy to be contingent upon export performance, the granting of the subsidy must be tied to actual or anticipated exportation or export earnings. The tie required by Article 3.1(a) is not a tie to production. Thus, even if production capacity were equivalent to production in the large civil aircraft market, the EC still has not established that the granting of an alleged subsidy is tied to anticipated exportation.

175. The EC goes on to argue that “a decision to comply with the condition in HB 2294 to put in place production capacity to produce 36 787s per year is tantamount to a decision to produce at least that number of aircraft per year. It follows that requiring Boeing, as a condition of receipt of the subsidy, to put in place production capacity to produce 36 787s per year is tantamount to requiring Boeing to produce that number of aircraft per year, and as discussed elsewhere, to export some of these LCA, given limited demand in the US market.”²³³

176. Finally, in concluding its response to the Panel’s Question 54, the EC makes an observation as to what it “finds remarkable about the United States’ defence on this basic point” – the “basic point” being the equation the EC assumes between a requirement to establish production capacity and a tie to actual or anticipated exportation.²³⁴ What the EC finds “remarkable” is that, in its view, the U.S. defense “is entirely based on the absence of an express

²³⁰ See *Oxford Spanish Dictionary*, p. 625 (2d ed. revised, 2001) (defining “real” to mean “verdadero, no ficticio”); *Le Petit Robert, Dictionnaire de la Langue Française*, p. 838 (revised ed., 2004) (defining “effectif, i-ve” as “qui se traduit par un effet, par des actes réels. => concret, 1. positif, réel, tangible”).

²³¹ *Canada - Aircraft (AB)*, para. 172.

²³² EC RPQ1, para. 175.

²³³ EC RPQ1, para. 177.

²³⁴ EC RPQ1, para. 179.

requirement to do the thing that is alleged to give rise to the prohibited subsidy.”²³⁵ But that is not the basis of the U.S. defense at all, and it is notable that the EC cites no support for its characterization of the U.S. defense.

177. The EC’s position fails not because of the absence of an express requirement to export as a condition for granting of the subsidy. It fails because of the absence of **any** tie – whether in the form of an express requirement to export or whether in some other form – between the granting of the alleged subsidy and actual or anticipated exportation. Nowhere has the United States advanced the position described in the EC’s mooted interpretation that the tie between the granting of a subsidy and actual or anticipated exportation must take the form of an “express requirement” in order for the subsidy to be prohibited under Article 3.1(a) and footnote 4. Contrary to the EC’s assertion, the United States emphatically does not “adhere{ } to the position” set out in the EC’s mooted interpretation.²³⁶

178. The U.S. rebuttal of the EC’s export contingency claim is straightforward and responds directly to the premise on which that claim is based. In brief, the EC’s claim is that an alleged subsidy conditioned upon the establishment of production capacity equates to an alleged subsidy conditioned upon actual production, which equates to an alleged subsidy conditioned upon export performance. The U.S. response is that the EC has provided no evidence to substantiate the leap from production capacity to actual production and from actual production to export performance.²³⁷ Accordingly, even on the only theory the EC has advanced, it has failed to establish that the granting of an alleged subsidy is tied to actual or anticipated exportation.

179. In sum, the EC’s desperate attempts to rely on a mooted argument, to assert unsubstantiated assumptions about the LCA market, and to assert unsubstantiated statements about Boeing’s expectations, do not help the EC in establishing its export contingency claim.

55. *Footnote 4 to Article 3.1(a) provides that the "contingent ... in fact ... upon export performance" standard in Article 3.1(a) is met when the facts demonstrate that the granting of a subsidy, without having been made legally contingent upon export performance, "is in fact tied to actual or anticipated exportation or export earnings." Could the parties please elaborate their views on the concept of the granting of a subsidy being "in fact" tied to "anticipated" exportation?*

²³⁵ EC RPQ1, para. 179.

²³⁶ In a statement utterly irrelevant to this dispute, the EC offers its opinion as to the implications for a different dispute of the Panel’s eventual acceptance of the U.S. argument in this dispute. EC RPQ1, para. 179. In addition to being irrelevant, the EC’s opinion is premised on a gross mischaracterization of the U.S. argument in this dispute, and thus of no consequence even as a theoretical matter.

²³⁷ US SWS, paras. 149-58.

180. The EC makes no arguments in response to this question. The EC merely makes reference to its mooted interpretation and then confirms that it is not actually advancing the mooted interpretation in this dispute. Thus, the EC has not responded to the Panel’s question.

181. For the U.S. views on the issues raised by this question, the United States refers the Panel to the U.S. response to Question 55.²³⁸

56. *At paragraph 111 of its Oral Statement, the European Communities refers to its "primary argument" in connection with its claim that the subsidies allegedly provided through HB2294 are contingent in fact upon export performance. How many distinct legal arguments (including those made in the alternative) is the European Communities advancing in support of its claim that the subsidies allegedly provided through HB2294 are contingent in fact upon export performance?*

182. The United States notes again that the EC devotes a considerable portion of its response to Question 56 to the “mooted” interpretation of export contingency that it is in fact not advancing in this dispute.

183. The first actual argument advanced by the EC is that in order to establish *de facto* export contingency, “it is sufficient to demonstrate the existence of a subsidy grant contingent upon sales, regardless of whether such sales occur in the domestic market (the United States) or with respect to exports. That is, there is no need to demonstrate that the subsidy favours exports or is greater in the case of export.”²³⁹

184. The EC is correct in noting that Article 3.1(a) and footnote 4 of the SCM Agreement do not require a demonstration that a “subsidy favours exports.” But, it is incorrect in suggesting that the absence of such a requirement means that “it is sufficient to demonstrate that the existence of a subsidy grant contingent upon sales.” One proposition does not follow logically from the other. Thus, the EC’s first export contingency argument is a *non-sequitur*. As the United States previously has explained at length, Article 3.1(a) prohibits “subsidies contingent . . . upon export performance,” which contingency exists (as Footnote 4 explains) when “the granting of the a subsidy is in fact tied to actual or anticipated exportation or export earnings.” The key issue, therefore, is whether the granting of a subsidy is tied to actual or anticipated exportation or export earnings, not whether “the subsidy favours exports.”

185. A tie to actual or anticipated exportation or export earnings is not the same as a tie to mere sales. Contrasting the EC’s allegation in this dispute to the facts of the *Canada – Aircraft* dispute highlights the distinction. At issue in *Canada – Aircraft* was a program (“Technology Partnerships Canada” or “TPC”) whereby the Canadian government gave up-front financing to

²³⁸ US RPQ1, paras. 155-62.

²³⁹ EC RPQ1, para. 190.

aircraft manufacturers to underwrite the costs of developing a new aircraft model in exchange for a commitment by the manufacturers to repay the financing at a specified, below-market rate for each sale of the covered aircraft over a specified number of sales.²⁴⁰ Evidence before the *Canada – Aircraft* panel, including evidence of the Canadian government’s reliance on a manufacturer’s projected export sales as a key part of the decision to provide TPC financing, led the panel to conclude that “the TPC assistance to the Canadian regional aircraft industry would not have been granted but for some expectation of exportation or export earnings” and that, accordingly, TPC financing was contingent in fact upon export performance.²⁴¹ The Appellate Body upheld that conclusion.²⁴²

186. Now consider, by contrast, the situation described in the first argument the EC actually makes, in which, according to the EC, “the amount of the subsidy is contingent upon sales.”²⁴³ Unlike the situation in *Canada – Aircraft*, the situation the EC describes involves no tie between the granting of a subsidy and actual or anticipated exportation. The EC provides no evidence, for example, that the State of Washington relied on projections of export sales in providing Boeing the tax treatment in HB 2294 (incorrectly alleged by the EC to be a subsidy). Nor does the EC provide any other evidence of a tie to actual or anticipated exportation. Even under the EC’s mistaken interpretation of HB 2294, the granting of the alleged subsidy is at most conditioned on sales. In fact, the granting of HB 2294 is not even tied to sales; it is conditioned on construction of a facility with a given production capacity.

187. The EC also suggests that the sales upon which “the amount of the subsidy is {allegedly} contingent” could include export sales.²⁴⁴ But that possibility does not establish a tie between the granting of the alleged subsidy and actual or anticipated exportation or export earnings. This point is made clear by the second sentence of footnote 4 of the SCM Agreement, which states: “The mere fact that a subsidy is granted to enterprises which export shall not for that reason alone be considered to be an export subsidy within the meaning of this provision.” The possibility that some of the sales that lead to greater subsidy amounts under the EC’s scenario may be export sales bears no resemblance whatsoever to the facts of *Canada – Aircraft* described above, in which the granting of a subsidy is tied to a commitment by the recipient that cannot be fulfilled without exportation.

188. As the situation the EC describes does not entail the granting of a subsidy tied to actual or anticipated exportation or export earnings, it is not a situation covered by Article 3.1(a) and footnote 4 of the SCM Agreement. Therefore, contrary to the EC’s first argument, the B&O tax

²⁴⁰ See *Canada – Aircraft (Panel)*, paras. 9.282-9.315.

²⁴¹ *Canada – Aircraft (Panel)*, para. 9.341.

²⁴² See *Canada – Aircraft (AB)*, para. 180.

²⁴³ EC RPQ1, para. 192.

²⁴⁴ EC RPQ1, para. 192.

measure is not a subsidy contingent upon export performance and is not prohibited by Article 3.1(a) and footnote 4.

189. In the second argument advanced by the EC in this dispute, the EC maintains that “if the facts demonstrate that there was the ‘anticipating of’ exports (a point admitted by the United States) and that the grant of the subsidy (in this case HB 2294) was ‘tied-to’ such ‘anticipating of’ exports, then HB 2294 in its entirety constitutes a measure contingent in fact upon export.”²⁴⁵ Unlike its first actual argument, but like its mooted interpretation, this second actual argument assumes “that it is still necessary to demonstrate some element of ‘favouring.’”²⁴⁶ As already discussed, Article 3.1(a) and footnote 4 make no reference to “favouring.”

190. Aside from its reference to “favouring,” the EC’s second argument appears to be nothing more than a paraphrase of Article 3.1(a) and footnote 4, except that instead of referring to a tie to “anticipated exportation” (the phrase used in footnote 4), the EC refers to “the ‘anticipating of’ exports.” The EC’s placement of the phrase “anticipating of” in quotation marks indicates that the EC focuses on a distinction between “the ‘anticipating of’ exports” and “anticipated exportation,” a point that is elaborated upon in the argument that the EC is not advancing in this dispute.²⁴⁷

191. The EC’s is correct that footnote 4 does not use the phrase “the ‘anticipating of’ exports.” But, footnote 4 does use the phrase “anticipated exportation,” and the Appellate Body has clarified that in this context “anticipated” means “expected.”²⁴⁸ Exportation that is anticipated is exportation that may occur but need not necessarily occur.²⁴⁹ The existence of exportation that is anticipated or expected necessarily implies some entity doing the anticipating or expecting. In the context of footnote 4, it is clear that that entity is the granting authority. It follows that where the granting of a subsidy is tied to anticipated exportation (and thus prohibited under Article 3.1(a) and footnote 4), there necessarily will be an anticipating of exportation on the part of the granting authority.

²⁴⁵ EC RPQ1, para. 193. The United States has made clear that it did not “admit” that there was the “anticipating of” exports. In erroneously asserting that the United States did make such an admission, the EC refers to paragraph 108 of its Second Oral Statement, which refers to paragraph 698 of the U.S. first written submission. What the United States actually said in that paragraph was, “[a]lthough the State of Washington *may have expected* that Boeing would export some of its airplanes manufactured in the commercial airplane final assembly facility cited in HB 2294, the EC has not shown that the granting of HB 2294’s tax incentives is tied to this anticipated exportation.” (Emphasis added).

²⁴⁶ EC RPQ1, para. 193.

²⁴⁷ See EC RPQ1, para. 188.

²⁴⁸ *Canada - Aircraft (AB)*, para. 172.

²⁴⁹ See *Canada - Aircraft (AB)*, para. 172.

192. Given the ordinary meaning of the term “anticipated” in context and in light of the object and purpose of the SCM Agreement, there is no significance to the distinction the EC draws between “anticipated exportation” and “the ‘anticipating of’ exports.” That distinction appears to be linked to the EC’s misinterpretation of the term “anticipated” as “future,” contrary to the Appellate Body’s finding that “anticipated” means “expected.” If, as the EC asserts, an anticipated export is an actual export that will occur in the future (putting to one side the redundancy this would create between the terms “actual” and “anticipated” in footnote 4), then the distinction the EC highlights in its second actual argument might be meaningful. But, as that distinction appears to be based on a misinterpretation of the term “anticipated,” it is meaningless.

193. Without any meaningful elaboration, the EC asserts that the third export contingency argument it is actually making “combines the first and second arguments.”²⁵⁰ Combining two deeply flawed arguments does not result in the emergence of a good argument. Therefore, for the reasons discussed in connection with the first and second arguments, the third argument is also deeply flawed.

57. *Is the European Communities arguing that the grant of the subsidy was in fact tied to “anticipated” or “actual” exportation?*

194. In paragraph 195 of its response to Question 57, the EC cobbles together another enumerated list of possible arguments. The EC’s states that, “in order to be certain that it has made all the necessary arguments, the European Communities submits that each of the relevant measures provides for a subsidy contingent upon *actual* export; or alternatively contingent upon *anticipated* export; or alternatively contingent upon *actual or anticipated* export; or alternatively contingent upon *actual and anticipated* export; and in each case whether one adopts the Reference Interpretation or the United States’ interpretation of the term “actual or anticipated.”²⁵¹

195. It is entirely unclear what it means for a Party to assert arguments “in order to be certain that it has made all the necessary arguments.”²⁵² Either the EC has a legal and factual basis for asserting a claim or it does not. The EC’s summary of its various arguments in the alternative is nonsensical. In fact, when the EC attempts to provide some explanation, it admits that its explanations “do not exhaust all the alternative arguments” it purports to be making.²⁵³ It appears that the EC wishes to identify arguments in the most cursory terms and then impose

²⁵⁰ EC RPQ1, para. 194.

²⁵¹ EC RPQ1, para. 195.

²⁵² EC RPQ1, para. 195.

²⁵³ EC RPQ1, para. 197.

upon the Panel the burden of filling in the reasoning that would support those arguments. However, it is not for the Panel to make the EC's case for it.²⁵⁴ This Panel should do likewise.

196. To the extent the EC does explain any of its arguments, it continues to assert that there are two different possible meanings of the term “actual or anticipated” in footnote 4: “past or future” or “real or potential.” As discussed above, this is demonstrably false, and repetition by the EC will not make it so. In the context of footnote 4, “actual” unquestionably means “real,” not “past,” as confirmed by the Spanish and French texts of the SCM Agreement. Also in the context of footnote 4, “anticipated” unquestionably means “expected,” not “future,” as clarified by the Appellate Body and again confirmed by the Spanish and French texts. Therefore, “actual” exportation is exportation that has occurred or will in fact occur in the future, while “anticipated” exportation is exportation that is expected to occur but may or may not actually occur. An argument based on any other interpretation of these terms is based on a false premise.

197. Additionally, the EC also repeats its suggestion that the mere fact that a recipient of the tax treatment afforded by HB 2294 exports makes that measure an export contingent subsidy.²⁵⁵ That suggestion is contradicted by the second sentence of footnote 4 of the SCM Agreement. Establishing that the recipient of a subsidy exports is not a substitute for establishing that the granting of a subsidy is tied to actual or anticipated exportation or export earnings, which is what is required to make a *prima facie* case of a breach of Article 3.1(a).

198. Finally, the EC asserts that its claim should prevail even if “anticipated exportation” means (as the Appellate Body has found) “expected exportation.” Thus, the EC asserts that “the exports are ‘anticipated’ in the sense that they are expected.”²⁵⁶ Once again, however, the EC offers no substantiation for this assertion.

58. *In its first written submission, the European Communities recalls that “WTO panels and the Appellate Body have repeatedly found these tax breaks to constitute WTO-incompatible export subsidies” (e.g. para. 964 and footnote 1684). In US – Shrimp (Article 21.5 – Malaysia), the Appellate Body clarified that Appellate Body Reports that are adopted by the DSB must be treated by the parties to a particular dispute “as a final resolution to that dispute”.²⁵⁷ In EC – Bed Linen (Article 21.5 – India), the Appellate Body clarified that an unappealed finding included in a panel report that is adopted by the DSB must likewise be treated “as a final resolution to a dispute between*

²⁵⁴ *Japan – Agricultural Products (AB)*, para. 129. This is not the first time that the EC has advanced a cascade of claims without bothering to present any arguments in support of them. In its report in *US – Zeroing (EC) (AB)*, the Appellate Body declined to rule on an EC “conditional appeal” when the EC “did not set out any specific arguments to support this aspect of its appeal. Para. 234.

²⁵⁵ See EC RPQ1, para. 199.

²⁵⁶ EC RPQ1, para. 200.

²⁵⁷ *US – Shrimp (Article 21.5) (AB)*, para. 97.

the parties in respect of the particular claim and the specific component of a measure that is the subject of that claim".²⁵⁸ On that basis, the Appellate Body concluded that a particular claim "was not properly before the Panel".²⁵⁹ Is the European Communities' claim, i.e. that "subsidies provided by the FSC/ETI measures and successor legislation are contingent in law upon export performance" (EC FWS, para. 964), properly before this Panel?

199. In its response to this question, the EC for the first time states that it seeks a “final resolution” of the question “whether the FSC/ETI (and its violation of Article 3.1 of the *SCM Agreement*) continues today in light of (i) the Tax Increase Prevention and Reconciliation Act of 2005 (“TIPRA”).”²⁶⁰ However, this claim is not within the Panel’s terms of reference. Therefore, the DSU does not permit the EC to bring these claims before the Panel.

200. Specifically, the Panel’s terms of reference are:

To examine, in light of the relevant provisions of the covered agreements cited by the European Communities in document WT/DS353/2¹, the matter referred to the DSB by the European Communities in that document, and to make such findings as will assist the DSB in making the recommendations or in giving the rulings provided for in those agreements.²⁶¹

Document WT/DS353/2, the EC’s request for establishment of a panel, does not reference TIPRA. The only references it makes to the FSC and ETI measures are to:

- a.. Sections 921-927 of the Internal Revenue Code (prior to repeal) and related measures establishing special tax treatment for “Foreign Sales Corporations” (“FSCs”)
- b. FSC Repeal and Extraterritorial Income Exclusion Act of 2000, Pub. L. No. 106-519; and
- c. American Jobs Creation Act of 2004, Pub. L. No. 108-357.

201. Therefore, although the EC might “seek” a “final resolution of whether TIPRA allows a measure to continue, it did not include TIPRA within the terms of reference of this Panel.

²⁵⁸ *EC – Bed Linen (Article 21.5) (AB)*, para. 93 (emphasis original)

²⁵⁹ *EC – Bed Linen (Article 21.5) (AB)*, para. 99.

²⁶⁰ Tax Increase Prevention and Reconciliation Act of 2005, Pub. L. 109-222, § 513 (Exhibit EC-627).

²⁶¹ Constitution of the Panel Established at the Request of the European Communities, WT/DS353/3, para. 2 (4 December 2006) (footnote omitted).

Therefore, the question of whether TIPRA is inconsistent with the SCM Agreement is not properly before the Panel.

59. *We understood the European Communities to clarify, in response to a question from the Panel at the first meeting, that it is not claiming that the Tax Increase Prevention and Reconciliation Act of 2005 – nor any other FSC/ETI-related measure referred to in its First Written Submission – is inconsistent with Article 3.1(a) "as such"; rather, the scope of the European Communities' claim under Article 3.1(a) is limited to the financial contributions/benefits to Boeing under those measures – i.e., these FSC/ETI-related measures "as applied" to Boeing. Is our understanding correct?*

202. The United States refers the Panel to the U.S. response to Panel Question 58.²⁶²

61. *Can the concept of "serious prejudice to the interests of another Member" in Article 5(c) be interpreted as covering forms of serious prejudice not enumerated in Article 6.3?*

(a) *Please indicate whether such an interpretation of Article 5(c) would be in accordance with the customary rules of interpretation of public international law as expressed in the Vienna Convention on the Law of Treaties.*

(b) *Please explain whether prior panel and Appellate Body reports provide any guidance on this question of treaty interpretation. In this regard, please comment on the US – Upland Cotton panel's finding that "demonstration that at least one of the four effects-based situations in Article 6.3 exists is a necessary basis to conclude that serious prejudice exists" (para. 7.1380).*

(c) *If the Panel were to conclude that the 1992 Agreement could in principle be taken into account (pursuant to Article 31(3)(c) of the Vienna Convention or otherwise) for the purpose of interpreting Article 5(c), please explain whether the 1992 Agreement provides any guidance on the question of whether the concept of "serious prejudice to the interests of another Member" in Article 5(c) could be interpreted as covering forms of serious prejudice not enumerated in Article 6.3.*

203. The EC makes several attempts to arrive at a reading of Article 5(c) and Article 6.3 of the SCM Agreement that would support its position with respect to the 1992 Agreement. None of these attempts is successful.

204. First, the EC's argument ignores the explicit provision in the 1992 agreement itself, that its terms are "without prejudice" to the rights and obligations of the United States and the EC "under the GATT and under other multilateral agreements negotiated under the auspices of the GATT," which includes the SCM Agreement. Thus, even if the Panel were to decide it would be

²⁶² US RPQ1, paras. 163-166.

appropriate to look at the 1992 agreement – which the United States disputes – the Panel would only be able to conclude that by its own terms that agreement cannot be used to inform the interpretation of the SCM Agreement and that the 1992 Agreement is secondary to the SCM Agreement and the other WTO Agreements.

205. Second, the EC itself explicitly acknowledges that the 1992 Agreement in no way addresses the question of whether serious prejudice under Article 5(c) includes forms of serious prejudice not enumerated in Article 6.3.²⁶³ The EC states that because it is “enacted in pursuit of the Parties ‘common goal’ or interest,” the “very existence of the 1992 Agreement . . . strongly supports the view that the Parties agreed to a set of mutual ‘interests’ in this area, which interests could, by definition, extend beyond those enumerated in Article 6.3, and could be ‘seriously prejudiced’ within the meaning of Article 5(c) of the SCM Agreement.”²⁶⁴ However, the EC points to nothing in the 1992 agreement – let alone in the SCM Agreement – that supports such a view.

206. Indeed, if the EC’s argument were followed to its logical conclusion, every agreement between a subset of Members could be asserted as substantive law for purposes of Article 6.3. The EC has provided no logical basis for concluding that this is the type of “interest” contemplated by Article 5(c) of the SCM Agreement, and such an interpretation would lead to precisely the situation for which the Appellate Body in *Mexico – Taxes on Soft Drinks* indicated the WTO is not the appropriate forum. We have discussed this in more detail in our response to this Question and to Question 62(b).

207. Third, the EC does not even address Article 6.2, which provides clear context for the meaning of Article 6.1. Specifically, Article 6.2 states that “[n]otwithstanding the provisions of paragraph 1, serious prejudice shall not be found if the subsidizing Member demonstrates that the subsidy in question has not resulted in any of the effects enumerated in paragraph 3.” The use of the word “shall” clearly indicates that where none of the effects enumerated in paragraph 3 exists, serious prejudice does not exist.²⁶⁵

208. Fourth, the EC refers to Article XVI of the GATT 1994 to support its position that Article 6.3 could include forms of serious prejudice not enumerated.²⁶⁶ However, there is nothing in Article XVI of the GATT 1994 that supports such an interpretation of Article 6.3 and the EC does not point to anything.

²⁶³ EC RPQ1, para. 215.

²⁶⁴ EC RPQ1, para. 215.

²⁶⁵ See also US RPQ1, para. 171.

²⁶⁶ EC RPQ1, para. 212.

209. Finally, the EC argues that since footnote 13 in Article 5(c) of the SCM Agreement provides that serious prejudice includes “threat of serious prejudice” while Article 6.3 makes no reference to a “threat of serious prejudice,” footnote 13 supports a broader reading of Article 6.3. The EC’s argument is without merit. Article 5(c) provides that “serious prejudice to the interests of another Member” is a type of “adverse effect.” Footnote 13 makes clear that “serious prejudice” in Article 5(c) has two components: “serious prejudice” and “threat of serious prejudice.” Both of these components include the concept of “serious prejudice,” which is defined exhaustively in Article 6.3.

210. In sum, the EC has provided no basis in the SCM Agreement or the 1992 Agreement – and none exists – for its expansive reading of Article 6.3 of the SCM Agreement.

62. *If the Panel were to conclude that the concept of "serious prejudice to the interests of another Member" in Article 5(c) could in principle cover forms of serious prejudice not enumerated in Article 6.3, can the concept of "serious prejudice to the interests of another Member" in Article 5(c) be interpreted as covering serious prejudice to a Member's "interest to have international obligations respected" (EC Oral Statement, para. 117)?*

- (a) *Please explain whether such an interpretation of Article 5(c) would be in accordance with the customary rules of interpretation of public international law as expressed in the Vienna Convention on the Law of Treaties.*
- (b) *Please explain whether prior panel and Appellate Body reports provide any guidance on this question of treaty interpretation. In this regard, please comment on the relevance of paragraph 78 of the Appellate Body Report in Mexico – Taxes on Soft Drinks.*
- (c) *If the Panel were to conclude that the 1992 Agreement could in principle be taken into account (pursuant to Article 31(3)(c) of the Vienna Convention or otherwise) for the purpose of interpreting Article 5(c), please explain whether the 1992 Agreement provides any guidance on the question of whether the concept of "serious prejudice to the interests of another Member" in Article 5(c) could be interpreted as covering serious prejudice to a Member's "interest to have international obligations respected".*

211. The EC’s response to Questions 62(a) through (c) is mired in misunderstandings of the proper elements of treaty interpretation, misunderstandings of the Appellate Body’s findings in *Mexico – Taxes on Soft Drinks*, and failure to address the core point that the 1992 agreement is – by its own terms – without prejudice to the SCM Agreement and that it does not even address the issue.

212. First, as before, the EC simply ignores the fact that the 1992 agreement explicitly refers to its relationship to the SCM Agreement by stating unequivocally that its terms are “without prejudice” to those of the GATT and any agreements negotiated under its auspices. The EC nowhere explains how, despite this clear treaty language, it considers that the 1992 agreement can nevertheless affect the scope of what is “serious prejudice” under the SCM Agreement.

213. What is more, the EC repeats its express acknowledgement that the 1992 Agreement does not address the issue of serious prejudice. The EC’s suggestion that the 1992 Agreement does expressly set forth “interests” of the United States and the EC is not relevant; not every interest, simply by virtue of being an “interest,” is relevant for a determination of serious prejudice. Indeed, this is precisely the role that Article 6.3 plays in enumerating the interests that are relevant – and leaving out those that are not. The EC’s interpretation would allow every agreement entered into by a subset of Members to be a source of substantive law for purposes of Article 5(c) of the SCM Agreement. This is precisely the type of analysis in which the Appellate Body in *Mexico – Taxes on Soft Drinks* found WTO dispute settlement cannot engage.

214. The EC then goes on to argue that the 1992 Agreement could have “contextual” relevance in an interpretation of Article 5(c) of the SCM Agreement. However, as an agreement between only two of the WTO’s Members, the 1992 Agreement does not constitute “context” under the customary rules of treaty interpretation reflected in Article 31 of the Vienna Convention.

215. Finally, in claiming that the Appellate Body’s decision in *Mexico – Taxes on Soft Drinks* supports the EC’s position, the EC misstates the Appellate Body’s finding in that dispute. As the EC states, the Appellate Body found that the term “laws or regulations” in Article XX(d) of the GATT 1994 did not relate to the international law obligations of another WTO Member.²⁶⁷ However, the EC neglects to mention that the Appellate Body also stated as follows:

“even if the terms "laws or regulations" do not go so far as to encompass the WTO agreements, as Mexico argues, Mexico's interpretation would imply that, in order to resolve the case, WTO panels and the Appellate Body would have to assume that there is a violation of the relevant international agreement (such as the NAFTA) by the complaining party, or they would have to assess whether the relevant international agreement has been violated. WTO panels and the Appellate Body would thus become adjudicators of non-WTO disputes. As we noted earlier, this is not the function of panels and the Appellate Body as intended by the DSU.”²⁶⁸

²⁶⁷ *Mexico – Taxes on Soft Drinks (AB)*, para. 78.

²⁶⁸ *Mexico – Taxes on Soft Drinks (AB)*, para. 78 (Emphasis added) (internal citations omitted).

216. Thus, the Appellate Body’s statement in its entirety is clear that regardless of the meaning of “laws or regulations” in Article XX(d), it would not be appropriate to assess WTO Members’ compliance with non-covered agreements in the context of WTO dispute settlement. However, requesting the Panel to assess the EC and U.S. compliance with provisions of the non-covered 1992 Agreement is precisely what the EC is requesting the Panel to do in this case.

63. *How many adverse effects claims does the European Communities make as part of its "second and independent complaint" described at paragraph 1000 of the European Communities' First Written Submission? In particular, please clarify whether the European Communities is making three adverse effects claims corresponding to the three identified LCA product markets (as suggested in paragraph 1154 of its First Written Submission), and if so, the extent to which these claims are or are not dependent on the European Communities' identification of three separate LCA product markets.*

217. In response to this question, the EC asserts that it has one adverse effects claim with regard to all “large civil aircraft as a whole,” supported by arguments related to three “product markets”: 100-200 seats, 200-300 seats, and 300-400 seats.²⁶⁹ The Panel should note that the EC views large civil aircraft as split into *five* “product markets” – those just listed, and separate “product markets” for 400-500 seats and 500+ seats.²⁷⁰ It adds that its “claim on adverse effects” is not dependent on the identification of three separate LCA product markets.”²⁷¹

218. The question of whether the EC has raised “a single adverse effects claim” prior to this time is secondary to the question of whether, having now made such a claim, it has provided evidence and argumentation to meet its burden of proof. It has not. In fact, the EC has not even tried to prove a single adverse effects claim. Rather, the EC has identified specific sets of Airbus aircraft, each one of which it says competes with an allegedly subsidized Boeing product in one of three “distinct LCA product markets.” Its serious prejudice claims are based entirely on the alleged effects of the alleged subsidies on competition within each of these three separate markets.

219. The United States questions the validity of EC’s insistence that there are, in fact, wholly segregated large civil aircraft markets based on aircraft seating capacity. At the same time, the United States has recognized the EC’s right under the SCM Agreement to make its adverse effects case in this way if it so chooses. But having done so, the EC cannot now argue that it has also made a case that the subsidies allegedly conferred on Boeing’s 737, 777, and 787 aircraft have caused serious prejudice in a single large civil aircraft market to Airbus’ large civil aircraft operations as a whole. To the contrary, because the EC has identified three separate types of Boeing aircraft each one of which, it alleges, is a distinct “subsidized product”, and each one of

²⁶⁹ EC RPQ1, paras 219-220.

²⁷⁰ EC FWS, para. 1162.

²⁷¹ EC RPQ1, para. 222.

which, it alleges, competes with, and has caused serious prejudice to, a distinct set of “like” Airbus aircraft in a distinct large civil aircraft market, defined by seating capacity, it cannot properly claim to have shown displacement or impedance, price suppression or lost sales in a “single” large civil aircraft market. Indeed, the EC asserts that the Airbus offers the A380 in a discrete “product market” in which Boeing does not offer a competing product.²⁷²

220. The Panel should note another serious flaw in the EC position – in arguing that the Panel can reach a finding with regard to *all* large civil aircraft based solely on three of the “product markets,” the EC is in effect arguing that the Panel can find actionable subsidies with regard to the 500+ product market (in which the EC places the A380) without ever making a finding of serious prejudice regarding the A380. It would reach this result even though the EC contends that Boeing products do not compete with the A380, and has never claimed that alleged subsidies to Boeing caused serious prejudice to the A380.

221. Such an analysis does not meet the requirements of the SCM Agreement. For example, Article 6.3(a) provides that serious prejudice exists when “the effect of the subsidy is to displace or impede the imports of a like product of another Member into the market of the subsidizing Member.” Article 6.3(b) makes a similar provision with regard to exports of a like product from a third country market. The only allegations the EC makes with regard to displacement/impedance are for sales in particular countries within each “product market.” Given the way the EC has structured its claims, those findings would not apply to the “product market” containing the A380. Thus, the EC’s displacement and impedance claims provide no basis for a ruling with regard to all large civil aircraft.

222. Article 6.3(c) provides that serious prejudice exists when the effect of the subsidy is significant price suppression or lost sales in the same market. Again, the EC has made no allegation with regard to the A380 “product market.” Therefore, its price suppression and lost sales claims provide no basis for a ruling with regard to all large civil aircraft.

223. The EC response to this question also appears to suggest that the Panel could reach a conclusion of actionable subsidies with regard to “large civil aircraft as a whole” even if the Panel only makes findings of serious prejudice with regard to one of the “product markets” defined by the EC.²⁷³ Given the way the EC has structured its arguments, such a result would be inconsistent with Articles 6.3(a), (b), and (c) because a finding of actionable subsidies requires a finding of displacement or impedance, price suppression, or lost sales with regard to a market. Although there is no basis for a finding of serious prejudice with respect to any of these markets, there is also no basis to extrapolate from one market to all “product markets” identified by the EC.

²⁷² EC FWS, para. 1161.

²⁷³ Paragraph 225 of the EC RPQ1, confirms this conclusion.

224. In sum, the EC cannot evade its burden under the SCM Agreement to show serious prejudice by grouping products one way for its claims and another way for its “arguments and evidence.”²⁷⁴

64. *If the European Communities is making only one adverse effects claim, please explain: (i) whether it would be necessary for the Panel to "aggregate" its findings in respect of the effects of the challenged measures in the three identified LCA product markets; and if so, (ii) how the Panel would "aggregate" its findings in respect of the effects of the challenged measures in the three identified LCA product markets.*

225. The points made in the U.S. comments on the EC’s response to Panel Question 63 apply equally to the EC’s response to this question, particularly with regard to the assertion that a serious prejudice finding with regard to one of four “product markets” served by Airbus is enough to find actual adverse effects with regard to all Airbus products as a whole.

226. The EC suggests that the Panel “aggregate” its findings by listing them in a single section and quantifying their “impact” on “EC LCA-related interests.”²⁷⁵ The EC seems to be suggesting that a list of the findings for each of its “product markets” somehow represents an “aggregation” that would be tantamount to a single adverse effects finding. There is no support for the EC claim on this point. Therefore, the Panel should not grant the EC request to quantify the impact of the alleged adverse effects on its large civil aircraft interests.

65. *Assuming that "the degree to which a market is limited by geography will depend on the product itself and its ability to be traded across distances", what are the relevant criteria for delimiting specific geographic markets for LCA for purposes of Article 6.3(c)?²⁷⁶ Do the parties consider it possible that, given that LCA are sold and operated throughout the world under similar conditions of competition and that relative transportation costs of delivery are negligible, there is in fact only one geographic market for LCA, namely, the world market?*

227. In its response, the EC, for purposes of its claims under Article 6.3(c), posits the existence of three, separate large civil aircraft world markets in which Boeing and Airbus aircraft compete.²⁷⁷ The United States does not accept that the facts support dividing competition between Boeing and Airbus large civil aircraft in the world market into three separate markets, but for the purposes of this dispute, the United States is will to proceed on the basis of the EC’s division of the products.

²⁷⁴ EC RPQ1, para. 220.

²⁷⁵ EC RPQ1, para. 227.

²⁷⁶ US – Upland Cotton (Panel), para. 7.1237.

²⁷⁷ EC RPQ1, para. 231.

228. With regard to the geographic scope of markets for purposes of its third country displacement/impedance claims, the EC argues that Article 6.3(b) “legally direct{s}” the Panel “to limit the geographical scope of the markets it assesses to the territorial boundaries of the countries at issue.”²⁷⁸ The EC made the same argument at the First Meeting of the Panel: “the express language of Article 6.3(b) *requires* an analysis of displacement or impedance with regards to a ‘third *country* market.’”²⁷⁹ Here, the EC presumes that the use of the term “country” means that the Panel, as a matter of law, must consider any country identified by the EC for purposes of its Article 6.3(b) claims to be a “third country market,” regardless of whether the facts show that a self-contained market for large civil aircraft exists within that geographical area. The facts may show that competition for large civil aircraft sales in any third country are inextricable from a larger regional or world market. The EC has not provided any evidence to support its assertion that each of the third countries it identifies is a “market” for purposes of Article 6.3(b).

229. The United States also notes that the EC has failed completely to show that the scarce data for the countries it has identified under its Article 6.3(b) claims permit the Panel to find that displacement or impedance has occurred. In this regard, it is important to recall Article 6.4, which allows a finding of displacement or impedance with regard to a third country market only if the complaining party has provided data for “an appropriately representative period sufficient to demonstrate clear trends” The EC has provided *no* evidence that data for the relevant countries for the 2001-2006 period on which it focuses “demonstrate clear trends.” In fact, the data are so spotty and transactions so small that they demonstrate no trends at all.

66. *In the context of assessing claims of displacement and impedance under Article 6.3(a) and 6.3(b), what are the criteria for determining whether an LCA constitutes an "import" or an "export" in relation to a particular market (for example, do factors such as the location from which an order is made, the "nationality" of the purchaser and the seller (however such nationality may be established) and/or the country from and to which the LCA is delivered, have any relevance to this determination)? How are imports and exports of LCA based on these criteria derived from data on "orders" and "deliveries"?*

230. The EC’s first response to Panel Question 66 is to reiterate its view that its “displacement or impedance” claims under Article 6.3(a) and (b) should be assessed by reference to orders and, on that basis, the EC argues for the relevance of “the nationality of the purchaser.”²⁸⁰ Yet those articles refer to displacement or impedance of “imports” and “exports,” which indicates that a complaining party may not frame a displacement or impedance claim by reference to orders. Rather, the ordinary meaning of Article 6.3(a) and (b) requires analysis of displacement or

²⁷⁸ EC RPQ1, para. 232.

²⁷⁹ EC OS1(Conf.), para. 91 (emphasis in original).

²⁸⁰ EC RPQ1, para. 233.

impedance based on data reflective of goods that have crossed borders, which in the large civil aircraft industry means only delivery data.²⁸¹ And here, the EC appears to agree with the United States that if its Article 6.3(a) and 6.3(b) claims are to be assessed by reference to deliveries, market shares must be determined by data for the country to which the aircraft are delivered.²⁸²

231. There are, however, significant points of disagreement between the United States and the EC regarding the analysis by the Panel of large civil aircraft delivery data. The EC argues that the Panel can and should ignore “deliveries that result from leasing company orders.”²⁸³ There is no textual support for the EC’s position. To the contrary, the terms “imports” and “exports” in Articles 6.3(a) and (b), respectively, require an examination of displacement or impedance based on delivered aircraft without regard to the terms of the import or export transaction.

232. Nor is there any factual basis for ignoring deliveries because a purchasing leasing company may be of a nationality different from that of the airline taking delivery of the aircraft. Leasing companies often work in concert with Boeing and Airbus to place a mix of leased and purchased aircraft with a particular customer, such that a leasing company’s provision of new large civil aircraft assists a manufacturer in placing aircraft in a particular country, as the following examples illustrate:

- In May 2005, Sky Europe, a Slovak airline, ordered four 737s from Boeing and leased 12 additional 737s from GECAS, six of which GECAS ordered from Boeing as part of the deal.²⁸⁴
- In June 2003, Qatar Airways ordered two A321s, eight A330-200s, six A330-300s, and two A340-600s from Airbus. The Airbus press release from the deal expressly acknowledged that, “{i}n addition, Qatar Airways is to lease two Airbus A330-200s from GECAS.”²⁸⁵

The fact that a leasing company played an intermediary role should not prevent the recognition that these transactions resulted in deliveries and, thus, exports into Slovakia and Qatar, respectively.

233. The EC is also wrong when it asserts that the Panel’s use of delivery or order market share data “is of no consequence” in assessing the displacement or impedance claims because the

²⁸¹ US RPQ1, para. 188.

²⁸² EC RPQ1, para. 234.

²⁸³ EC RPQ1, para. 235.

²⁸⁴ Boeing Press Release, *Boeing, GECAS Confirm Order for Six Boeing 737-700 Jetliners* (May 10, 2005) (Exhibit US-1222).

²⁸⁵ Airbus Press Release, *Qatar Airways to expand with an all-Airbus fleet* (June 19, 2003) (Exhibit US-1223).

EC has provided “evidence from individual sales campaigns” which “were won by Boeing and lost by Airbus.”²⁸⁶ To make a displacement or impedance claim, the complaining party needs to show more than instances of lost sales. Specifically, the complaining party must show that, in the aggregate, its industry’s exports to a market have been impeded or displaced.

234. Although the panel in *Indonesia – Autos* found that Article 6.4, with its provisions regarding market share, does not apply directly to Article 6.3(a) claims, the panel noted that “market share data may be highly relevant evidence for the analysis of such a claim {under Article 6.3(a)}.”²⁸⁷ In addition to examining market share data, that panel also looked at “actual sales figures” but did so by analyzing the “absolute volume of sales” in the entire market, not by focusing on an individual transaction or a handful of transactions.²⁸⁸ Indeed, the panel made clear that sales data should be understood “in the context of the overall market situation.”²⁸⁹ Yet, here, the EC asks the Panel to find displacement or impedance without placing any of the individual campaign it references “in the context of the overall market situation.” In light of this and the absence of aggregate delivery data showing clear trends prejudicial to Airbus, the EC has failed to meet its burden of proof on displacement and impedance.

67. *Do the parties agree with Brazil (at paragraph 33 of the Third Party Written Submission of Brazil) that the Panel should recognize that (i) subsidies benefiting certain individual aircraft types or families may have "spill-over" effects to other families, and (ii) consistent with conditions of competition in the aircraft industry, sales of aircraft in one family or market segment may affect sales in another family or market segment? If so, how should the Panel incorporate recognition of these factors into its adverse effects analysis, in light of the European Communities' contention (at paragraphs 1159-1161 of its First Written Submission) that there are five separate product markets for LCA?*

235. Please see the U.S. comments on the EC’s combined response to Questions 67 and 68 following Question 68, below.

68. *Should the Panel understand that, as a result of its division of the LCA product market into five segments and its identification of three "subsidized products" and three corresponding groups of "like products" for purposes of demonstrating serious prejudice, the European Communities is requesting the Panel to confine itself to examining the causal relationships between the following groupings of alleged subsidies and effects of those alleged subsidies:*

²⁸⁶ EC RPQ1, para. 236.

²⁸⁷ *Indonesia – Autos*, para. 14.211.

²⁸⁸ *Indonesia – Autos*, para. 14.215-14.216.

²⁸⁹ *Indonesia – Autos*, paras. 14.221.

- *alleged subsidies to the 737 and effects to the A320 (i.e. the European Communities does not request the Panel to examine any causal relationship between alleged subsidies to the 737 and effects to the A330, A340, A350 Original, A350 XWB or A380);*
- *alleged subsidies to the 787 and effects to the A330, A350 Original and A350 XWB-800 (i.e. the European Communities does not request the Panel to examine any causal relationship between alleged subsidies to the 787 and effects to the A320, A340, A350 XWB-900, A350 XWB-1000 and A380); and*
- *alleged subsidies to the 777 and effects to the A340 and A350 XWB-900/-1000 (i.e. the European Communities does not request the Panel to examine any causal relationship between alleged subsidies to the 777 and effects to the A320, A330, A350 Original, A350 XWB-800 or A380)?*

236. In responding to questions 67 and 68, the EC backs away from its unequivocal assertion that there are five separate large civil aircraft markets,²⁹⁰ agreeing with Brazil's statement that there can be "spillover" effects and that "sales of aircraft in one family or market segment may affect sales in another family or market segment."²⁹¹ The EC attempts to minimize the significance of these "spillover" effects by, for example, focusing on the percentage of all transactions in a given year that involved "bundled" sales instead of the relative significance of those "bundled" sales measured in terms of value.²⁹² That said, the key point is that, in recognizing that the large civil aircraft market is not as rigidly segmented as it has previously claimed, the EC is also recognizing that the economic assumptions on which its adverse effects claims rest are, in important respects, at odds with the economic realities of large civil aircraft production and the large civil aircraft market.

69. *Does the European Communities agree that a product need not necessarily be a "like product", in the sense of footnote 46, in order to be considered to compete in the "same market" as the subsidized product for purposes of Article 6.3(c)?*

237. In its response to this question, the EC contradicts everything it has said about competition between large civil aircraft within the "three different product markets" categories it has identified. Where it previously contended that "many of the factors that reveal whether products are 'like products' are relevant for a determination of whether they are 'in the same market,'"²⁹³ the EC now states that "for purposes of claims involving significant price

²⁹⁰ EC FWS, paras. 1159-1165.

²⁹¹ EC RPQ1, para. 248 (quoting, with agreement, Third Party Submission of Brazil, para. 33).

²⁹² EC RPQ1, para. 244.

²⁹³ EC FWS, para. 1156.

suppression, price depression and lost sales in the same market . . . a product of the complaining member need not necessarily be a ‘like product.’”²⁹⁴

238. This response fails to acknowledge that, previously, the EC did not merely assert that the Airbus large civil aircraft within each of the three groupings it identifies – those with seating capacities of 100-200, 200-300, and 300-400 seats²⁹⁵ – are “like” the respective Boeing aircraft. The EC also asserted that those groupings constitute “three different product markets.”²⁹⁶ So, according to the EC’s previous position, whether Article 6.3(c) imposes a “like product” requirement is irrelevant: no two large civil aircraft are in the “same market” if they are not both within one of the three “product markets” the EC identifies. Thus, the EC has structured its serious prejudice claims such that any Airbus aircraft cannot be considered to compete in the “same market” as a Boeing large civil aircraft if it is not a “like product” to that Boeing aircraft.

239. To be sure, the EC, in its response to Panel Questions 68, now asserts that large civil aircraft in one “product market” can, and do, affect sales of large civil aircraft in another.²⁹⁷ Considered in light of what the EC has previously argued with respect to “product markets,” however, its revised position on cross-segment competitive effects calls into question the entire structure of the its serious prejudice claims.

70. *How is the European Communities' contention (at paragraph 1159 of the European Communities' First Written Submission) that Boeing and Airbus compete in "five separate markets" reflected in the model presented in the Cabral Report (Exhibit EC-4)?*

240. The EC’s response to Panel Question 70 shows that nothing about the model Prof. Cabral uses to calculate the alleged price effects has anything to do with the “five separate markets” posited by the EC. As the EC admits, Prof. Cabral’s model “does not differentiate between the impact of subsidies on particular Boeing products.”²⁹⁸ Prof. Cabral did, as the EC states, “translate the results of his model” into per-aircraft price effects allocated over “sales” that the EC identifies as “competitive,”²⁹⁹ but this allocation is unrelated to his model. Indeed, Prof. Cabral claimed to be able to, and did, allocate per-aircraft price effects over all Boeing “sales.”³⁰⁰ Notably, both allocation methods rely on “sales” based on the “derived orders” for each year

²⁹⁴ EC RPQ1, para. 250.

²⁹⁵ EC FWS, para. 1154.

²⁹⁶ EC FWS, para. 1154.

²⁹⁷ EC RPQ1, para. 247.

²⁹⁸ EC RPQ1, para. 251.

²⁹⁹ EC RPQ1, para. 252; Cabral Report, para. 89, Table 8 (Exhibit EC-4).

³⁰⁰ Cabral Report at para. 89, Table 7 (Exhibit EC-4).

calculated by ITR in its magnitude report. ITR so thoroughly rearranges the data that they bear no relation to Boeing's actual annual order or delivery data.³⁰¹

241. In any event, the EC's continuing reliance on the Cabral report as proof of anything is unwarranted. As the United States has shown repeatedly, Professor Cabral's model bears no relationship to reality.³⁰²

72. *What is the relevance of the length of the LCA business cycle to determining the appropriateness of the reference period for purposes of examining adverse effects in the context of this dispute?*

242. The EC's answer to Panel question 72 regarding the "relevance of the length of the LCA business cycle" to determining the appropriate reference period cites *US – Upland Cotton* for two propositions. The first is that "a reference period should include a recent period for which complete data is available"; the second, that it is "appropriate to examine a longer period of time to confirm, or put into perspective, the most recent complete data."³⁰³ The United States agrees with the EC on both points – and both support selection of a reference period that, *inter alia*, includes a full business cycle.

243. The EC does not dispute the existence of the large civil aircraft business cycle, and concedes that it "might affect Boeing and Airbus in a somewhat different manner."³⁰⁴ Nor does the EC dispute the U.S. contention that data for the period before the 2004-2006 period shed light on pricing and other business decision-making during the period because (1) it takes years to bring a large civil aircraft to market, (2) large civil aircraft sales campaigns typically involve deliveries and follow-on sales over a multi-year period, and (3) pricing at a major account affects market pricing for years as other customers demand a "competitive" price.

244. Rather than address these issues, the EC's response to Panel Question 72 argues against the relevance of the large civil aircraft business cycle because a single condition of competition – the level of demand – was lower in 2001-2003.³⁰⁵ Based on this criterion, the EC insists that the Panel's focus should be confined to the 2004-2006 period because it "exhibits conditions of competition that are identical, or very similar, to those prevailing in the LCA markets today."³⁰⁶

³⁰¹ Cabral Report, para. 87, n. 25. (Exhibit EC-4) In paragraph 175 of its second written submission, the United States shows how the ITR Magnitude Report (Exhibit EC-13) improperly imputes orders to certain years on the basis of delivery data in order to exaggerate the ad valorem levels of the alleged subsidies.

³⁰² US FWS, paras. 823-862; US SWS, paras. 178-184.

³⁰³ EC RPQ1, para. 254.

³⁰⁴ EC RPQ1, para. 257.

³⁰⁵ EC RPQ1, para. 257.

³⁰⁶ EC RPQ1, para. 259.

Yet, the EC fails to mention that the level of demand in 2004, measured in terms of total world large civil aircraft orders, was actually lower than the level in 2001, as shown below.

Global large civil aircraft demand, 2001-2006
(total Boeing and Airbus orders)

2001	2002	2003	2004	2005	2006
672	578	537	660	2007	1995

Airclaims CASE database.

245. There is no basis for considering data from 2004 but not other years that reflect the “down” portion of the large civil aircraft business cycle.

246. It is striking that the EC relies on *US – Upland Cotton* for the proposition that the Panel should ignore data prior to the three year period from 2004 to 2006. The panel in that dispute, which involved an agricultural product that is planted, harvested, and marketed in a single year, made findings concerning the existence of serious prejudice over a period of *four* distinct marketing years.

73. *At paragraph 129 of the European Communities’ Oral Statement, the European Communities argues that the conditions of competition in the LCA markets during 2001 through 2003 are so dissimilar from the prevailing conditions of competition in the LCA markets that an assessment of the effects of Boeing’s subsidies in the former offers little insight into whether the alleged subsidies cause adverse effects under today’s conditions of competition. If the Panel were to adopt a reference period of 2001 through 2006, explain how the data for 2001 through 2003 should be assessed to make due allowance for such dissimilar conditions of competition in this period.*

247. In responding to the Panel’s question about how 2001-2003 data should be factored into its assessment of the effects of the alleged subsidies if the Panel selects a 2001-2006 reference period, the EC argues once again that because demand in 2001-2003 was low and because Airbus and Boeing launched new aircraft after 2003, the “conditions of competition” between the two periods are too different to permit a 2001-2006 reference period.^{307/}

248. In fact, however, the key conditions of competition that drive the economics of large civil aircraft production (heavy upfront development costs with a return over decades; the multi-year process of large civil aircraft development; the learning curve, etc.) and sales (long-term contracts frequently worth billions of dollars that involve deliveries over many years, switching costs, the factors that go into an airline’s assessment of the net present value of Boeing and Airbus offers, the importance of price, etc.) were the same in 2004-2006 as they were in 2001-

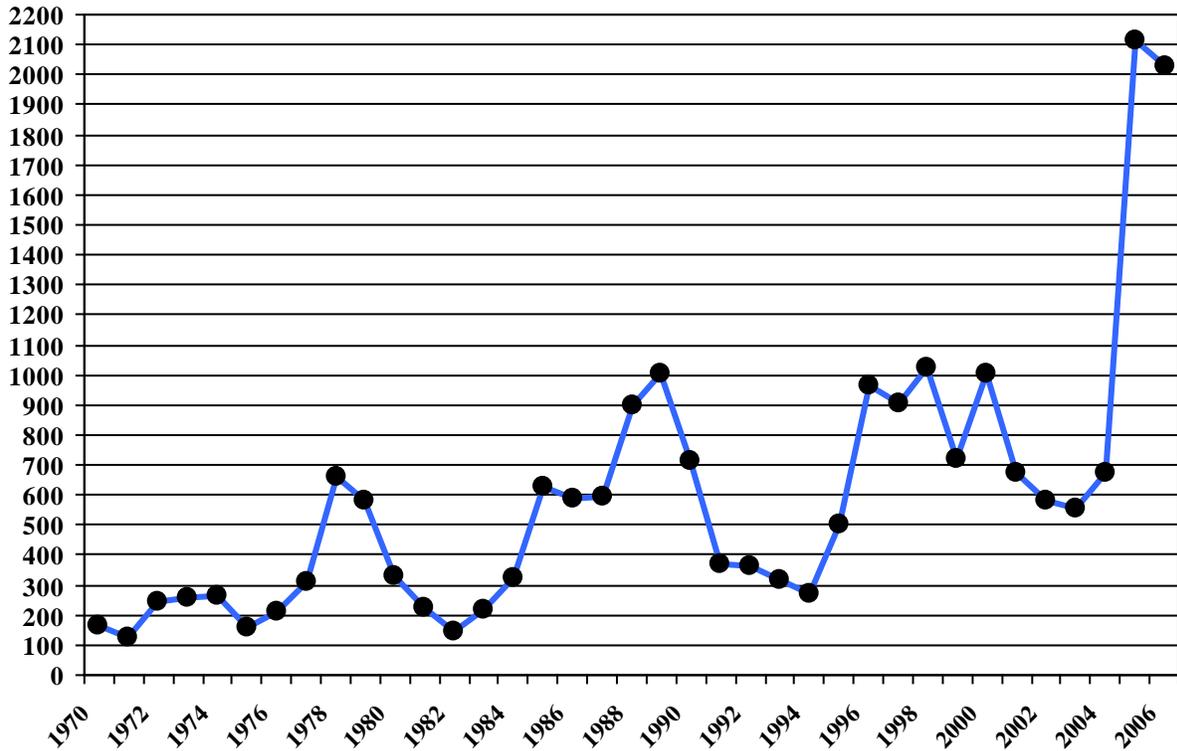
³⁰⁷ EC RPQ1, para. 262.

2003. Moreover, the EC is even wrong about the level of demand, the one condition of competition that did change; as noted above, large civil aircraft demand in 2001-2003 was, on average, well below the average 2004-2006 level, but in 2004, demand was still below the 2001 level.

249. Moreover, the data also refute the EC's claim that the decline in large civil aircraft demand during 2001-2003 was aberrational.³⁰⁸ As Figure 1 demonstrates, total demand in 2005 and 2006 was unusually high, while the cyclical downturn in 2001-2003 was, despite the effects of the events of September 11, 2001, relatively shallow by historical standards:

³⁰⁸ Cf. EC RPQ1, paras. 266-267.

**Global large civil aircraft demand, by total orders
(1970-2006)**



250. If the EC were correct in its contention that changes in market share from 2001 to 2003 were due to temporary phenomena unrelated to Airbus’ strategy of using low prices to gain market share, one would expect the relative market shares of Boeing and Airbus to return to their “normal” levels after the market recovered. Yet this has not occurred. The global large civil aircraft delivery market share of Airbus, after increasing by 15 percentage points to 53 percent in 2003, was 53 percent in 2004, 57 percent in 2005, 53 percent in 2006, and 50 percent in the first eleven months of 2007. Even if, as the EC alleges, the 2001-2003 period was somehow unusual, the large shift of market share from Boeing to Airbus during this period has largely remained with Airbus through the present day.

251. The EC also tries to explain away Boeing’s market share losses as a function of Airbus’ “more limited commercial relationships with U.S. airlines” that were financially troubled in the 2001-2003 period.³⁰⁹ However, this argument fails, of course, to explain Airbus’ significant market share gains outside of the United States. In the EC market, Airbus’ order market share

³⁰⁹ EC RPQ1, para. 266.

increased from 53 percent in 2000 – the last year of the previous “up” cycle – to 71 percent in 2004, with Airbus capturing 61 percent of all orders during the 2001-2004 downturn. Similarly, in third countries as a whole, Airbus’ order market share increased from 37 percent in 2000 to 56 percent in 2004, with Airbus taking 52 percent of all orders during the 2001-2004 downturn.

252. The evidence also contradicts the EC’s allegation that Boeing’s 2001-2003 market share losses are attributable to Boeing’s so-called “strategy” of “competing with leasing companies.”³¹⁰ When Boeing first announced in 1999 that Boeing Capital Corporation (“BCC”) would play a larger role in financing large civil aircraft sales, the president of BCC made clear that “Boeing Capital is not interested in speculative operating leasing, which involves buying and maintaining a fleet of aircraft types for possible leases.”³¹¹ Indeed, rather than compete with leasing companies, BCC in May 2000 made a point of working with International Lease Finance Corp. (“ILFC”) and another large civil aircraft lessor to finance the acquisition of Boeing aircraft by American Trans Air (“ATA”). This experience demonstrated that BCC’s leasing operations would assist ordinary airline customers in financing their purchases of Boeing aircraft, and would not purchase Boeing aircraft to compete directly with leasing companies. Leasing company officials expressed their satisfaction that “Boeing Capital does not seem to be in the business of making speculative buys of aircraft” or of competing with them.³¹²

253. Lastly, in answering question 73, the EC asserts that “Boeing’s admitted ineptitude in customer relations prior to 2004 also negatively impacted Boeing’s sales and deliveries in 2001-2003 period.”³¹³ The only source the EC supplies for this supposed “admission” is a Boeing executive’s statement that the company “allowed ourselves to step back from our customers too far.”³¹⁴ The campaign-specific documents submitted by the EC demonstrate that the “step back” was not “ineptitude,” but [[HSBI.]].³¹⁵ (*A copy of this paragraph appears in the HSBI Appendix to this submission.*)

254. The EC’s response to Question 73 is, at bottom, an effort to minimize the impact of evidence, which it knows to be true, about Airbus’ pre-2004 pricing and product development decisions, and the 2004-2006 effects of those decisions:

³¹⁰ EC RPQ1, para. 268.

³¹¹ *Boeing puts new emphasis on financing unit*, Seattle Times (Oct. 8, 1999) (Exhibit US-1224).

³¹² *Why buy aircraft when planes can be leased?*, Seattle Times (Aug. 20, 2000) (Exhibit US-1225).

³¹³ EC RPQ1, para. 268.

³¹⁴ EC SWS, para. 888.

³¹⁵ [[HSBI]]

- Between 2001 and 2003, Airbus made a conscious decision to use price to switch Boeing operators when demand was low. It did so at easyJet, Air Berlin, Air Asia and other significant accounts.³¹⁶
- Airbus' 2001-2003 pricing set airline expectations regarding price and thus shaped market prices in the 2004-2006 period as customers demanded that Boeing meet Airbus' prices or lose more market share.³¹⁷
- At the same time as it was deliberately undercutting Boeing on price, Airbus' product development resources (and its management) were focused on the A380 and, as a result, Airbus could not (and did not) devote the resources needed to bring to market a viable competitor to Boeing's 787.³¹⁸
- The consequences of Airbus' pre-2004 decision to bring its A340 to market as a fuel inefficient aircraft were particularly acute beginning in 2004, as rising fuel costs, and the A340's other operational shortcomings, prevented Airbus from selling the A340 in the quantities and at the prices it had hoped for.³¹⁹

(A copy of this paragraph appears in the HSBI Appendix to this submission.)

255. The EC's attempts to remove the 2001-2003 evidence from the Panel's review, or at the very least marginalize it, speak volumes about the significance of that evidence.

74. *Does the European Communities agree with the statement by the United States, at paragraph 108 of its Oral Statement, that the period 2004 through 2006 represents an "up" portion of the LCA business cycle that can only be properly understood in the context of the "down" portion of the cycle which began in 2001? If the Panel were to take due account of the fact that 2001-2003 represented the "down" portion of the business cycle, are there any reasons why the Panel would be in error in examining the effects of the alleged subsidies over the longer 2001 through 2006 period in order to determine whether the alleged subsidies cause adverse effects to the interests of the European Communities?*

256. In its answer to this question, the EC argues that the Panel should assign little weight to evidence from 2001-2003 because "the European Communities' arguments and evidence of present significant price suppression, significant lost sales and displacement and impedance do not depend" on it.

³¹⁶ US FWS, paras. 1029-1035.

³¹⁷ [[HSBI]]

³¹⁸ US SWS, HSBI Appendix, paras. 10-16.

³¹⁹ US SWS, HSBI Appendix, paras. 63-65.

257. *Of course, the EC's case does not depend on the 2001-2003 evidence.* To the contrary, the evidence from the 2001-2003 period is one of the reasons the EC's case *fails*. But far from giving the panel reason to ignore the 2001-2003 evidence,³²⁰ the fact that this evidence highlights “other factors” that caused the prejudice about which the EC complains is precisely why this evidence is essential to “an objective assessment” by the Panel of the EC's case.

75. *Please describe: (i) the manner in which the various subsidy "amounts" were derived; (ii) the basis on which those subsidy "amounts" were allocated among the Boeing LCA identified as "subsidized products" in this dispute (i.e. the 787, 737NG and 777); and (iii) the manner in which those subsidy "amounts" were allocated over time.*

258. In response to clause (i) of this question, the EC restated the description of the calculation methodology in an even more summary and cursory fashion than it did in its first written submission. The United States thought the EC might have more profitably used this opportunity to explain its calculations and the reasons for some of the allocation methodologies it used.

259. In response to clause (ii) of this question, the EC explained that it allocated subsidy amounts based on the “typical number of passenger seats.”³²¹ First, this is not entirely true – the EC used less than the typical seat number for the 787-3, ostensibly because that aircraft has the same fuselage size as another aircraft with a different seat count.³²² However, the change had the effect of artificially allocating alleged subsidies away from an aircraft about which the EC did not make serious prejudice claims to aircraft for which it did. Second, and perhaps more importantly, this methodology is inconsistent with the EC's underlying theory as to how Boeing uses its funds – to reduce prices so as to increase revenue and profitability and invest in research and development to produce better aircraft.³²³ These objectives relate to the value of a transaction in terms of revenue and profitability, and not to the number of seats in an aircraft.³²⁴ Third, the EC's allocation methodology is even more out of touch with how Boeing actually sets its prices, based on conditions of supply and demand unrelated to the number of seats in the particular aircraft it sells.³²⁵ Thus, the ITR calculation simply does not provide a valid way of relating alleged subsidies to market conditions.

³²⁰ The United States establishes in its comment to the EC's response to Panel Question 73, *supra*, why the “other factors” identified by the EC for the 2001-2003 period do not explain how Airbus gained market share at Boeing's expense.

³²¹ EC RPQ1, para. 281.

³²² ITR Response, para. 25 (Exhibit EC-1181).

³²³ EC FWS, paras. 1317-1318 and 1320.

³²⁴ Under the EC theory, Boeing would value the sale of a higher priced 787 the same as a lower priced 767 with the same number of seats. This is, of course, the opposite of Boeing's real world strategy.

³²⁵ The EC asserts that under an allocation based on revenue, the approach favored by the United States, “proportionately less subsidies would be allocated to the most subsidised aircraft programmes.” EC RPQ1, para.

260. In response to clause (iii) of this question, the EC asserts that a producer can take subsidies that allegedly affect revenue into account in setting prices many years in advance of actual receipt of any benefit.³²⁶ The reasoning ignores the uncertainty associated with future taxes, especially those related to income, which can change depending on the recipient's tax situation.

76. *What do the figures in Exhibit EC-17, identified by the items "sub-total for subsidies reducing marginal units costs" and "sub-total for subsidies increasing non-operating cash flow", respectively, represent and how were the numbers appearing in the "amount of subsidy" columns (past amount, future amount and total amount) derived? What is the significance, if any, of the amounts listed in the "future amount" column of Exhibit EC-17 to the Panel's determination of adverse effects of any alleged subsidies received by Boeing?*

261. The United States has no comment on the EC's descriptions of various sub-totals and totals other than to observe that it has explained elsewhere the numerous errors in the EC calculations, and will not repeat those explanations here.³²⁷

262. The Panel should also note that the EC claims that it "does not rely on all of the annual future amounts as evidence for establishing its claims of present serious prejudice and threat thereof."³²⁸ This is incorrect. The future alleged subsidies are included in the \$24 billion figure that the EC references repeatedly as the supposed value of the alleged subsidies. (In fact, they represent almost 20 percent of that figure.³²⁹)

77. *At paragraph 1293 of the European Communities' First Written Submission, the European Communities indicates that it presents per-LCA subsidies and subsidization rates in terms of orders, as opposed to deliveries, on the basis that a sale occurs at the time of the order and this is the point in time when harm is caused to Airbus. However, the Panel notes that the per-LCA allocation calculation conducted by International Trade Resources LLC (at paragraph 34 of Exhibit EC-13), is based on a more complex methodology which does not rely on order data because LCA orders "are frequently modified with respect to the timing of a delivery, the number of aircraft ordered and the*

281, note 269. However, the seat-based approach would ignore an aircraft producer's imperative to keep pricing for relatively high-priced customers in line with market prices so that they do not turn to lower priced products from the other producer.

³²⁶ EC RPQ1, para. 285.

³²⁷ US FWS, paras. 813-822; US SWS, paras. 171-177, US RPQ1, paras. 205-209.

³²⁸ EC RPQ1, para. 291.

³²⁹ Exhibit EC-17, p. 2.

aircraft models ordered." Can the European Communities please explain the apparent inconsistency?

263. The EC's efforts to defend ITR's derived orders calculation only serve to highlight further the inappropriateness of the calculation. Under the EC's serious prejudice theory, the alleged subsidies affect operating cash flow in the year of receipt, and Boeing uses that excess cash flow in large part to fund its pricing practices.³³⁰ The Panel should note that any such activity would have to relate to *actual* sales campaigns and *actual* (rather than derived) orders. Thus, any effect of the subsidies under the EC theory would occur in the year of order, even if the delivery was scheduled for four years later. However, the ITR methodology would treat that order – and the effect of subsidies – as occurring in the following year, three years before delivery, a result completely contrary to reality.

264. This is not a minor problem. ITR's rearrangement of the orders cuts the 2005 and 2006 order value roughly in half and doubles the 2004 order value, meaning that it assigns approximately half of the orders (by value) to the wrong year.³³¹

265. ITR's methodology serves to inflate the "*ad valorem*" relationship of subsidies and order values because it lowers the value of orders ascribed to later years of the period in which the EC alleges adverse effects, thus making the alleged subsidies appear larger in relation to orders. This rearrangement of order values also masks an important implication of the EC's theory – that subsidies will have less of an effect in a year with large amounts of orders. That is because the EC treats subsidies affecting non-operating cash flow as having their effect in the year of receipt. If there is a large number of orders, any effect will obviously be diluted. However, by rearranging the orders so that each year of the 2004-2006 period has a roughly even order value, the ITR figures hide the fact that any alleged subsidies later in the period should have a smaller impact on individual transactions.

266. ITR's flattening of the values of Boeing's actual orders (and, hence, the inflation of ITR's *ad valorem* subsidy rates for 2005 and 2006) masks another problem with the EC theory. If the EC theory were correct, the alleged subsidies should have a greater effect in years with *low* order volume, when their value in relation to order value is relatively high, and less of an effect in years of higher order volume when the value of alleged subsidies is relatively low in relation to order value. However, in the period of low order value, Airbus' share of orders *increased*, while

³³⁰ EC FWS, paras 1312 and 1322; Cabral Report, para. 85, Table 5 (Exhibit EC-4).

³³¹ Boeing's order value based on an assumed discount of 45.7 percent off catalog values of actual orders was: \$16.7 billion in 2004, \$67.2 billion in 2005, and \$61.6 billion in 2006. ITR's rearrangement put \$31 billion in 2004, \$31.9 billion in 2005, and \$38.1 billion in 2006. US SWS, para. 175. Some of the difference between U.S. figures based on the catalog value of actual orders (discounted using a 45.7 percent figure assumed by Prof. Cabral, the EC's economist (Cabral Report, para. 52 (Exhibit EC-4)) and ITR's figures based on derived orders results may result from ITR's use of a discount calculation that ITR describes, but does not reproduce. *Compare Exhibit Net orders of Boeing, by estimated value (2001-2006)* (Exhibit US-1148) with ITR Report, para. 40.

its share of orders *decreased* in 2005 and 2006 when the value of alleged subsidies in relation to order value was falling.

267. Finally, the EC attempts to defend ITR's rearrangement of the orders by arguing that it reflects the fact that "the actual cash flow impact of the US subsidies on Boeing is related to deliveries."³³² This statement does not accurately reflect the EC argument. By far the majority (88 percent) of the subsidies alleged by the EC in the 1989-2006 period were, in its view, "subsidies increasing non-operating cash flow."³³³ As noted above, the EC treats these subsidies as affecting cash flow in the year of receipt, and not in the year aircraft are delivered.³³⁴ The EC's statement in defense of the ITR methodology reflects only the EC's theory regarding the effect of "subsidies reducing marginal unit costs," which represent only 12 percent of the subsidies alleged for the 1989-2006 period.

78. *The Panel understands the European Communities to use the term "magnitude" of subsidies to refer to the "benefits" of alleged subsidies allocated over time pursuant to a methodology described by International Trade Resources LLC in their report at Exhibit EC-13 (based on the European Communities' First Written Submission, paragraph 1284, footnote 2054). Is the European Communities arguing that the allocated "benefit" of the alleged subsidies is a relevant factor for the Panel to consider in assessing the effects of the alleged subsidies? What is the nature of the relationship between the amount of a financial contribution, the "benefit" conferred by that financial contribution, the "magnitude" of the subsidy (in the sense used by the European Communities in its First Written Submission) and the "effects" of the subsidy?*

268. The EC's response to this question leaves no doubt that the EC's adverse effects case depends critically on the validity of its magnitude-of-the-alleged subsidies calculation. In its first written submission, the EC made no attempt to demonstrate that, absent the alleged subsidies, Boeing would have been *unable* to price its large civil aircraft as it did. Instead, the EC (1) attempted to show that the magnitude of the alleged subsidies was "very large" on an aggregate and *ad valorem* basis,³³⁵ and (2) relied on Professor Cabral's price effects model, which assumed, but failed to show, that Boeing lacked sufficient non-subsidy sources of cash for its aircraft pricing and investments.³³⁶ The United States noted this in its first written submission, and also demonstrated that, in light of Boeing's market share losses to Airbus during the 2001-

³³² EC RPQ1, para. 294.

³³³ Exhibit EC-17, p. 2.

³³⁴ EC FWS, paras. 1312 and 1322; Cabral Report, para. 85, Table 5 (Exhibit EC-4).

³³⁵ EC FWS, para. 1285.

³³⁶ Compare EC FWS, para. 1314, and Cabral Report, paras. 22, 24 (Exhibit EC-4), with Comments by Prof. Greenwald, pp. 1-2 (Exhibit US-8), and Reply to Prof. Cabral by Drs. Jordan & Dorman, pp. 2, 8, 11 (Exhibit US-3).

2004 period, Boeing’s pricing decisions made clear economic sense. In response, the EC concedes that Boeing’s pricing may have made economic sense,³³⁷ but attempts to show that the amount and magnitude of the alleged subsidies “alone” was so large that it *must* cause adverse effects – that is, the EC now argues that, absent the alleged subsidies, Boeing could not have sustained its aircraft development and pricing.³³⁸ In making this allegation, and in light of its failure to show otherwise that Boeing’s pricing would have been any different without the alleged subsidies, the EC has placed the quantification of the alleged subsidies at the center of its adverse effects case.³³⁹ The United States has shown that the EC has grossly overstated the magnitude of the alleged subsidies by, *inter alia*,

- mischaracterizing as subsidized “sham transactions” the contracts Boeing negotiated at arms-length with the U.S. government to provide R&D services sought by the U.S. government for legitimate U.S. government objectives unrelated to the development of any large civil aircraft,
- mischaracterizing as a subsidy to Boeing substantial parts of the administrative budgets of two U.S. government agencies, and
- mischaracterizing as a subsidy to Boeing, service supply contracts between the U.S. government and other companies.

If the Panel agrees that a large portion of the value of the EC’s magnitude calculation is invalid, then nothing remains of this key element of the EC’s adverse effects claims.

269. In arguing that the magnitude of the alleged subsidies is, in and of itself, sufficient to demonstrate the causal link required by the SCM Agreement between the alleged subsidies and adverse effects, the EC claims that “but for the subsidies at issue, the U.S. LCA industry would have made no profits”³⁴⁰ and that Boeing “would have collapsed under a debt burden spiraling out of control.”³⁴¹ On that basis, the EC argues that Boeing could not have priced and developed its large civil aircraft as it did without the alleged subsidies. And, to be sure, assigning \$15 billion or more of the unrelated costs of two government agencies to a single company would, in

³³⁷ EC RPQ1, para. 386 (“Boeing’s 2004 decision to change in {sic} its pricing policy, and lower its prices, may well have been taken for commercially viable reasons.”).

³³⁸ EC SWS, para. 732 (“Thus, the amount and magnitude of the US subsidies alone, whether or not precisely quantified, conclusively demonstrates that these subsidies cause adverse effects.”); *see also* EC OS1, para. 148-149; EC SWS, paras. 706-731.

³³⁹ Although “[a] precise, definitive quantification of the subsidy is not required” of the complaining party, *US – Upland Cotton (AB)*, para. 467, the EC has organized its case in a way that requires it to demonstrate that it has accurately calculated the amount and magnitude of the alleged subsidies.

³⁴⁰ EC RPQ1, para. 299.

³⁴¹ EC RPQ1, para. 300.

most cases, be enough to cripple that company. However, even disregarding the huge exaggerations in the EC's magnitude calculation, Boeing's financial data affirmatively disprove the EC's claim that "but for" the alleged subsidies, Boeing would be a "failed company."

270. The EC has alleged \$19.1 billion in subsidies over the 18 years from 1989 through 2006, about \$2 billion of which are in the form of FSC/ETI tax credits that have no impact on Boeing's pre-tax operations.³⁴² Over that same eighteen year period, Boeing's commercial aircraft division's aggregate operating profit was \$22.3 billion and its cash flow (operating income plus depreciation and amortization) was \$31.9 billion.³⁴³ For The Boeing Company, the relevant figures are earnings before tax of \$34 billion and cash flow (on the same basis) of \$57.7 billion.³⁴⁴ In prior submissions, the United States has pointed out that between 1986 and 2006, Boeing repurchased over \$16 billion of its stock, but as these figures show, the \$16 billion in stock repurchases represents only a fraction of Boeing's net income and cash flow from operations. Thus, even accepting the EC's fantastical magnitude calculations, Boeing's profits and cash flow were more than enough to absorb the portions of the Defense Department and NASA budgets that the EC wants Boeing to bear.

271. Finally, in its answer to this question, the EC asserts that the alleged subsidies were key to Boeing's decision to narrow the pricing gap with Airbus in key sales campaigns. The facts, however, show that Boeing would have priced as it did regardless of the alleged subsidies:

- Boeing was the incumbent supplier at most of these accounts with no incentive to lower its pricing, but a strong incentive to respond to Airbus' pricing to retain its customer base.³⁴⁵
- Airbus systematically offered its large civil aircraft at a price below Boeing's.
- Boeing was forced to narrow the price gap in response to Airbus' pricing, but never "led" prices down.
- The economic rationale behind Boeing's decision to close the price gap with Airbus is apparent from BCA's financials. BCA's 2001-2003 reluctance to

³⁴² In any event, FSC and ETI exempted the income of certain transactions from U.S. income tax. Scenarios in which Boeing covers the large chunk of DoD and NASA budgets, as alleged by the EC, would change its tax picture to the point that any FSC/ETI benefits would likely be minimal or zero.

³⁴³ All Boeing financial data is from Boeing annual reports for the period 1989-2006. The cash flow calculation is based on operating profit and depreciation/amortization, because payments for future deliveries are recorded at the time of delivery. *Comparison of selected Boeing and BCA financial data and alleged subsidies: 1986-2006* (Exhibit US-1226).

³⁴⁴ *Id.*

³⁴⁵ US RPQ1, paras. 246-247.

narrow the price gap with Airbus led to a substantial loss of orders. BCA's profits dropped steeply in 2003 and 2004. By contrast, once BCA became more flexible in its pricing, its market share losses lessened and its profitability recovered.

272. In its answer to Question 85, the EC recognizes that “Boeing’s 2004 decision to change in {sic} its pricing policy, and lower its prices, may well have been taken for commercially viable reasons.”³⁴⁶ The EC’s conclusion on this key point means that the EC’s causation case is wholly predicated on the assertion that, without the alleged subsidies, Boeing *could not* have acted in an economically sensible manner. The data show Boeing could and, therefore, disprove the EC’s claim that the alleged subsidies “caused” or “enabled” Boeing’s pricing or product development decisions.

273. Therefore, the EC’s assertions do not support the proposition that the magnitude of the alleged subsidies was significant.

79. *The Panel understands that the European Communities has allocated the benefit of alleged recurring subsidies that reduce marginal unit costs to the year that the LCA (on which the alleged subsidy will accrue) was sold, even though the alleged subsidy would not be received by Boeing until the year that the LCA was delivered (Exhibit EC-13, para. 5). Please explain how such an allocation methodology is consistent with the SCM Agreement.*

274. In its response to this question, the EC asserts that it “has allocated the benefit of recurring subsidies that reduce Boeing’s marginal unit cost to the year that the large civil aircraft was ordered.”³⁴⁷ This is not entirely accurate, as what the EC did was allocate these alleged subsidies to the year three years prior to the year of receipt, on the theory that aircraft delivered in the year of receipt were, on average, ordered three years earlier.³⁴⁸ As the United States noted in its comment on the EC response to Panel Question 77, this is a highly inaccurate methodology.

81. *Please explain how the Panel should undertake a counterfactual evaluation of the effects of the alleged subsidies in a market in which customers translate the overall financial package offered by each of Boeing and Airbus into a Net Present Value (NPV). Specifically, please explain how the Panel should determine that prices are being suppressed, that specific sales were lost, or that imports or exports were displaced or impeded, due to the price or technological features of a Boeing LCA, in a market in which the outcome of a sales campaign is typically determined by the best overall NPV to an airline or leasing company customer?*

³⁴⁶ EC RPQ1, para. 386.

³⁴⁷ EC RPQ1, para. 306.

³⁴⁸ ITR Report, para. 5 (Exhibit EC-13).

275. The EC, like the United States, answered this question by recognizing that the critical question is how, if at all, the NPVs of Boeing's offers to supply large civil aircraft were different because of the alleged subsidies. The EC makes an additional point with which the United States agrees, that is, that the performance characteristics of the competing Boeing and Airbus large civil aircraft are set at the time of the sales campaign and that the variable in the campaigns is price and price/non-price concessions.³⁴⁹

276. The problem with the EC response is not how it characterizes NPVs or their significance in the market, but its claim that "but for" the alleged subsidies, Boeing would not have been able to make the final offers that it did. This assertion, which is central to the EC's case, has no factual support. Nor is there any theoretical support for it. As the data show, the economics of large civil aircraft production are such that during the reference period, the profitability of Boeing's large civil aircraft operations, which are recorded on the basis of aircraft deliveries, were lowest in 2003-2004, in the wake of Boeing's 2001-2002 market share losses to Airbus. By contrast, Boeing's profits began to improve in 2005 and 2006, as the volume of its deliveries increased.

277. Given these data, the EC cannot (and does not) point to any evidence to show that, but for the alleged subsidies, it would have made economic sense for Boeing to price its large civil aircraft higher than it did. Instead, the EC reiterates the same baseless argument used in its answer to Panel question 78, that is, *assuming* that Boeing could not have priced as it did "but for" the alleged subsidy because the company needed the subsidy dollars to do what it did. The United States also notes that the EC has stated nothing about the alleged subsidy programs to support the conclusion that they were instrumental to Boeing's pricing or product development decisions.

278. The EC response to Panel Question 81 then goes on to a lengthy analysis of sales campaigns in reach of the three large civil aircraft markets it has identified for purposes of its case. However, it omits critical facts regarding those campaigns. Specifically:

- The EC never mentions that Boeing was the incumbent supplier in the vast majority of the campaigns in question.
- The EC never mentions that Airbus was in a number of the campaigns a new supplier, which put it at a "switching cost" disadvantage. Airbus accordingly engaged in systematical undercutting of Boeing's price (or the NPV of Boeing's offer) in an effort to "flip" the Boeing customer.
- The EC never mentions that there is no evidence that Boeing undercut Airbus' price. Notwithstanding the EC characterization of Boeing's "final price

³⁴⁹ EC RPQ1, para. 321.

discount,” the Boeing price was regularly higher, and was often significantly higher, than Airbus’ final price.

- The EC never mentions that the sales at issue have been profitable for Boeing. The 787 has been a success.³⁵⁰ Because of its design and performance advantages over the A340, the 777 sells at a significant premium relative to the A340.³⁵¹ In the single aisle market, there is no doubt that by defending its customer base, Boeing was able to recover from the problems it encountered when it lost substantial market share during the 2001-2004 period.

279. The following table provides the data on the sales at issue that is missing from the EC’s answer to this question. *(A copy of this paragraph appears in the HSBI Appendix to this submission.)*

Boeing Model at Issue	Campaign (Customer HQ)	Campaign Dates	Incumbent	Winner	First Boeing Deliv.	Key Evidence From Sales Campaign
787	All Nippon Airways (Japan)	2003-2004	Boeing - 767	Boeing	2008	[[HSBI]]
787	Continental Airlines (USA)	2003-2005	Boeing - 767	Boeing	post-2008	[[HSBI]]
787	Japan Airlines (Japan)	2003-2005	Boeing - 767	Boeing	post-2008	[[HSBI]]
787	Air Europa (EC – Spain)	2004-2005	Dual Operator - 767/A330	Airbus	N/A	[[HSBI]]
787	Icelandair (Iceland)	2004-2005	Boeing - 757	Boeing	post-2008	[[HSBI]]
787	Ethiopian Airlines (Ethiopia)	2004-2005	Boeing - 767	Boeing	post-2008	[[HSBI]]
787	Air Canada (Canada)	2004-2005	Dual Operator - 767/A330	Boeing	post-2008	[[HSBI]]
787	Northwest Airlines (USA)	2003-2005	Mixed long-range fleet - 747, DC-10, A330	Boeing	post-2008	[[HSBI]]

³⁵⁰ Boeing press release, Boeing Celebrates the Premiere of the 787 Dreamliner (July 8, 2007) (Exhibit US-1227) (noting that the 787 is “the most successful commercial airplane launch in history.”).

³⁵¹ EC OS1, para. 85.

U.S. AND EC BUSINESS CONFIDENTIAL INFORMATION REDACTED

*United States – Measures Affecting Trade
in Large Civil Aircraft (Second Complaint) (DS353)*

Comments of the United States on the Responses of
the European Communities to the First Set of
Questions from the Panel to the Parties
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787	Royal Air Maroc (Morocco)	2004-2005	Boeing - 767	Boeing	post-2008	[[HSBI]]
787	CIT Group (USA)	2005	N/A – leasing co.	Airbus	N/A	[[HSBI]]
787	ILFC (USA)	2005	N/A – leasing co.	Airbus	N/A	[[HSBI]]
787	Qantas (Australia)	2004-2005	Dual Operator - 767/A330	Boeing	post-2008	[[HSBI]]
787	Kenya Airways (Kenya)	2005-2006	Boeing - 767	Boeing	post-2008	[[HSBI]]
737NG	Ryanair (EC – Ireland)	2001-2002	Boeing - 737NG	Boeing	2002	[[HSBI]]
737NG	easyJet (EC – U.K.)	2002	Boeing - 737NG	Airbus	N/A	[[HSBI]]
737NG	Air Berlin (EC – Germany)	2003-2004	Boeing - 737NG	Airbus	N/A	[[HSBI]]
737NG	AirAsia (Malaysia)	2003-2005	Boeing - 737 "Classic"	Airbus	N/A	[[HSBI]]
737NG	Iberia (EC – Spain)	2004-2005	Airbus - A320	Airbus	N/A	[[HSBI]]
737NG	Japan Airlines (Japan)	2005	Boeing - 737 "Classic"	Boeing	2006	[[HSBI]]
737NG	SALE (Singapore)	2005	N/A – leasing co.	Boeing	2006	[[HSBI]]
737NG	Lion Air (Indonesia)	2005	Boeing - 737 "Classic"	Boeing	2007	[[HSBI]]
737NG	Aegean Airlines (EC – Greece)	2005	Boeing - 737 "Classic"	Airbus	N/A	[[HSBI]]
737NG	Hamburg International (EC – Germany)	2005	Boeing - 737NG	Airbus	N/A	[[HSBI]]
737NG	DBA (EC – Germany)	2005	Boeing - 737NG	Boeing	N/A	[[HSBI]]
777	Air New Zealand (New Zealand)	2003-2004	Boeing long-range fleet - 747, 767	Boeing	2005	[[HSBI]]
777	Singapore Airlines (Singapore)	2004	Dual Operator - 777/A340	Boeing	2006	[[HSBI]]
777	Cathay Pacific (Hong Kong)	2005	Dual Operator - 777/A340	Boeing	2007	[[HSBI]]
777	Lufthansa (EC-Germany)	2004	Airbus - A340	Airbus	N/A	[[HSBI]]

82. *The United States argues (at paragraphs 929-930, 1059-1060 and 1120-1122 of its First Written Submission) that there is no coincidence in time between the alleged subsidies and the alleged serious prejudice to the European Communities' interests. What sort of temporal correlation between the level of subsidization and the adverse effects of such subsidization is it appropriate to expect in an industry such as the LCA industry?*

280. In answering the Panel's question about the "temporal correlation" between subsidy levels and adverse effects that might be expected in the large civil aircraft industry, the EC argues that "a number of non-attribution factors prior to 2004 caused Boeing to lose overall market share" and that, as a result, the impact of the alleged subsidies in those years were cushioned even though the subsidies were, at the time, at their peak levels. According to the EC, the situation changed when Boeing initiated an [***].³⁵² As an initial point, the Panel should note that the EC's characterization of the timing is inaccurate. [***]³⁵³

281. The evidence, moreover, shows that if Boeing's pricing decisions had been, as the EC alleges, "subsidy fueled," there was every reason to use the alleged subsidies to narrow the pricing gap with Airbus before 2004, when the subsidies were at their peak *and* while Boeing was losing key accounts because of Airbus' pricing. The fact that Boeing [***] only after the "bottom line" consequences of its market share losses to Airbus had become apparent is proof that the economics of the business, not the alleged subsidies, were the reason for Boeing's pricing decisions. Instead of addressing this issue directly, the EC claims that Boeing lost share to Airbus in 2001-2003 because of reasons other than price. However, the evidence regarding market conditions in the 2001-2003 period,³⁵⁴ as well as evidence from specific campaigns,³⁵⁵ disproves this EC claim.

83. *At paragraph 119 of its Oral Statement, the European Communities contends that, but for the billions of dollars in subsidies received by Boeing, Boeing would have been forced to charge higher prices, and as a result, Airbus would have won additional sales and its LCA prices would have been higher.*

(a) *What specific support does the European Communities have for the above-referenced contention that in the absence of the alleged subsidies, Boeing would have charged higher prices for its LCA? Does the European Communities consider it possible that, given the nature of competition in the LCA markets, "but for" the alleged subsidies, Boeing would have priced its LCA as aggressively as it*

³⁵² EC RPQ1, para. 341.

³⁵³ US FWS, paras. 1034-1035.

³⁵⁴ U.S. Comment on EC Response to Panel Question 73.

³⁵⁵ US FWS, U.S. Campaign Annex, para. 107; US SWS, HSBI Appendix, paras. 52-53.

did, but would have earned narrower margins on its sales of LCA? If not, why not?

- (b) *What is the significance, in terms of the Panel’s assessment of the “price effects” and “technology effects” of the alleged subsidies, of the distinction drawn by the European Communities between “competitive sales campaigns” and “non-competitive sales campaigns”? What are the implications of this distinction for the Panel’s assessment of the various claims of serious prejudice in Article 6.3?*
- (c) *Is the Panel correct in understanding the European Communities’ causation argument (as described in paragraph 119 of its Oral Statement) essentially to involve two steps, both of which involve the application of a “but for” causation test through a counterfactual demonstration; namely, (i) but for the alleged subsidies, Boeing’s LCA prices would have been higher (and as regards the 787, Boeing would not have developed, launched and been able to promise to deliver the 787 within the time frame that it did); and (ii) but for the lower Boeing LCA prices (and the innovative technologies and manufacturing methods used on the 787), Airbus’ sales and LCA prices would have been higher? If not, please explain the basis on which the Panel should evaluate whether the “nature” of the alleged subsidies is such that they give rise to the “price effects” and “technology effects” for which the European Communities contends.*

282. In its response to this question 83, the EC repeats the claim it makes in response to Panel Question 78 – that is, that “without the U.S. subsidies Boeing would not have made any profits for almost twenty years”³⁵⁶ and that “no commercial enterprise could survive in these circumstances.”³⁵⁷ The U.S. comments on the EC’s answer to Question 78 apply equally here. These assertions by the EC depend, first and foremost, on the EC’s unsustainable calculation on the amount of the alleged subsidies and, second, on the EC’s misreading of Boeing’s financials.

283. The United States has stated previously, and repeats here, that the EC is free to structure and argue its adverse effects claim as it chooses. Specifically, the EC has the latitude to predicate its adverse effects claims on a deeply flawed subsidy magnitude calculation. By the same token, however, the EC must submit to an examination of its claim as presented. It may not seek to have the Panel develop alternative arguments on its behalf or make findings on arguments that the EC has not made. If, therefore, the Panel concludes that a large portion of the value of the EC’s magnitude calculation is invalid, it should reject the EC’s adverse effects claim because it depends entirely on those calculations.

³⁵⁶ EC RPQ1, para. 348.

³⁵⁷ EC RPQ1, para. 349.

284. The U.S. comments on the EC's response to Panel Question 83 also incorporate by reference the data provided in the U.S. response to Panel Question 78, which shows that even if the EC's magnitude of the subsidy calculation is accepted at face value, Boeing had the means and the economic incentive to price and develop its aircraft exactly as it did.

84. *At paragraph 120 of its Oral Statement, the European Communities argues that one of the effects of the alleged subsidies to Boeing is that the additional cash flow from the alleged subsidies “enhances Boeing’s ability to price down its LCA in competitive sales campaigns.” Does the European Communities argue that, for purposes of Article 5(c) and 6.3, a sufficient causal link between the subsidy and the serious prejudice factor can be established by demonstrating that a subsidy enhances or facilitates an actor’s ability to act in a manner which gives rise to a serious prejudice factor?*

285. In the first paragraph of its answer to this question, the EC concedes that it cannot establish a sufficient causal link for purposes of Articles 5(c) and 6.3 merely by “demonstrating that the US subsidies enhance or facilitate Boeing’s ability to act in a manner which gives rise to serious prejudice.”³⁵⁸ Thus, it appears to have abandoned its previous assertion that “the amount and magnitude of the US subsidies *alone*, whether or not precisely quantified, *conclusively demonstrates* that these subsidies cause adverse effects.”³⁵⁹ The EC then goes on to articulate a five-point approach to causation that, it argues, it has satisfied in this case. The United States considers that it is worth exploring in detail the EC's proposed approach, and the evidence, as opposed to the EC's assertions, on each of its five points. But before doing so, the United States notes that the EC's proposal omits two elements that are essential to any “but for” analysis. First, the EC's approach fails to mention the nature of the alleged subsidies. The key issue here is whether there is evidence that the structure of the alleged subsidies is such that they are likely to have an impact on price or the development of a specific product. Second, the EC's approach fails to ask whether in the absence of the alleged subsidies, Boeing's pricing and product development choices still made economic sense. If the answer to that question is “yes,” then the only relevant question is whether, in the absence of the alleged subsidies, Boeing had the financial resources to make those choices when and how it did. If it would have, there is no economic basis on which to find a “causal link” between the subsidies and the pricing and product development choices that allegedly led to serious prejudice.

286. Turning now to the EC's five-point approach to causation, the first point is that, in the EC's view, the magnitude of the alleged subsidies was “sufficiently large” to give Boeing the *ability* to cause adverse effects. One critical flaw in this argument is that the figure cited by the EC is wrong – it both exaggerates the payments under the challenged programs and assumes that programs are subsidies when the evidence proves otherwise. The other flaw is that, as the United States has shown in response to Panel Question 81, even in the absence of the alleged subsidies,

³⁵⁸ EC RPQ1, para. 370.

³⁵⁹ EC SWS, para. 732 (emphasis added).

Boeing would still have had the “ability” to develop its products when and how it did, and price them at the levels it did.³⁶⁰ Thus, Boeing’s own resources gave it the ability to make the commercially rational choices that it did. The subsidies played no role.

287. The second point in the EC’s causation approach is that, in its view, Boeing had an *incentive* to use the magnitude of the alleged subsidies to price its aircraft aggressively in “intense sales-campaign-specific competition” with Airbus.³⁶¹ The EC’s discussion of “incentive” does not get at the core “but for” question, which is whether the alleged subsidies would induce Boeing to price in a way that would not otherwise make business sense. In the vast majority of “sales-campaigns-specific” competitions identified by the EC, Boeing was the incumbent supplier,³⁶² defending to keep Airbus from, as the EC puts it, “getting a foothold in its customers.”³⁶³ The evidence indicates that, in many instances, Boeing had a choice between maintaining its price and losing the customer to Airbus or narrowing the price gap with Airbus and maintaining the customer. As Boeing’s financial data show, by 2004, it had become clear that the economics of the business favored the latter – the cost of losing the account was greater than the costs of a reduced profit margin on the sale. Given these facts, the alleged subsidies were irrelevant to Boeing’s pricing decisions.

288. The third point in the EC’s approach to causation is its assertion that “Boeing’s behavior in the sales campaigns at issue” shows that it used the alleged subsidies to lower prices. This raises issues of fact – and the facts are unequivocal:

- In the campaigns at issue, Boeing was typically the incumbent supplier with no incentive to lower its prices absent price undercutting by Airbus.³⁶⁴
- There is no evidence that Boeing ever undercut Airbus’ prices, but there is overwhelming evidence that, in the course of campaigns, Boeing only lowered its prices in response to Airbus’ price undercutting.³⁶⁵
- In the campaigns that Boeing won, it typically did so despite a lower Airbus price.³⁶⁶

³⁶⁰ US SWS, para. 176; US RPQ1, paras. 217-218; U.S. Comment on EC Response to Panel Question 77.

³⁶¹ EC RPQ1, para. 378.

³⁶² US RPQ1, para. 246.

³⁶³ EC RPQ1, para. 522.

³⁶⁴ US RPQ1, paras. 256-247.

³⁶⁵ US SWS, HSBI Appendix, paras. 24-26, 37, 44-59, and 66-74.

³⁶⁶ US SWS, HSBI Appendix, paras. 24-26, 58, and 72-73.

289. In assessing this part of the EC's response to this question, the United States urges the Panel to look closely at the confidential version of the table submitted in connection with the U.S. comments on the EC's answer to Panel Question 81. That table sets out key facts regarding each of the sales campaigns cited by the EC. In each case, the facts discredit the EC's characterization of Boeing's behavior.

290. The fourth point in the approach to causation is the EC's contention that "Boeing was required to use subsidies to fund lower prices if it wanted to avoid insolvency." The United States has already addressed the flaws with this particular claim at length by showing that Boeing's profits and cash flow were more than enough to absorb even the EC's greatly exaggerated subsidy amounts.³⁶⁷

291. The fifth point in the EC's causation approach cites statements of Boeing executives that, according to the EC, provide "{a}dditional confirmation that Boeing acted on its incentive and ability to use subsidies to pursue its policy of lowering prices" because they discuss how Boeing's competitiveness is enhanced by cost savings unrelated to the alleged subsidies.³⁶⁸ These statements provide no such confirmation.

292. In its support of its position, the EC refers the Panel to the Boeing statements quoted in its second written submission.³⁶⁹ Among these statements is a discussion of how Boeing Library Services has made buying books more efficient throughout The Boeing Company. However, the only statements specific to Boeing's production of large civil aircraft are two comments by former BCA CEO Alan Mulally.³⁷⁰ In one statement – from a 2005 Boeing investor conference – Mr. Mulally responded to a question regarding BCA's projections of increased profit margins:

³⁶⁷ See *infra* U.S. Comment to EC Response to Panel Question 78; US RPQ1, paras. 217-218; US SWS, para. 176.

³⁶⁸ EC RPQ1, para. 380.

³⁶⁹ EC RPQ1, paras. 371 n. 368 (citing EC SWS, paras. 803-808), 380 n. 377 (same).

³⁷⁰ EC RPQ1, para. 380 (citing Mulally statements quoted in EC SWS, paras. 803-804). The other statements quoted by the EC in its second written submission pertain to The Boeing Company as a whole, EC SWS, para. 804 n. 1235 (quoting The Boeing Company CFO James Bell), or non-BCA business units. EC SWS, para. 804 n. 1235, 805. These quotes include a reference in Boeing Frontier Magazine to Boeing Library Services, which the EC cites only in part. EC SWS, para. 805 ("Similarly, the Boeing Frontier magazine explains that '{e}liminating {a costly} step lowers the end price to the ultimately {sic} Boeing customer, as overhead Finance costs are no longer added to the price.'"). Here is the full quote: "Even Boeing Library Services recently introduced its own Lean ordering process, turning the ordering of all books – except those not available through Boeing-approved supplier Barnes & Noble – over to each organization or group. The goal: to remove the library as a middleman. Eliminating this step lowers the end price to the ultimate Boeing customer, as overhead Finance costs are no longer added to the price of publications.") *Getting Lean*, Boeing Frontiers (August 2002), p. 5 (Exhibit EC-1249).

Q: Alan, both you and James talk about double digit marketing objectives. Could you walk us through the progression to get there? And perhaps qualify where these are coming from? Efficiencies versus component pricing versus volume, R&D ramped down{,} product mix?

A: Sure, it's all of those, of course. As you said, that the fundamental is that our plan is to continue to improve the gross margins and the pre-R&D margins, through lean mainly and the volume coming back, but also, in that is reflected the pricing where we're sharing part of our productivity with the airlines. So the fundamental, in the pre-R&D margins. And over this next couple of years will be our peak spending on the 787 that even – but the plan is, is to offset that and grow the bottom line operating margins, by increasing the pre-R&D margins.

Indeed, Boeing's operating margins did grow during the 2005-2006 period through the application of lean manufacturing techniques and increased production volumes, as reflected in the table below. It is true that Mr. Mulally noted that part of BCA's productivity gains would be shared with customers, but as the table shows, any effect the productivity gains had on prices was dwarfed by the effect those gains had on BCA's operating margins.

**BCA profitability vs. price changes
(all dollar amounts in millions)**

	2001	2002	2003	2004	2005	2006
BCA LCA Deliveries ³⁷¹	518	377	273	280	284	387
BCA Revenues ³⁷²	\$35,056	\$28,387	\$22,408	\$21,037	\$22,651	\$28,465
BCA Net Earnings from Operations ³⁷³	\$ 1,911	\$ 2,017	\$ 707	\$ 753	\$ 1,432	\$ 2,733
BCA Operating Margin ³⁷⁴	5.45%	7.11%	3.16%	3.58%	6.32%	9.60%
Indexed 777 Prices (in constant \$; 2000 = 100) ³⁷⁵	[***]	[***]	[***]	[***]	[***]	[***]
Indexed 737NG Prices (in constant \$; 2000 = 100) ³⁷⁶	[***]	[***]	[***]	[***]	[***]	[***]

293. The data show that BCA's productivity improvements during the 2004-2006 period were so significant that [***] while simultaneously increasing its operating margins. This reflects a temporal coincidence in the 2004-2006 period among the productivity gains referred to by Mr. Mulally, significantly increased BCA operating margins, and [***].

294. By contrast, no temporal coincidence exists between these developments and the alleged subsidies. Even according to the EC's fantastical calculations, the average annual amount of alleged subsidies during the 2004-2006 period was 11 percent lower than the average annual amount during the 2001-2003 period.³⁷⁷

³⁷¹ Airclaims CASE Database, data query as of January 17, 2006.

³⁷² Exhibit US-1240.

³⁷³ Exhibit US-1240.

³⁷⁴ Exhibit US-1240.

³⁷⁵ Indexed 737NG & 777 Average Order Prices (2000 – 2006) (Exhibit US-1164).

³⁷⁶ Indexed 737NG & 777 Average Order Prices (2000 – 2006) (Exhibit US-1164).

³⁷⁷ ITR Magnitude Report, Appendix A, p. 4 (Exhibit EC-17).

295. Thus, there is no basis for the EC’s contention that the alleged subsidies “operate in the same manner as the production cost reductions addressed by Mr. Mulally and others.”³⁷⁸ Evidence exists to show that Boeing’s production cost reductions enhanced its competitiveness, while there is no evidence that the alleged subsidies do the same.

85. *At paragraph 180 of its Oral Statement, the European Communities argues that it is “inconceivable that an average of \$2.4 million per 737 in subsidies played no causal role in Boeing’s decision to change its pricing policy” for the 737 in 2004. Does the European Communities agree that, if the alleged annual level of subsidization of the 737 in 2001 through 2003 exceeded the alleged 2004 level (as is indicated in Table 11 to Exhibit EC-13), it is reasonable to conclude that Boeing’s “radical change” in pricing policy in 2004 was the result of factors other than the alleged subsidies?*

296. In response to this question, the EC concedes that “Boeing’s 2004 decision to change its pricing policy, and lower its prices, may well have been taken for commercially justifiable reasons.”³⁷⁹ While noting again that the EC has the timing wrong,³⁸⁰ the United States otherwise agrees. With this concession, the EC returns to its core argument: “the U.S. subsidies determined the level to which Boeing was able to lower its prices.”³⁸¹ But this assertion is true only if (1) the EC’s magnitude calculation is accurate, and (2) Boeing did not have the financial wherewithal to price as it did without regard to the alleged subsidies. As the United States has shown, the magnitude calculation greatly exaggerates the value of the programs challenged by the EC, and Boeing would have been able to fund its pricing and product development plans even in the absence of the alleged subsidies.

297. In any event, the EC cannot escape the fact that when, by the EC’s own calculations, the alleged subsidies were at their peak, they had no discernible impact on Boeing’s pricing, even though Boeing was, at the time losing substantial market share to Airbus. Nevertheless, the EC continues to argue in its answer to this question that when the alleged subsidies were cut in half, Boeing depended on them to become more competitive on price. This is a fundamentally untenable position.

86. *At paragraph 53 of its Confidential First Oral Statement, the European Communities states that in 2004, Boeing “suddenly decided to use more of the cash available from the US subsidies to change its pricing strategy with respect to the 737NG.” How is this scenario consistent with the European Communities’ general arguments concerning the price effects of the alleged subsidies that reduce Boeing’s marginal unit costs of*

³⁷⁸ EC RPQ1, para. 380.

³⁷⁹ EC RPQ1, para. 386.

³⁸⁰ [***] US FWS, paras. 1034-1035.

³⁸¹ EC RPQ1, para. 386.

production (at paragraphs 1306 and 1308 of the European Communities’ First Written Submission) and those that increase non-operating cash flow (as detailed in the Cabral Report and at paragraph 1321 of the European Communities’ First Written Submission). On what basis does the European Communities assert that in 2004, Boeing used “more of the cash available from the US subsidies” to lower the prices of its 737NG?

298. As the United States understands the question, it focuses on the EC’s general price effects argument, which posits (1) alleged subsidies that reduce marginal unit costs always pass through to price on a “one-for-one” basis, and (2) alleged subsidies that increase non-operating cash flow have the “immediate and direct”³⁸² effect of “aggressive pricing,” and asks whether that argument contradicts the EC view that the alleged subsidies were responsible for the 2004 change in Boeing’s pricing. As noted elsewhere, [***].³⁸³

299. The correct answer is that the alleged subsidies did not have anything to do with Boeing’s decision to become more competitive with Airbus on price after it became aware of the costs of its 2001-2003 market share losses. It was a business decision taken because Boeing could not afford to let the erosion of its market share continue. As the United States has stated, Boeing prices its large civil aircraft by reference to the market.³⁸⁴ It had the financial resources to implement that decision independent of the alleged subsidies, so there is no basis to attribute that decision to the alleged subsidies.

300. The EC’s response to this question illustrates the contradictions between its theories and reality, and shows that the “estimates” in Professor Cabral’s model are not, in fact, a rough approximation of Boeing’s behavior but a hypothesis so contrary to it as to have no explanatory value in this dispute.

301. The EC makes two efforts to reconcile its argument on the 2004 Boeing price decreases with its general price effects theory. The first is to repeat its contention that “subsidies reducing marginal cost”³⁸⁵ have price effects equal to their magnitude.³⁸⁶ However, the magnitude of these alleged subsidies fell in relation to order value from 2003 to 2004 and 2005, whether measured as ITR prefers or based on the value of actual orders, the comparison the United States considers appropriate.³⁸⁷ Thus, these programs would not explain a decrease in Boeing’s price.

³⁸² EC FWS, para. 1322.

³⁸³ US FWS, paras. 1034-1035.

³⁸⁴ US RPQ1, para. 228, *citing* Statement of Clay Richmond, para. 11 (Exhibit US-275) (HSBI).

³⁸⁵ These programs, for the most part, actually affect *revenue* rather than cost. US RPQ1, paras. 233-234.

³⁸⁶ EC RPQ1, para. 393.

³⁸⁷ U.S. first written submission, para. 815 (showing ratio of FSC/ETI to sales decreasing from 1:91 in 2003 to 1:104 in 2004); ITR Report, Table 3, p. 1 and Table 9, p. 1 (showing “subsidies reducing margin unit cost” decreasing from \$163.2 million in 2003 to \$35.2 million in 2004, while total seats sold increases between those years) (Exhibit EC-7).

In fact, if the EC “one-for-one” theory were correct, the dramatic fall-off in the value of these alleged subsidies should have led to a price *increase*.

302. The EC’s second effort to explain how Boeing was able to “use more of the cash available from the US subsidies to change its pricing strategy” is to assert that:

the European Communities’ argument that, post-2004, Boeing used a greater portion than previously of the US subsidies increasing its non-operating cash flow to price down its LCA (as opposed to returning them to shareholders) is consistent with Professor Cabral’s model which assesses Boeing’s average behavior during 2004-2006.”³⁸⁸

No such consistency exists.

303. *First*, the EC, in its first written submission insisted that “The pricing effect of subsidies that increase Boeing’s non-operating cash flow is *immediate and direct* for both the case of investment in aggressive pricing of new planes (via pricing down the learning curve) and for aggressive pricing of sales of mature aircraft.”³⁸⁹ The EC argument that Boeing “used a greater portion than previously” of the alleged subsidies increasing non-operating cash flow to lower prices³⁹⁰ directly contradicts this earlier contention. The obvious consequence of changing its argument in this manner, however, is that the EC admits that Boeing may significantly change its distribution of the amount of the alleged non-operating cash flow benefit among various spending options. The EC, however, provides no explanation of why Boeing, if it is free to use alleged subsidy funds however it wants, would use them to cover pricing policies, rather than share repurchases, acquisitions, etc. (In fact, with their declining value, the alleged subsidies would be *even less likely* to play a role in enabling particular investments.)

304. *Second*, the EC’s argument that Boeing “used more of the cash available” to fund price reductions is squarely at odds with the model used by Professor Cabral, which assumes that Boeing uses any subsidy cash in a fixed proportion between investments leading to lower aircraft prices and payments to shareholders.³⁹¹ It is only through this assumption that the EC and Professor Cabral can claim that the alleged non-operating cash flow subsidies will always affect Boeing’s prices – otherwise, Professor Cabral’s model provides no reason why, at a given time, the proportion of the subsidy invested in lower pricing would be zero and the proportion passed on to shareholders would be 100 percent. Thus, the EC is simply wrong when it states that

³⁸⁸ EC RPQ1, para. 394.

³⁸⁹ EC FWS, para. 1322 (emphasis added).

³⁹⁰ EC RPQ1, para. 394.

³⁹¹ Cabral Report, paras. 16-18 (Exhibit EC-4).

“Professor Cabral’s model does not *preclude* that Boeing may invest a somewhat higher percentage of its subsidies in pricing down its LCA in certain years.”³⁹²

305. It is no answer for the EC to say that Prof. Cabral’s model “assesses Boeing’s average behaviour”³⁹³ but “does not track these marginal changes from year to year.”³⁹⁴ If Prof. Cabral’s critical assumption about how Boeing’s makes investment decisions is contradicted by the evidence, as it is, then there is no reason to believe that his model provides a good “estimate” of Boeing’s “average behaviour.”

306. *Third*, even if the EC’s price effects theory were not dependent on Professor Cabral’s assumption that Boeing uses a fixed proportion of subsidy cash in “aggressive pricing,” it is contradicted by the relevant data. The EC and Professor Cabral assume that Boeing’s investment decisions are limited to aggressive pricing, R&D, and shareholder payments. Leaving aside the invalidity of this assumption, the EC’s “more of the cash available” argument requires that “investments” in lower Boeing 737NG prices during the 2004-2006 period would coincide with lower BCA R&D spending and/or shareholder payments. That is, if Boeing were to deviate from the fixed proportional investment behavior assumed by Professor Cabral (namely, that, for every subsidy dollar, Boeing apportions 15 cents to shareholder payments, 26 cents to R&D spending, and 59 cents to “aggressive pricing” related to learning curve efficiencies and switching costs), the EC’s price effects theory would require that an increase in “aggressive pricing” would be offset by decreases in shareholder payments and/or R&D spending. The data set forth in the following table disproves the EC’s theory:

³⁹² EC RPQ1, para. 394 note 396.

³⁹³ EC RPQ1, para. 394.

³⁹⁴ EC RPQ1, para. 394 n. 396.

**Comparison of alleged subsidies with certain financial data
(all dollar amounts in millions)**

	2000	2001	2002	2003	2004	2005	2006
(a) Alleged subsidies increasing non-operating cash flow	\$1,005.9	\$1,093.60	\$1,038.60	\$ 715.00	\$ 854.20	\$ 853.50	\$ 812.80
(b) Boeing share repurchases	\$2,357.00	\$2,417.00	\$ 0	\$ 0	\$ 752.00	\$2,877.00	\$1,698.00
(c) Boeing dividends	\$504.00	\$ 582.00	\$ 571.00	\$ 572.00	\$ 648.00	\$ 820.00	\$ 956.00
(d) BCA R&D spending	\$574.00	\$ 858.00	\$ 768.00	\$ 676.00	\$ 941.00	\$1,302.00	\$2,390.00
Total (b+c+d)	\$3,435.00	\$3,857.00	\$1,339.00	\$ 1,248.00	\$2,341.00	\$4,999.00	\$5,044.00
Alleged subsidies increasing non-operating cash flow as a percentage of Boeing shareholder payments and R&D (a/(b+c+d))	29%	28%	78%	57%	36%	17%	16%
Indexed 737NG Prices (in constant 2000 \$s)	***]	***]	***]	***]	***]	***]	***]
737NG share of 100- to 200-seat LCA orders	50.20%	41.92%	33.26%	48.01%	30.97%	39.79%	47.24%
A320 series share of 100- to 200-seat LCA orders	41.21%	48.48%	60.00%	47.76%	67.31%	59.72%	52.57%

Sources: ITR Magnitude Report, Appendix A, p. 4 (Exhibit EC-17); Excerpts from Boeing 2003, 2005, and 2006 Annual Reports (Exhibit US-1240); Boeing 737, 777 Indexed Average Order Prices per Seat (2000-2006) (Exhibit US-1164); Airclaims CASE Database.

307. As this table shows, [***] allowed it to recover some, but only some, of the market share it lost since 2000. Contrary to the EC’s assertion that “post-2004, Boeing used a greater portion than previously of the US subsidies increasing its non-operating cash flow to price down its LCA (as opposed to returning them to shareholders),”³⁹⁵ [***] did not coincide with decreased shareholder payments and R&D spending. Rather, Boeing’s shareholder payments in 2005 more than doubled over the prior year and BCA’s R&D spending increased significantly. Moreover, the alleged amount of subsidies increasing Boeing’s non-operating cash flow during the 2004-2006 period was, on average, significantly lower than the average level alleged for the 2001-2003 period.

³⁹⁵ EC RPQ1, para. 394.

308. Thus, the correct answer to Panel Question 86 is not that the EC’s “more of the cash available” argument is consistent with its general price effects argument. The arguments are both incorrect, and inconsistent with each other.

87. *At paragraph 174 of its Oral Statement, the European Communities contends that Airbus’ Original A350 “was not able to match the subsidy-enhanced technological innovations on the 787” because Airbus did not have “access to the same R&D – in particular composite-related – subsidies as Boeing”. To what extent was Airbus’ design of the Original A350 affected by its inability to access specific R&D, particularly R&D related to composites technology, rather than by the strategy and resource constraints described by the United States at paragraphs 920 to 928 of its First Written Submission?*

(A copy of the U.S. response to this question paragraph appears in the HSBI Appendix to this submission.)

309. The EC argues in its response to the Panel’s question that the reason Airbus (1) was not able to launch a predominantly composite, mid-sized aircraft in 2004 (when Boeing launched the 787) and (2) will require a longer period from launch to entry-into-service to develop a competitive aircraft is because it lacked access to the NASA and DoD research contracts challenged by the EC. The evidence and the EC’s own arguments contradict these assertions:

- Airbus’ engineers admit that when the company realized that its original A350 design was not competitive, and decided instead to design a predominantly composite, mid-sized aircraft, it was able to launch such an aircraft of “comparable, if not better”³⁹⁶ performance and operating capabilities than the 787 in a matter of “many months”³⁹⁷ after making its decision.
- In the years leading up to their respective launch decisions for a new composite mid-sized aircraft, Boeing’s public reporting demonstrates that it had been working on developing just such a plane. Airbus’s public reporting demonstrates it had been focused on developing a very different aircraft, the A380 superjumbo.
- Even if the Panel were to accept the EC’s assertion (despite the evidence demonstrating otherwise) that the research Boeing performed under the challenged NASA and DoD contracts was the “but for” cause of the 787 launch, Boeing’s financial data demonstrate that it could have funded the enabling

³⁹⁶ EC RPQ1, para. 404.

³⁹⁷ EC RPQ1, para. 404. The EC engineers state that after [[HSBI]], it took them “many months of redesigning and detailed assessment of the significant challenges to building an all-composite fuselage” before they launched the A350XWB on December 1, 2006. EC RPQ1, para. 404 and EC RPQ1, HSBI Annex, para. 2e).

research itself, had those contracts been unavailable. Boeing's competitive strategy demonstrates that it would have done so.

Timing of the A350 launch

310. With respect to the question raised by the Panel regarding the reason for the non-competitiveness of the original A350 design, Airbus' management has stated publicly that it was the result of financial pressure and strategic miscalculation, not the result of a technological deficit. As Airbus CEO and EADS co-CEO Noel Forgeard explained, “{i}n 2004, when Boeing launched the 787, I was CEO of Airbus and I had to balance the interests of the customers and the shareholders. I didn't want to directly demand another large investment from our shareholders after the major effort with the A380. I tried to limit the costs. And our marketing boss John Leahy said that the 787 would not be so successful, at least for the next ten years.”³⁹⁸ As EADS co-CEO Thomas Enders concurs, “Airbus had first underestimated the 787 . . . {W}e made errors.”³⁹⁹

311. Even in the face of these public admissions, the EC has grounded its technology effects claim on the contention that the aircraft Boeing launched in 2004 – the 787 – was out of reach to Airbus for technological reasons: “Airbus attempted to compete in December 2004, *but without access to the same R&D support as Boeing*, Airbus' original A350 family was unable to match the technological advancements of the 787 and was therefore ill-received in the market”.⁴⁰⁰ The evidence shows, however, that the original A350 was not competitive because Airbus ignored the need to develop a new aircraft for most of 2004, and then, in December 2004, launched the lowest-cost aircraft it believed could compete in a market it misjudged. But as soon as Airbus took a better read of the market and decided to develop an all-new aircraft, it was quickly able to do so.

312. In its response to the Panel's question, the EC introduces a statement from Airbus engineers acknowledging that Airbus was doing nothing to prepare a competitor to the 787 throughout 2004. They recall that prior to the launch of the 787, the A330 was “the undisputed market leader” in the 200-300 seat segment.⁴⁰¹ (Airbus's then CEO commented at the time that “while there will probably be a market for the 7E7 . . . {t}he 7E7 is clearly a reaction to the

³⁹⁸ Interview with Noel Forgeard: “I wanted to limit the costs for Airbus”, *Süddeutsche Zeitung* (May 20, 2006) (Exhibit US-1228).

³⁹⁹ Interview with Co-CEO Thomas Enders regarding state shareholding and the problems with the A350: “We have made mistakes,” *Welt am Sonntag* (May 14, 2006) (Exhibit US-1229).

⁴⁰⁰ EC FWS, para. 1011 (emphasis added). See also EC FWS, Annex C, para. 187 (“It goes without saying that if Airbus had access to the same U.S. Government-furnished technological knowledge and experience, Airbus could have launched an LCA comparable to the 787 in 2004, for entry into service in 2008, or marginally later.”).

⁴⁰¹ EC RPQ1, HSBI Annex, para. 2.d.

A330 and we do not feel obliged to react to a reaction.”⁴⁰² Airbus’s chief salesman later recalled that Airbus faced limited competition, having already effectively “put the 767 out of business.”⁴⁰³) The Airbus experts recall the company’s view of the market for a 787-type aircraft was that “[i]nitial customer response was weak” and “Boeing only managed to secure three customers for its 787.”⁴⁰⁴ It was not until the end of 2004, when “customer interest for the 787 started picking up,” that Airbus launched the A350 Original.⁴⁰⁵ In short, throughout 2004, Airbus undertook no development activity on an aircraft to compete with the 787 because of a market misjudgment. By contrast, two years before the launch of the 787, Boeing had started “with our customers and technology partners to develop a new, super-efficient midsized airplane, currently designated as the Boeing 7E7.”⁴⁰⁶

313. The Airbus experts also recognize that [[HSBI]]. Although the experts now argue that [[HSBI]], their excuses are not credible.⁴⁰⁷ The EC’s experts argue that the problem was that [[HSBI]]⁴⁰⁸ By the EC’s own admissions, however, the 787 was already at a much more advanced stage of development when launched in 2004 than the Sonic Cruiser ever reached⁴⁰⁹ – with advertised performance improvements,⁴¹⁰ 50 launch orders from ANA,⁴¹¹ and the ability to convince suppliers to invest in the project.⁴¹² Indeed, Airbus’s experts explicitly recognize that they [[HSBI]]⁴¹³. As Airbus’ Chief Commercial Officer John Leahy said, “we were caught napping.”⁴¹⁴

⁴⁰² Graham Dunn, *Forgeard Insists No Pressure to Combat 7E7*, Air Transport Intelligence (July 20, 2004) (Exhibit US-288).

⁴⁰³ AF&NM interview: John Leahy, Chief Commercial Officer, Airbus, Airline Fleet & Network Management (Nov./Dec. 2005) (Exhibit US-281).

⁴⁰⁴ EC RPQ1, para. 403.

⁴⁰⁵ EC RPQ1, para. 403.

⁴⁰⁶ Boeing 2002 Annual Report, p. 18 (Exhibit US-1230).

⁴⁰⁷ EC RPQ1, HSBI Annex para. 2(f). This argument is also irrelevant to the analysis under the SCM Agreement. A failure by Airbus to appreciate that it had to offer a new aircraft to stay competitive in a particular market segment and the consequences that followed does not amount to a showing that a subsidy caused serious prejudice.

⁴⁰⁸ EC RPQ1, HSBI Annex para. 2c.

⁴⁰⁹ Although Boeing put significant research efforts into the Sonic Cruiser, the program was never officially launched, nor did it ever have any orders.

⁴¹⁰ EC RPQ1, HSBI Annex para. 2c.

⁴¹¹ “Boeing Commits to Building 7E7 After ANA Order,” *China Daily* (Apr. 27, 2004) (Exhibit US-309).

⁴¹² EC RPQ1, para. 462.

⁴¹³ EC RPQ1, HSBI Annex para. 2l.

⁴¹⁴ Exhibit US-290.

314. Once the market told Airbus that its original A350 was not competitive with the all-new 787, Airbus was able to change course with remarkable speed. This is how the Airbus engineers put it in the latest EC submission: Following the early success of the 787 and market reaction to the original A350 following its December 2004 launch, Airbus [[HSBI]]⁴¹⁵ The engineers do not specify when Airbus came to this realization, but they admit that once the company decided to redesign the aircraft, it was only a matter of “many months of redesigning and detailed assessment of the significant challenges to building an all-composite fuselage”⁴¹⁶ to come up with an aircraft of “comparable, or *even better* performance than Boeing’s 787 family LCA”⁴¹⁷ The EC’s claim that Airbus failed to launch a competitive product one year earlier (but succeed in doing so one year later) because of a 20-year deficit in access to NASA and DoD research is simply not credible.

315. The engineers’ statements and the EC’s rendition of the facts thus confirm that Airbus’s choice was driven by business considerations, not by a technology deficit. Airbus engineers were first instructed to [[HSBI]]⁴¹⁸ – without two years of pre-launch design and marketing, such as Boeing carried out prior to 787 launch. Therefore, the original A350 was [[HSBI]]⁴¹⁹ In fact, it would have been remarkable if Airbus engineers had the “confidence” to launch (and offer performance guarantees on) an all-new technology aircraft in such short order. Yet even once it became apparent that the original A350 was uncompetitive, it took Airbus engineers little more than “many months” to design the A350XWB – as opposed to the years spent by Boeing in getting to the point where it could launch the 787. If the EC’s assertions were accurate – that is, if 20 years of NASA and DoD research is what uniquely enabled Boeing to offer the 787 when it did – the EC would have had no such “alternative” to quickly design and offer a comparable aircraft. The fact that Airbus could offer a technologically comparable plane in short order confirms how misleading the various EC statements are regarding the “decades” of composite knowledge and experience that Airbus supposedly lacked.⁴²⁰ The evidence demonstrates that Airbus’s launch decisions – first with respect to the original A350 and then with respect to the A350XWB – were driven by a commercial calculus, just like Boeing’s decision to launch the 787 several years earlier.⁴²¹

⁴¹⁵ EC RPQ1, HSBI Annex para. 2e.

⁴¹⁶ EC RPQ1, para. 404 (public and HSBI version).

⁴¹⁷ EC FWS, para 1338. See also EC OS1, para. 176 (“The A350XWB-800 ... achieves similar operating cost improvements based on comparable composite technology”).

⁴¹⁸ EC RPQ1, HSBI Annex para. 2m.

⁴¹⁹ EC RPQ1, HSBI Annex para. 2m.

⁴²⁰ EC RPQ1, HSBI Annex paras. 2(r), 2(t).

⁴²¹ Bair Affidavit (Exhibit US-7), paras 10, 12-17.

316. In response to the Panel’s question, the EC also attempts to downplay the impact of A380 development on the commercial calculus driving the 2004 launch of the original A350 launch. It draws the Panel’s attention to the wiring engineers required to fix a particular problem that emerged in the A380 development process.⁴²² However, Airbus’s A380 “wiring” problem did not occur until June 2006.⁴²³ In 2004, Airbus was still in the peak period of A380 development,⁴²⁴ and recognized that “{t}here is a risk of costs exceeding the initial 1999 \$10.7 billion programme estimate by €1.5 billion. This is due to the unforeseen development of two different layouts for the A380 freighter; more ambitious noise reduction targets; an initial underestimate of the cost of systems development.”⁴²⁵ As noted above, Airbus then-CEO Noel Forgeard has acknowledged that because the company had been making an enormous investment in the A380, he instructed engineers to develop the lowest-cost A350. All this was occurring at the same time Airbus was “underestimating” the 787 and the response that would be necessary in order to compete.

317. The EC argues that “{o}n an intuitive level, even if the US argument that {Airbus and Boeing has [***] to technologies} were true, there is no commercial reason why Airbus would not have simply designed and offered its Original A350 in 2004”⁴²⁶ To expect a company developing an all-new superjumbo aircraft, costing more than \$12 billion, to concurrently design, offer, and commit to a second all-new aircraft, is to ignore financial realities. Given the extent of the commitment of resources on the A380, it is no surprise that Airbus management decided to try to compete with the 787 in a way that limited the financial impact on the company. And, with a budgeted development cost at a modest \$2.6 to \$3.9 billion,⁴²⁷ it is no surprise that the Airbus’s engineers designed the original A350 as a derivative of the A330 – “largely based on

⁴²² EC RPQ1, para. 435. The EC’s focus on wiring engineers ignores the significant attention that the problems leading to the delay of A380 deliveries also required from management, sales teams and the Airbus treasury.

⁴²³ *Noel Forgeard and the A380*, Commercial Aviation Report, p. 10 (January 1 & 15 2007) (Exhibit US-297).

⁴²⁴ *Ascending: EADS Annual Review 2004*, p. 40 (“The A380 met all its key deadlines through the year, including the electrical and hydraulic powering up of the systems in the first A380, the first flight tests and certification of the Rolls-Royce Trent 900 – the launch engine. Furthermore, the huge industrial process that supports construction is now a reality. In France, the final assembly line is in Toulouse, and the central fuselage section is put together in Saint Nazaire. In Germany, structural assembly of the forward fuselage takes place in Hamburg. In the UK, the wings are assembled at Broughton and the landing gear at Filton. Finally, in Spain, the horizontal tail planes are assembled at Puerto Real. Four aircraft were assembled during the year.”) (Exhibit US-1241).

⁴²⁵ *Ascending: EADS Annual Review 2004*, p. 42 (Exhibit US-1241). Airbus was also developing the A400M at this time, a military transport aircraft. US FWS, para. 925.

⁴²⁶ EC RPQ1, para. 461.

⁴²⁷ See USFWS, para. 924, citing Exhibits US-292 and US-293.

the A330 fuselage with the addition of a new composite wing (and new engines).”⁴²⁸ Thus, while Airbus had a technological choice in December 2004 to build a modified A330 or an all-new composite aircraft, its commercial choice was limited by the fact that in 2000, it had chosen to launch the A380 and did not have the resources to undertake a concurrent major development effort.

318. Since Airbus choose not to even try to compete with the 787 in 2004, the EC cannot credibly argue that the alleged NASA and DoD subsidies caused the EC serious prejudice at that time. And since Airbus was able to pivot quickly when it did choose to compete with the 787, and offer a technologically comparable, mid-sized composite aircraft that is being well-received by the market, the EC cannot credibly argue that the alleged NASA and DoD subsidies caused the EC serious prejudice at any time.

Comparative Development Cycles for the 787 and A350XWB

319. As demonstrated above, the two-year difference in launch of the 787 and A350XWB is one of commercial, not technological choice, and accordingly is not impacted by the “technology effects” of the challenged NASA and DoD R&D. The EC also argues that the supposedly shorter development cycle of the 787 (as compared to Airbus’s “comparable, or *even better*” A350XWB) is the result of the challenged NASA and DoD measures. Specifically, it asserts that Airbus’ projected first delivery is currently seven years after launch, while Boeing’s projected first delivery is currently four years after launch. The EC premises this assertion on a false comparison.

320. The comparison the EC tries to make is not, as it suggests, an “objective” comparison⁴²⁹ – it assumes that two companies were similarly situated at the time of launch, and, therefore, any differential is extraordinary. In fact, Boeing had spent two years before the launch of the 787 (namely, 2002-2004) developing its predominantly composite, mid-sized aircraft, and the two years prior to that (namely, 2000-2001) working on a predominantly composite, high-speed aircraft (Sonic Cruiser).⁴³⁰ As Boeing explained it in its 2002 Annual Report:

Late in the year, we decided to move forward with our customers and technology partners to develop a new, super-efficient midsized airplane, currently designated as the Boeing 7E7. The new airplane will fly as fast and as far as the 777 and 747 and incorporate the advanced technologies identified during the feasibility study for the Sonic Cruiser. This decision will shape the

⁴²⁸ EC RPQ1, para. 404.

⁴²⁹ EC RPQ1, para. 432 and USSWS, para. 190 (noting the difficulties of making the comparison that the EC seeks).

⁴³⁰ US FWS, para. 922.

future of the industry and will represent the bulk of our research-
and-development activities.⁴³¹

321. In contrast to these several years of focus and use of internal funds prior to formal launch of the 787, Airbus spent “many months” before it launched a predominantly composite aircraft. Airbus, by its own admission, was focused during the prior period on designing a very different aircraft. Accordingly, it is misleading and ultimately uninformative to compare the time between formal launch and promised first delivery of the A350XWB and the 787.⁴³² A fair assessment of the length of the overall development cycles of the 787 and A350XWB demonstrates no meaningful difference between the two.⁴³³

322. The fact that Boeing and Airbus have comparable development cycles for the 787 and A350XWB is not surprising. Boeing faces the same challenges of designing and building a composite mid-size aircraft as Airbus, which, prior to the launch of the 787, had been the industry leader in composites use.⁴³⁴ Indeed, Boeing, like Airbus, has had to develop an “entirely new engineering ‘mindset,’”⁴³⁵ learn “to apply textbook knowledge”⁴³⁶ and “[HSBI].”⁴³⁷ Specifically, Boeing too had to “stop thinking of metal ... {which} even Boeing engineers found ... hard to swallow” and overcome the technological reality that “{t}his is a

⁴³¹ Boeing 2002 Annual Report, p. 18 (Exhibit US-1230).

⁴³² In any event, the United States notes that the EC has miscalculated the period from launch to delivery for the A350XWB. Although Airbus currently projects the first A350 XWB delivery to be in late 2013, (EC RPQ1, para. 430) it made a commitment to Singapore Airlines for a 2012 first delivery when it launched the A350XWB in 2006. The timing of future deliveries are, by definition, uncertain for either Airbus or Boeing; indeed, the projected first delivery of the 787 has also been pushed back from initial projection. *Boeing Reschedules Initial 787 Deliveries and First Flight*, available at http://www.boeing.com/commercial/787family/news/2007/q4/071010d_nr.html (Exhibit US-1231). The noteworthy point is that in 2006, Airbus had the “confidence” to guarantee delivery as of 2012 – that is, a six-year development cycle.

⁴³³ The EC also argues that [HSBI] (EC RPQ1, HSBI Annex para 2x.) Specifically, it compares a [HSBI] to Boeing’s estimated US \$7-9 billion investment in the 787. (Statement of Patrick Gavin et al, para. 14 (Exhibit EC-1175 (HSBI))) This comparison is also not an “objective” measurement of the effect of the challenged R&D measures. Development costs are impacted by many factors other than “knowledge and experience,” including cost of labor and materials, degree of development costs borne by suppliers, and – at least if one is converting euro development costs into dollars – the exchange rate at which one is doing so.

⁴³⁴ US FWS, para. 935 and Bair Affidavit, para. 51 (Exhibit US-7).

⁴³⁵ EC RPQ1, para. 424.

⁴³⁶ EC RPQ1, para. 425.

⁴³⁷ EC RPQ1, HSBI Annex para. 2v.

journey none of us has been on There’s no answer in the back of the book” and “{t}his is very much laying track as you go.”⁴³⁸

NASA and DoD Research Did Not Enable Boeing or Disable Airbus

323. The EC’s arguments regarding the substance and dissemination of NASA and DoD R&D are no more supportive of its case than its other arguments. The EC argues that Boeing was only able to launch the 787 when it did because of its access to the alleged NASA and DoD subsidies, and a supposed lack of access to this NASA and DoD research contracts disabled Airbus from competing with the 787. Both assertions are necessary to the EC’s case, and it fails to substantiate either.

324. As a threshold matter, the EC has not shown that Boeing could not or would not have funded the research and development that it conducted under the challenged NASA and DoD contracts. That is, to the extent that Boeing thought that any of the research that NASA and DoD purchased was of independent value to its commercial aircraft development, it had the financial wherewithal and interest to pursue that R&D if NASA and DoD funding were unavailable.⁴³⁹ (The United States discusses this point at great length, in its comments to the EC’s response to Panel Question 78.) In short, any “knowledge, experience, and confidence” that Boeing received from NASA and DoD contracting could have been obtained by Boeing on its own through pursuit of its own research.⁴⁴⁰ This fact alone brings an end to the EC’s technology effects-based claim – that is, even in the absence of the alleged subsidies, Boeing could and would have funded any R&D necessary for the 787.

325. The United States, however, also notes that the EC’s technology effects case is based on general connections between technologies studied under NASA and DoD programs and the 787 aircraft. The “report” of the Airbus experts does not make the “but for” case that the EC must make under the SCM Agreement.

326. First, the Airbus experts demonstrate nothing with respect to the bulk of the challenged funding, about which they can find no 787 connection. Consider, for example, the High Speed Research program, a contract under which Boeing received \$325 million of the \$750 million

⁴³⁸ Michael O’Neal and David Greising, *Boeing bets big on a plastic plane*, Chicago Tribune (January 12, 2005) (Exhibit US-310).

⁴³⁹ US SWS, paras. 185-188. The United States also notes that of the great sum that the EC argues Boeing would have had to self-fund in lieu of NASA and DoD alleged subsidies, billions of the EC’s claim represents R&D funding provided to other companies and NASA and DoD’s institutional overhead. Moreover, most of the challenged programs and monies have no relationship to the technologies on the 787 (*e.g.*, \$325m is for the High Speed Research program, which – as discussed in response to this question, is completely unrelated to the subsonic 787).

⁴⁴⁰ Indeed, the EC states that “experience can be gained only by performing the R&D.” EC FWS, Annex C, para. 11.

disbursed to Boeing under all of the NASA programs challenged by the EC.⁴⁴¹ After describing the entire HSR program, Airbus engineer Dominik Wacht admits that “[g]iven the nature of supersonic flight and the constraints and requirements that are imposed on an aircraft operating in such an environment, links between the HSR program and subsonic aircraft programs, such as those of the 777 and 787, are not obvious.”⁴⁴² Mr. Wacht accordingly limits his discussion of “links” to only “[t]wo HSR areas of research [that] seem particularly *likely* to benefit subsonic civil aircraft programs: (1) the enhanced vision system, and (2) the development and improvement of design codes and CFD.”⁴⁴³ Yet he continues by immediately acknowledging, with respect to the first “likely” benefit that Boeing “is currently not offering an enhanced vision system for the 787”⁴⁴⁴ – eliminating the only basis on which the EC could make its “but for” case.

327. With respect to the CFD codes, Mr. Wacht refers to OVERFLOW and TRANAIR.⁴⁴⁵ Boeing, like all companies that design products that must account for flow (including Airbus) uses CFD codes, and uses its own funds to develop the proprietary versions of the codes that it uses.⁴⁴⁶ As for the basic codes, OVERFLOW was developed by NASA, and as it explains on its website, is a code “widely used by NASA and industry for designing launch and re-entry vehicles, rotorcraft, ships, and commercial aircraft, among others.”⁴⁴⁷ TRANAIR was originally developed by Boeing under contract to NASA, but the versions that Boeing developed with NASA funding are similarly publicly available.⁴⁴⁸ TRANAIR is today recognized as being “a

⁴⁴¹ Exhibit US-1202.

⁴⁴² Wacht Report (Exhibit EC-15), p. 118.

⁴⁴³ Wacht Report (Exhibit EC-15), p. 118 (emphasis added). Mr. Wacht also makes a vague reference to the “possibility that lessons learned about supersonic flow on the HSR program could be benefiting Boeing LCA”, although he recognizes that such a conclusion is not supported by the NASA technical reports from the program. In fact, the research related to supersonic flight done under HSR is not relevant to the study of the local supersonic flow over a wing during subsonic flight. Even more vaguely, Mr. Wacht comments that “the HSR program provided Boeing with the opportunity to pursue numerous advanced technology routes, and thus enabled its engineers to develop essential skills and capabilities that could be used in any future aircraft program – whether supersonic or subsonic.” It is precisely this sort of non-defined complaint that demonstrates the sort of “evidence” on which the EC rests its “but for” case with respect to the R&D measures it has challenged.

⁴⁴⁴ Wacht Report, p. 119 (Exhibit EC-15).

⁴⁴⁵ Wacht Report, p. 120 (Exhibit EC-15).

⁴⁴⁶ Bair Affidavit, para. 67 (Exhibit US-7).

⁴⁴⁷ NAS Software Applications, <http://www.nas.nasa.gov/Resources/Applications/applications.html> (Exhibit US-1232). (Incidentally, NASA explains here its extensive own use CFD codes that it contracts with Boeing and other industry entities to develop and validate.) Information for ordering the code is available at <http://aac.larc.nasa.gov/~buning/codes.html#pegsus> (Exhibit US-1233). The codes are only available in the United States.

⁴⁴⁸ Bair Affidavit, para. 67 (Exhibit US-7).

well-known full potential code in widespread use in the aircraft industry in the United States”⁴⁴⁹ and can be commercially licensed through the CALMAR corporation.⁴⁵⁰

328. Second, with respect to the research that is, at a very general level, related to the technologies on the 787, the Airbus engineers overstate the relevance of the research to the actual timing and design of the 787. For instance, \$26 million of the \$750 million disbursed to Boeing under all of the challenged NASA programs related to the Advanced Technology Composite Aircraft Structures (“ATCAS”) project. Although Mr. Wacht begins by arguing that this work gave Boeing the “knowledge and experience” that was “crucial” in developing a full composite aircraft such as the 787,⁴⁵¹ he acknowledges that the research done under the ATCAS program did not actually relate to a single-barrel fuselage, but instead to a four-quadrant panelized fuselage.⁴⁵²

329. Moreover, as acknowledged by Mr. Wacht, three sections of the panelized fuselage concept studied under ATCAS were made using a mixed honeycomb core stiffened concept,⁴⁵³ a very different technology than the solid laminate technology being used on the 787 fuselage.⁴⁵⁴ Even the one section (the ATCAS crown panel) designed using co-cured solid laminate technology differs significantly from the technology used to build the 787 fuselage. In particular, the ATCAS crown panel was built as a stand-alone section using outer mold line (“OML”) tools and inner mold line (“IML”) cauls to co-cure the skin and stringers.⁴⁵⁵ The 787

⁴⁴⁹ Ian Fejtek, CFD Group, Bombardier Aerospace, Summary of Computer Code Validation Results for a Multi-Element Airfoil, available at <http://www.cfdsc.ca/bulletins/08/0809.html> (Exhibit US 1234).

⁴⁵⁰ Calmar Research Corp., Tranair++, <http://www.calmarresearch.com/NF/STG/Tranair/Tranair.htm> (recognizing that development was partially done under NASA contracts). (Exhibit US-1235).

⁴⁵¹ Wacht Report, p. 67 (Exhibit EC-15).

⁴⁵² Wacht Report, p. 50 (Exhibit EC-15). As Mr. Wacht notes, limited studies of a single-barrel design were undertaken at the end of the ATCAS project; however, as the United States has already demonstrated, the limited study ended with a finding that “efforts to fully understand . . . 360° concepts for transport aircraft would require an extensive look at all quadrants.” NASA Contractor Report 4732: *Advanced Technology Composite Fuselage – Program Overview*, (April 1997), at 6-5. (Exhibit US-1161). A limited conceptual study finding that further study was warranted does not indicate, as Mr. Wacht suggests, a research effort that was “critical in developing the technology and experience required to assemble a one piece composite fuselage.” Wacht Report, p. 72 (Exhibit EC-15). Moreover, Boeing itself acknowledges that regardless of what the limited study might have instructed, it nevertheless began the 787 development process by considering “making each barrel of the 7E7’s fuselage out of several large composite panels that would be bolted together to form a cylinder.” O’Neal and Greising, “Boeing bets big on a plastic plane,” *Chicago Tribunes* (Jan. 12, 2005) (Exhibit US-310).

⁴⁵³ Wacht Report, pp. 53-54 (Exhibit EC-15).

⁴⁵⁴ Honeycomb core structures are created using a sandwich form comprised of several parts. In contrast, the 787 fuselage is created using filament winding to create a single, solid composite structure. See Bair Affidavit, para. 45 (Exhibit US-7).

⁴⁵⁵ NASA Contractor Report 4732: *Advanced Technology Composite Fuselage – Program Overview*, (April 1997) at 5-1. (Exhibit US-1161).

fuselage, on the other hand, is being built as a single solid piece of composite created and cured around enormous multi-section mandrels (an IML tool designed by suppliers especially for Boeing) with OML cauls.⁴⁵⁶

330. Because of the clear differences between ATCAS and 787 technologies, Mr. Wacht is left with the only similarity being the “co-cured hat stringer” used on both the ATCAS crown panel and the 787 fuselage.⁴⁵⁷ Yet even here there are significant differences in stringer formation, curing methods and load requirements between the two. As the United States will explain further in the U.S. second oral statement, ATCAS research was limited to panel sections using only constant gage stringers, while Boeing has had to invent and design methods of creating multi-gage stringers to manage the changing loads over the length of the 787’s single composite fuselage.

331. In short, while Mr. Wacht draws general connections between the work done under ATCAS and technologies on the 787, he falls well short of establishing an evidentiary basis for the “but for” case the EC must make. And for the bulk of the funding, including projects like HSR, he simply does not try.

332. The United States also notes the EC’s most recent effort to link government research with the 787 is related to the move of Jeff Stone, from production operations director for the F-22 program to Superintendent of Body Structures, demonstrates “Boeing’s practice to fall back on engineers from DoD-supported military programmes, in order to efficiently implement the 787’s innovative design choices and manufacturing techniques.”⁴⁵⁸ First, the United States recalls that the EC has challenged Boeing’s military *RDT&E* contracts, not its *production* contracts. Therefore, any use the company makes of a “production operations director” is not within the scope of the EC’s challenge. Indeed, the job posting that Jeff Stone was selected to fill on the 787 program did not call for the sort of “knowledge and experience” one would gain on the DoD *RDT&E* programs that the EC has actually challenged. To the contrary, Stone was selected because he had the following skills: Extensive knowledge of production systems; Proven leadership experience in a production environment; Proven executive leadership skills, can manage cross-functional teams effectively; Understands the 787 Program and Business model.⁴⁵⁹

333. The EC has also not rebutted the U.S. demonstration of the widespread availability and use of the results of the research that Boeing performed under contract to NASA and DoD,

⁴⁵⁶ Bair Affidavit, para. 49 (Exhibit US-7).

⁴⁵⁷ Wacht Report, p. 73 (Exhibit EC-15). Mr. Wacht also highlights the importance of the “lessons {Boeing} learned” from the structural deficiencies found during the study of bonded frames, and connects that to their use of “floating frames” on the 787. This observation demonstrates that Airbus’s experts were also able to understand the problems associated with using bonded frames that Boeing discovered during ATCAS.

⁴⁵⁸ EC RPQ1, para. 444.

⁴⁵⁹ Boeing, Job Description, Superintendent 787 FA&D – Body Structures (Exhibit US-1238).

including the thousands of reports available on the internet, more available through peer-reviewed journals and presented at conferences attended by Airbus.⁴⁶⁰ The EC has offered a statement from a UK government scientist that in the 1970s and 1980s, he could not access certain NASA technical reports relating to research done by GE and Pratt and Whitney under the Energy Efficient Engine Program⁴⁶¹ – an area of research (engine-related) and a NASA program explicitly excluded from the EC’s challenge.⁴⁶² It has now added just a single reference to a recent IWD-related report from April 2007, which NASA did not provide because it was considered an “internal project report.”⁴⁶³

334. Airbus experts now explain that while they may have access to NASA technical reports, they cannot “apply [those] results in a meaningful way” to build the A350 XWB.⁴⁶⁴ The observation does not support the EC’s “but for” allegation, because, as Boeing’s Mike Bair explained, Boeing also could not use the results of NASA research to build the 787.⁴⁶⁵ The reports (like the research they describe) are intended as foundational science to be used as a base on which to build. It is simply not credible for the EC to argue that Airbus, which has succeeded in a highly competitive industry against both McDonnell Douglas and Boeing to become the largest supplier of large civil aircraft, has all the while suffered a “decades”-long disadvantage with respect to conceptual aeronautics knowledge.

335. In fact, Airbus’s own experts have already admitted that the data generated with NASA and DoD funding is not the problem. They assert: “[HSBI]”⁴⁶⁶ and a critical reason for the A350WXB’s delayed market entry was “[HSBI]”⁴⁶⁷. As the United States has explained, Boeing cannot protect the results of research done with U.S. government funding as “proprietary.” The only data that is shielded from dissemination is data developed with its own funding.⁴⁶⁸ Thus, to

⁴⁶⁰ US SWS, paras. 62-64 and US RPQ1, para. 73.

⁴⁶¹ Statement of Ray Kingcombe (Exhibit EC-1177). Moreover, the “competitive advantage” Kingcombe discusses is a competitive advantage of aero-engine companies – specifically, with respect to the CF6 and CFM56 (used on the A320 and A340) engine models, used on (and providing the same “competitive advantage” to) Airbus’s A300 (CF6), A320 (CFM56), A330 (CF6), and A340 (CFM56) models.

⁴⁶² *E.g.*, Exhibit EC-25, pp. 1-3 (“Total Aeronautics R&D Subsidies by Agency to Boeing & McDonnell Douglas LCA Division Excluding Engines”).

⁴⁶³ EC RPQ1, para. 450, citing Exhibit EC-1305.

⁴⁶⁴ EC RPQ1, para. 454.

⁴⁶⁵ Bair Affidavit, paras. 34-35 (Exhibit US-7).

⁴⁶⁶ Statement of Patrick Gavin et al., para. 13 (Exhibit EC-1175 (HSBI))

⁴⁶⁷ Statement of Patrick Gavin et al., para. 14 (Exhibit EC-1175 (HSBI))

⁴⁶⁸ US SWS, n. 106, *citing* 48 CFR 52-227-14(a) (NASA is required to protect its contractor’s proprietary data – i.e., data that “embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components or processes developed at private expense.”) See also US SWS para. 169.

the extent Airbus believes itself at a technology disadvantage, it is the result of work that Boeing did with its own funding.

336. However, even if the EC were correct that “decades” of conducting R&D under contract to NASA gave Boeing unique technical knowledge and experience that was the “but for” cause of its ability to build the 787, then one would expect Airbus, a company supposedly without access to the results of the challenged research, would have been unable to do what Boeing did. Yet Airbus has demonstrated that it was more than up to the challenge once it committed to meet it. As discussed above, after deciding to [[HSBI]] and pursue a predominantly composite mid-sized aircraft, Airbus has successfully launched (and received 404 orders for⁴⁶⁹) an aircraft that is technologically “comparable {to} or even better” than the 787 in a comparable time frame.

88. *What is the appropriate methodology for this Panel to adopt in determining whether the effect of the subsidy is significant price suppression, significant lost sales, or displacement or impedance of imports and exports under Article 6.3, in light of the Appellate Body's statement in US – Upland Cotton⁴⁷⁰ that it is necessary to ensure that the effects of other factors on prices (in the context of a significant price suppression claim) are not improperly attributed to the challenged subsidies? When the European Communities argues that the Panel should ignore United States' claims that Airbus is suffering losses due to non-subsidy factors (paragraph 191 of the European Communities' Oral Statement) does the European Communities mean that factors such as Airbus' strategic decisions on product development and pricing, resource constraints faced by Airbus, the increase in oil prices and the depreciation of the U.S. dollar relative to the Euro are not relevant to the non-attribution analysis to be conducted by the Panel in a serious prejudice claim under Article 5(c) and Article 6.3?*

337. The EC recognizes that, as the Appellate Body found in *US – Upland Cotton*, that a non-attribution analysis is necessary. However, it attempts to change the question posed by the Panel and, rather than addressing whether particular factors are “relevant,” discusses whether they are “important.”⁴⁷¹ In fact, its subsequent discussion demonstrates that the factors are relevant, and that the EC’s primary disagreement with the United States goes to whether the effects that the EC attributes to the alleged subsidies are in fact the effects of those other relevant factors.

338. Although the EC initially concedes that examination of other factors is necessary, it does attempt to short-circuit that analysis by arguing that “whether there were other factors that caused Airbus prices to increase *or* decrease is irrelevant. What counts is that, but for the US

⁴⁶⁹ Airbus A350XWB Orders & Commitments (Nov. 2007), available at http://www.airbus.com/store/mm_repository/pdf/att00011015/media_object_file_A350XWB_orders_commitments.pdf (Exhibit US-1239).

⁴⁷⁰ *US – Upland Cotton (AB)*, para. 437.

⁴⁷¹ EC RPQ1, para. 463.

subsidies, Airbus A320 family pricing would have been higher.”⁴⁷² This is, of course, entirely wrong. As the Appellate Body found with regard to price suppression claims in *US – Upland Cotton*, a panel’s task is to assess “whether the effect of a subsidy is significant price suppression rather than it being the effect of other factors.”⁴⁷³ Moreover, “[i]f the significant price suppression found in the world market for upland cotton were caused by factors other than the challenged subsidies, then that price suppression would not be ‘the effect of’ the challenged subsidies in the sense of Article 6.3(c).”⁴⁷⁴ Thus, a complaining party has not established “but for” causation until it has established that the effects of other identified factors are not improperly attributed to the subsidies.

339. Accordingly, and to the extent that Airbus has experienced significant price suppression, significant lost sales, or displacement/impedance in the relevant markets, the Panel must assess whether these conditions have been caused by factors other than the alleged subsidies. As the Panel notes, the United States has identified several factors that explain why the conditions complained of by the EC are not the effect of the alleged subsidies.

340. **The effects of Airbus’ systematic price undercutting.** Boeing’s ability – enabled by its operating cash flow – to price its aircraft as it did absent the subsidy is a key consideration for the Panel in assessing how Airbus’ pricing and sales were affected by its strategy of undercutting Boeing on price at key Boeing accounts, particularly at 737 operators. The EC concedes that, “[a]lthough Boeing, as the incumbent supplier in most of the sales campaigns {identified by the EC}, may have had an initial perceived or actual advantage in the sales campaigns, that advantage was quickly overcome.”⁴⁷⁵ As noted in the U.S. comment to Question 96, the evidence shows that Boeing’s incumbency advantage was “quickly overcome” by Airbus’ price undercutting.⁴⁷⁶ Considering that Airbus was driving prices downward and taking market share from Boeing, the Panel must determine whether the absence of the alleged subsidies would have prevented Boeing from responding to this dangerous situation as it did – by becoming more competitive on price.

341. The EC states that it “does not dispute that Boeing may contribute its own funds – in addition to the subsidies it receives – to invest in lower pricing,”⁴⁷⁷ and states further that “Boeing’s 2004 decision to change in {sic} its pricing policy, and lower its prices, may well have been taken for commercially viable reasons.”⁴⁷⁸ The EC has failed, however, to show that

⁴⁷² EC RPQ1, para. 476.

⁴⁷³ *US – Upland Cotton (AB)*, para. 438.

⁴⁷⁴ *US – Upland Cotton (AB)*, para. 437.

⁴⁷⁵ EC RPQ1, para. 519.

⁴⁷⁶ *E.g.*, [[HSBI]]

⁴⁷⁷ EC RPQ1, para. 396.

⁴⁷⁸ EC RPQ1, para. 386.

Boeing's own funds were insufficient to enable Boeing to price its aircraft as it did. The EC's greatly exaggerated magnitude calculations do nothing to alter this conclusion, as the United States has shown.⁴⁷⁹ Apart from the EC's assertion (which it has not proven) that the alleged subsidies it characterizes as reducing marginal cost have a one-for-one effect on Boeing's prices, the EC has pointed to nothing in the *nature* of the alleged subsidies that would lead them to flow through to Boeing's prices. That Airbus' aircraft prices and sales were not higher during the 2004-2006 period is not an effect of the alleged subsidies, but of Airbus' strategic decision to use low prices to take market share and of Boeing's decision – taken and executed without regard to the alleged subsidies – to respond to its market share losses.

342. **The effect of fuel prices on Airbus A340 sales and prices.** Just as the EC concedes that Boeing's own funds account for some of Boeing's ability to lower its aircraft prices, the EC concedes that increasing fuel prices account for some, but not all, of [***]⁴⁸⁰ The EC has failed, however, to demonstrate that, in light of the significant effect that fuel prices had on A340 prices and sales, the alleged subsidies had *any* contributing effects, much less effects sufficient to cause significant suppression of A340 prices, significant A340 lost sales, or displacement or impedance in third country markets. The EC admits that "the increase in fuel prices did play a role in sales campaigns for 300-400 seat LCA."⁴⁸¹ Similarly, Airbus parent EADS itself recognized in its 2006 annual report that "the A340 suffered from its lack of fuel efficiency as a four engine aircraft."⁴⁸² Moreover, [***]⁴⁸³ while [***]⁴⁸⁴ Under these circumstances, there is no basis for attributing the effects experienced by the A340 to the alleged subsidies rather than to increased fuel prices.

343. **The effect of Airbus' decision to develop the A380.** The EC does not address the substance of the U.S. arguments or the evidence showing that Airbus' decision, in 2000, to commit massive engineering and financial resources to the A380 super jumbo rather than to an all-new mid-size aircraft is the reason why it could not offer a viable competitor to the 787 in 2004 and 2005.⁴⁸⁵ Rather, the EC falls back to its allegation that "it would have taken several additional years until 2006, at least, for {Boeing} to launch the 787 had it *not* benefited from billions in NASA and DOD R&D subsidies."⁴⁸⁶ Yet, in December 2006, Airbus was able to launch the predominantly composite A350 XWB just "months" after deciding to design such a

⁴⁷⁹ US Comment on EC Response to Panel Question 78.

⁴⁸⁰ EC RPQ1, para. 475.

⁴⁸¹ EC RPQ1, para. 481.

⁴⁸² EADS 2006 Annual Report at 36 (Exhibit US-1182).

⁴⁸³ US FWS, para. 1146.

⁴⁸⁴ EC FWS, para. 1593.

⁴⁸⁵ US FWS, paras. 924-928; US SWS, paras. 189-190 and HSBI Appendix, paras. 8-15.

⁴⁸⁶ EC RPQ1, para. 484.

plane.⁴⁸⁷ The EC fails to reconcile Airbus' marketing and launch of the A350 XWB in 2006, as the development work on the A380 was winding down, with its allegation that, absent the alleged subsidies, Boeing could not have launched the 787 until at least 2006, despite the billions of R&D dollars it spent on developing an all-new mid-size aircraft, beginning in 2001 and leading up to the 787 launch in 2004.

89. *In light of the United States' criticisms (in Exhibits US-3 and US-8) of the assumption in the Cabral Report that Boeing's expenditure on dividends and investments cannot exceed net revenue from operations plus subsidies received (constraint 1), how would the results and estimates in the Cabral Report be affected if this assumption were replaced by the assumption that Boeing has the possibility to raise funds from imperfectly functioning capital markets?*

344. The EC, in its response to this question, avoids the issue raised by the Panel. Instead, the EC focuses only on the labels Professor Cabral assigns to the variables in constraint 1 of his model in an attempt to show that the model is valid as a whole. Because Professor Cabral defines "y" in constraint 1 as "cash flow other than development subsidies" the EC argues that "Professor Cabral's model already reflects the assumption that Boeing has the possibility to raise funds from imperfectly functioning capital markets."⁴⁸⁸ Prof. Cabral's model does no such thing.

345. It is true that Prof. Cabral describes "y" as "cash flow other than development subsidies." It is also true, however, that Professor Cabral assumes, but does not prove, that Boeing's "cash flow other than development subsidies" is fixed, and inadequate to fully fund its investments, such that Boeing would need development subsidies to fill the gap. Contrary to the EC's assertion that the U.S. criticisms reflect a "misreading" of the Cabral Report, Professor Greenwald recognized that Cabral's investment constraint encompassed other cash flow sources in addition to net revenue from operations, but noted that the assumption that Boeing's other sources of funds are fixed is the fundamental problem with Cabral's investment constraint:

Cabral simply assumes when he writes his overall investment constraint – *i.e.*, that investment plus dividends must be less than subsidies plus other sources of funds – *that other sources of funds are fixed and cannot be increased at essentially constant cost by borrowings in financial markets.* For a company like Boeing, with

⁴⁸⁷ EC RPQ1, para. 404.

⁴⁸⁸ EC RPQ1, para. 491.

relatively little debt which regularly repurchases large amounts of its stock, it should be obvious that no such constraint exists.⁴⁸⁹

346. Doctors Jordan and Dorman also identified this crucial flaw in Professor Cabral’s model:

{Prof. Cabral’s} investment model assumes that Boeing is so financially constrained that it is unable to fully fund desired investments from internal cash generation and is unable to raise funds in the capital markets. He performs no analysis of Boeing data to test the validity of this assumption. By making this untested (and unfounded) assumption, rather than including all of Boeing’s sources of cash in his model, Professor Cabral overstates any impact of a development subsidy on Boeing’s investment spending.⁴⁹⁰

347. The EC underscores Prof. Cabral’s failure to examine Boeing’s internally-generated cash flow and access to global capital markets when it cites Boeing’s 2006 annual report to show that “new borrowings are an important contributor to Boeing’s ‘cash flow other than development subsidies.’”⁴⁹¹ But neither the EC nor Prof. Cabral answers the question of whether Boeing actually faces significant financing constraints, an omission made clear in the EC’s second written submission: “Setting aside the question of whether Boeing is, in fact, financially unconstrained”⁴⁹² Rather, the EC and ITR attempt to show that Boeing would be insolvent if it borrowed the amount that the EC asserts Boeing received in subsidies,⁴⁹³ an argument not reflected in the Cabral Report, but one that Prof. Cabral nonetheless seeks to graft, *post hoc*, onto his analysis.⁴⁹⁴ This argument does nothing to save the Cabral Report, or, indeed, the EC’s entire adverse effects case, as the United States has shown.⁴⁹⁵

⁴⁸⁹ Comments by Professor Greenwald, p. 2 (Exhibit US-8) (emphasis added). Professor Greenwald also noted that the existence of what the Panel describes as “imperfectly functioning capital markets” does not mitigate Professor Cabral’s failure to assess whether Boeing faces significant capital constraints: “Markets may be imperfect and firms may make less than optimal decisions, but as long as firms have largely unconstrained access to capital, non-specific subsidies which amount to fixed transfers – the kind of subsidy at issue in the Cabral Report – will not affect firm investment decisions.” *Id.* at pp. 1-2.

⁴⁹⁰ Drs. Jordan and Dorman, Reply to Professor Cabral, p. 2 (Exhibit US-3).

⁴⁹¹ EC RPQ1, para. 494.

⁴⁹² EC SWS, para. 760.

⁴⁹³ EC SWS, paras. 712-732, 760.

⁴⁹⁴ Cabral Rebuttal Report, paras. 4-9 (Exhibit EC-1182).

⁴⁹⁵ U.S. Comment to EC Response to Panel Question 78, paras. 44-49; US RPQ1, paras. 217-218.

94. In *US – Upland Cotton*, the Panel noted that for a basic and widely traded commodity such as upland cotton, "a relatively small decrease or suppression of prices could be significant because, for example, profit margins may ordinarily be narrow, product homogeneity means that sales are price sensitive or because the sheer size of the market in terms of the amount of revenue involved in large volumes trade on the markets experiencing the price suppression."⁴⁹⁶ Do the parties consider that, for a product such as LCA, a relatively small decrease or suppression of prices could be "significant" for purposes of determining significant price suppression under Article 6.3(a)? Please explain why this is or is not so, and indicate the factors that the Panel should consider in determining whether the effect of an alleged subsidy to Boeing LCA is "significant" price suppression within Article 6.3(c).

348. In its response to this question, the EC argues that "even relatively small levels of price suppression" can be significant.⁴⁹⁷ The EC's response is notable in two respects.

349. First, the EC states that, according to the Panel Report in *U.S. – Upland Cotton*, "the price-sensitive nature of sales in LCA markets" is "a factor that could make relatively small amounts of suppressed prices significant."⁴⁹⁸ However, the portion of the *U.S. – Upland Cotton* panel's report cited by the EC makes clear that it was the particular circumstances of the market for upland cotton, especially the homogeneity of the product, that led that panel to its conclusion that "a relatively small decrease or suppression of prices could be significant":

We cannot believe that what may be significant in a market for upland cotton would necessarily also be applicable or relevant to a market for a very different product. We consider that, for a *basic and widely traded commodity*, such as upland cotton, a relatively small decrease or suppression of prices could be significant because, for example, profit margins may ordinarily be narrow, *product homogeneity means that sales are price sensitive* or because of the sheer size of the market in terms of the amount of revenue involved in large volumes traded on the markets experiencing the price suppression.⁴⁹⁹

350. The EC has stated clearly that "{a}ircraft are not commodity products."⁵⁰⁰ leading one to wonder how the cited portion of the *U.S. – Upland Cotton* panel report could support its position.

⁴⁹⁶ *US – Upland Cotton (Panel)*, para. 7.1330.

⁴⁹⁷ EC RPQ1, para. 513.

⁴⁹⁸ EC RPQ1, para. 511 (citing *US – Upland Cotton (Panel)*, para. 7.1330).

⁴⁹⁹ *US – Upland Cotton (Panel)*, para. 7.1330 (emphasis added).

⁵⁰⁰ EC OS1(Conf.), para. 57.

The United States agrees that large civil aircraft are not commodity products and explained in its response to this question why this factor indicates that a relatively small decrease in global price for Airbus large civil aircraft in a “particular product” market would not be significant.⁵⁰¹

351. *Second*, the EC also relies on the *US – Upland Cotton* panel report as the basis for its attempt to show that the effect of a one percent level of price suppression would be significant because Airbus’ profits would fall.⁵⁰² Again, the EC misreads that report. As made clear in the passage from *Upland Cotton* quoted above, that panel found the *narrowness of the profit margins* in the upland cotton industry to be a significant factor, not the basic fact that price suppression may decrease profits.⁵⁰³ This is an important distinction because a given decrease in profits caused by price suppression is far more likely to be significant in an industry with narrow margins than in an industry with wide margins. The EC’s response to Question 94 does not provide any evidence to show that profit margins in the large civil aircraft industry “may ordinarily be narrow.”⁵⁰⁴

352. *Third*, the EC’s one percent price reduction scenario is an across-the board reduction, which means it would include what the EC considers Airbus’ “non-competitive” sales. Under the EC’s theory, the effects of the alleged subsidies would not affect non-competitive sales. The EC cannot claim that any revenue lost on such sales is “the effect” of the alleged subsidies. Therefore, if the EC is to be held to its theory, in the event of a one percent price suppression, less than one percent of any price reduction would be properly attributable to alleged subsidies.

95. *Can both parties please explain how their respective contentions regarding the significance of switching costs on fleet purchase decisions relate to the assumption in EC-Exhibit 4 (at paragraph 65) that there is “only a 25% probability of switching across sellers (for a given aircraft model and generation)”.*

353. In response to this question, the EC asserts that Prof. Cabral’s estimate of a 25 percent likelihood that a customer switches across sellers is a “reasonable approximation.”⁵⁰⁵ However, it provides *absolutely no* evidence in support of this proposition. It merely observes that a 50

⁵⁰¹ US RPQ1, para. 241 (“Finally, determining significance requires a consideration of any price suppression found to exist in light of the conditions of competition in the marketplace. In this regard, it is important to note that the large civil aircraft market is not a commodity market. Products are not homogeneous. Customers are sophisticated, and typically evaluate each purchase using complicated formulas in which price, while an important factor, is one among many. Product features (such as fuel efficiency or cockpit commonality) or incumbent supplier advantages may prove more important than prices for some customers. For these reasons, a relatively small decrease in global prices would not constitute significant price suppression in this industry.”).

⁵⁰² EC RPQ1, para. 506.

⁵⁰³ *US – Upland Cotton (Panel)*, para. 7.1330.

⁵⁰⁴ *US – Upland Cotton (Panel)*, para. 7.1330.

⁵⁰⁵ EC RPQ1, paras. 514 and 518.

percent probability would mean that switching costs play no role, and that a 0 percent would mean that switching costs were so high that customers never switched. The EC then notes reasons why switching costs would sometimes be a factor, and that new suppliers can overcome them by offering price discounts. Finally, after this discussion, the EC proclaims again, without any explanation, that a 25 percent probability (half way between zero and 50) is a “reasonable approximation.”⁵⁰⁶

354. In this discussion, the evidence has no relationship to the conclusion drawn – it is merely a backdrop to pure guesswork. This imprecision has meaningful effects, as the 25 percent probability is one of two factors that Prof. Cabral uses to estimate the value of the switching discount, which he then factors into his model of price effects.⁵⁰⁷ It is noteworthy that he arrives at this value without considering at all the one factor that all parties agree drives any switching cost discount – a customer’s actual cost of switching, in the form of expenses for crew training, flight simulators, training for maintenance workers and ground handling personnel, ground equipment, and provisioning of new maintenance spare parts.⁵⁰⁸

355. The cost of performing these tasks will differ from customer to customer.⁵⁰⁹ The probability of switching will depend on the size of these costs, and the willingness of the non-incumbent supplier to lower its price to eliminate switching costs as a factor. Thus, while the probability of switching is certainly *somewhere* between 50 and zero on the EC’s scale, the EC’s decision to split the difference at 25 percent is no more consistent with the evidence than any other guess.

96. *How, if at all, should the Panel's assessment of whether specific sales campaigns provide evidence of price suppression, lost sales or displacement or impedance of imports and exports, be affected by the consideration that Boeing was the incumbent supplier?*

356. The EC’s response to this question shows just how important Boeing’s incumbency is to the Panel’s assessment of the specific sales campaigns at issue and, more generally, of the EC’s entire adverse effects case. The EC admits that Boeing’s incumbency in a given campaign meant that its position was defensive; that is, Boeing was reacting to Airbus’ attempts to gain “a foothold in its customers” rather than leading prices downward: “In fact, the only relevance of

⁵⁰⁶ Prof. Cabral uses the 25 percent probability, too, although he ascribes the rationale to the “observation of demand patterns for wide-body aircraft.” Cabral Report, p. 24 (Exhibit EC-4). He does not provide evidence or citation for this figure, and the EC has not provided evidence, either.

⁵⁰⁷ Cabral Report, pp. 23-24 (Exhibit EC-4).

⁵⁰⁸ Statement of Rod P. Muddle, para. 97 (Exhibit EC-10).

⁵⁰⁹ Statement of Clay Richmond, para. 5 (Exhibit US-275) (HSBI).

the incumbency factor is that Boeing had the incentive to use its subsidy benefits to obstruct the ‘Airbus threat’ from getting a foothold in its customers.”⁵¹⁰

357. Indeed, the EC acknowledges that Airbus was in the position of having to “overcome” Boeing’s incumbency advantage: “Although Boeing, as the incumbent supplier in most of the sales campaigns, may have had an initial perceived or actual advantage in the sales campaigns, that advantage was quickly overcome.”⁵¹¹

358. How did Airbus “quickly overcome” Boeing’s incumbency advantage? It was by undercutting Boeing on price.⁵¹² (*A copy of this paragraph appears in the HSBI Appendix to this submission.*)

97. *Please explain how the counterfactual illustrations of the pricing of the various Airbus LCA (Figures 31, 32, 47, 48, 62 and 63 of the European Communities' First Written Submission) demonstrate the prices of Airbus LCA "but for" the alleged subsidies to Boeing. Is the European Communities asserting that, in the absence of the alleged subsidies to Boeing, Airbus' LCA prices would have increased by the magnitude of alleged subsidy to the corresponding Boeing LCA (and therefore that Airbus' LCA prices have effectively been suppressed by an amount equivalent to the magnitude of alleged subsidization to the corresponding Boeing LCA)? If not, please explain what the European Communities is seeking to demonstrate in the above-mentioned graphs.*

359. The United States notes at the outset the circularity of the EC’s attempt to show, in the figures cited by the Panel, that Airbus A330, A320, and A340 prices would be higher absent the alleged subsidies by assuming that the those prices would be higher by the level of alleged subsidization.⁵¹³ The EC’s response to Question 97 provides additional reasons why those figures do not demonstrate the prices of Airbus large civil aircraft “but for” the alleged subsidies.

360. *First*, there is the issue of large civil aircraft demand: just because the EC calculates a certain per-aircraft subsidy magnitude figure does not mean that customers would be willing to pay that additional amount. Elsewhere, the EC has observed, correctly, that pricing “results from the interaction of supply and demand.”⁵¹⁴ In its response to Question 97, the EC admits that shifts in demand have caused [***]:

⁵¹⁰ EC RPQ1, para. 522.

⁵¹¹ EC RPQ1, para. 519.

⁵¹² *E.g.*, [[HSBI]].

⁵¹³ The United States discussed this point in its answer to Panel Question 94. US RPQ1, para. 240.

⁵¹⁴ EC SWS, para. 655.

{i}n 2002, Airbus A320 prices [***], in part, because of the effects of the events of 9/11 and the global economic recession. . . . *But for* the US subsidies, Airbus A320 prices would [***].⁵¹⁵

A340 prices [***], partly because of the increase in fuel prices.⁵¹⁶

361. Having conceded that Airbus' prices were affected by shifts in customer demand unrelated to Boeing's pricing or the alleged subsidies, the EC does not show that, *but for* the alleged subsidies, customers would have accepted Airbus price increases equal to the alleged subsidy magnitude. Rather, the EC simply *assumes* that they would.⁵¹⁷

362. The EC's point that it is not claiming price *depression* is irrelevant.⁵¹⁸ Regardless of whether the it claims price suppression or depression, the EC has failed to show that, in light of shifts in demand during the reference period, Airbus would be able to obtain higher prices absent the alleged subsidies.

363. The EC has also conceded that Boeing's internal funds [***] "The European Communities does not dispute that Boeing may contribute its own funds – in addition to the subsidies it receives – to invest in lower pricing."⁵¹⁹ In light of this admission, and assuming *arguendo* that the analysis represented in the EC figures cited by the Panel is otherwise valid, the appropriate measure of Airbus' large civil aircraft prices absent the subsidies is not the alleged subsidy magnitude, but the amount of the alleged subsidies that filled the gap in Boeing's available funds. As there was no such gap, Boeing's pricing would not have differed in the absence of the alleged subsidies.

98. *What are the asymptotic characteristics of the Cabral model with respect to switching costs, i.e. how is a dollar of development subsidies allocated if • in the equation presented in paragraph 64 of Exhibit EC-4 tends to zero?*

⁵¹⁵ EC RPQ1, para. 535.

⁵¹⁶ EC RPQ1, para. 536.

⁵¹⁷ EC RPQ1, para. 526 ("{i}n Figures 31, 47, and 62 of the EC First Written Submission, the European Communities presents an alternative counterfactual analysis of Airbus pricing that would exist *but for* the US subsidies, assuming that Boeing uses *all* of its subsidy benefits to evenly reduce prices for all its aircraft. The analysis assumes that the price effect on Boeing's aircraft translates one-for-one into a price effect on Airbus' aircraft."); *ibid.*, para. 527 ("{i}n Figures 32, 48 and 63 of the EC First Written Submission, the European Communities presents another counterfactual analysis of Airbus pricing that would exist *but for* the US subsidies, assuming that Boeing uses its subsidy benefits in competitive sales campaigns only. This analysis more realistically assumes that Boeing targets its subsidy benefits to certain sales campaigns.") (underlining added).

⁵¹⁸ EC RPQ1, para. 536.

⁵¹⁹ EC RPQ1, para. 396.

364. The United States notes at the outset that the scenario posited by the Panel’s question, namely, that current “aggressive pricing” discounts related to future switching costs would be zero, is entirely realistic. The existence of customer switching costs does not provide Boeing with an incentive to make the “switching cost” discounts described by the EC and Professor Cabral, as the United States has shown.⁵²⁰ This is not to say that Professor Cabral’s model could be salvaged if the switching cost discount were set to zero. Indeed, the results of his model under this scenario illustrates the disconnect between his model and reality.

365. As the EC shows in its response to this question, if the switching cost discount level were zero, “learning curve” price discounts on “new” Boeing aircraft models – that is, those models that have yet to pass the 100-unit production threshold⁵²¹ – would increase by 92 percent, from 12 cents to 23 cents per subsidy dollar.⁵²² This would be the case regardless of whether Boeing had any attractive investments related to the learning curve incentive conceived (incorrectly⁵²³) by Professor Cabral. That is, the Cabral model would predict that Boeing would dramatically increase discounts on “new” aircraft regardless of whether it had any “new” aircraft models as defined by Professor Cabral, or whether existing orders for a “new” Boeing model such as the 787 were much greater than necessary to fill the first 100 production slots.

366. The reason the Cabral model would produce such unrealistic results is that it is based on the unrealistic assumption that Boeing’s investment behavior would not change as conditions changed. Doctors Jordan and Dorman found this to be a critical flaw in Professor Cabral’s work, and not because the model fails to live up to an impossible standard of replicating the real world in an economic model, but because the model fails to live up to the standards set in the relevant economic literature:

Moreover, unlike the models in the literature, the Cabral investment model produces the completely unrealistic result that the same proportion (85%) of subsidy cash goes into investment every year (from 1989 through 2006) regardless of general economic conditions (the business cycle) and other factors affecting the sources and uses of funds, such as bond and commercial paper ratings, credit spreads, stock prices, investment opportunities (including acquisitions), and the status of the pension fund. Models in the literature are multi-period and dynamic. Firms continually respond to current and expected general

⁵²⁰ US RPQ1, paras. 242-244.

⁵²¹ Cabral Report, para. 60 (Exhibit EC-4) (defining “new” models applicable to learning curve discounts as those models in “the production stage of the first 100 units”).

⁵²² EC RPQ1, para. 540.

⁵²³ US FWS, para. 848.

economic conditions and firm-specific conditions by adjusting sources and uses of cash in order to maximize equity value. The Cabral investment model is static – the same decision about the use of subsidy cash is made in each year no matter what conditions the firm faces.⁵²⁴

367. Accordingly, the EC's response to this question provides yet another reason for the Panel to disregard the Cabral Report.

103. *At paragraph 1148 of the European Communities' First Written Submission, the European Communities argues that, having established the existence of serious prejudice from the alleged actionable subsidies, demonstrating the existence of threat of serious prejudice from the effects of the same subsidies is a relatively straight-forward exercise. Is the Panel correct in understanding the European Communities' claims of threat of serious prejudice based on future LCA orders (demonstrated by the same types of evidence that support the European Communities' present serious prejudice claims) to be dependent on the European Communities demonstrating present serious prejudice? In other words, if the Panel were to find that the evidence presented by the European Communities did not support its present serious prejudice claims, would it follow that such evidence equally does not support its threat of serious prejudice claims based on future LCA orders?*

368. The United States refers the Panel to its answer to Panel Question 105, which describes the U.S. views as to the proper analysis for threat of serious prejudice. The United States does not disagree with the proposition that evidence relevant to an analysis of serious prejudice may also be relevant to an analysis of threat of serious prejudice. However, the legal standard is different – there must be a clearly foreseen change in circumstances that will lead to the imminent occurrence of one of the forms of serious prejudice identified in Article 6.3.⁵²⁵ The EC's analysis fails because it has alleged only that the situation will continue as is. The United States showed in its first written submission that, in fact, the evidence indicates that the situation for Airbus sales is likely to *improve*.⁵²⁶ The current situation as laid out by the EC does not indicate a worsening or some vulnerability that is likely to ripen into serious prejudice. Thus, if the Panel does not find the existence of serious prejudice, the EC has provided no support for the proposition that the continuation of this situation will result in the imminent occurrence of serious prejudice.

104. *The Panel notes that the European Communities' makes a second set of threat of serious prejudice claims (based on future LCA deliveries) in the alternative and conditional on*

⁵²⁴ Drs. Jordan and Dorman, Reply to Professor Cabral, p. 5 (Exhibit US-3).

⁵²⁵ US FWS, para. 912.

⁵²⁶ US FWS, paras. 1011, 1100, and 1180.

the Panel disagreeing with the European Communities' focus on orders (as opposed to deliveries) for purposes of its present serious prejudice claims (paragraphs 1446, 1541 and 1631 of the European Communities' First Written Submission). Please explain whether (and the basis on which) the European Communities would make its alternative claims of threat of serious prejudice if the Panel were to assess the serious prejudice claims on the basis of orders of LCA, but to a more limited extent than is suggested by the European Communities (e.g. if the Panel were to agree with the United States that claims of displacement or impendance of imports or exports in Article 6.3(a) and 6.3(b) should not be assessed on the basis of orders of LCA)?

369. In its response to this question, the EC lays out its alternative analysis in the event the Panel concludes that data related to deliveries is necessary for an evaluation of whether the alleged subsidies have displaced or impeded imports into or exports to the United States or a third country market. This analysis posits that orders during the 2004-2006 period will lead to deliveries that represent a threat of displacement or impendance.

370. To base a claim of threat of displacement or impendance on orders during the 2004-2006 period, the EC would need to establish that those orders were likely to result in deliveries that would lead to imminent displacement or impendance. It has not done this. It has merely stated that these orders for Boeing large civil aircraft will “translate into future displaced and impeded delivered imports and exports”⁵²⁷ or cause a threat of displacement and impendance of exports.”⁵²⁸ This indicates nothing about *when* these imports or exports will occur, or about why such imports or exports are imminent.

371. The centrality of the imminence of the threat also points out another flaw in the EC’s reasoning. In its first written submission, the United States pointed out that orders *do not equate with deliveries* because they could be cancelled or deferred.⁵²⁹ The EC dismisses these concerns on the ground that, by combining the two possibilities, “the United States implicitly concedes that cancellations themselves are not a ‘frequent’ event in the LCA industry.”⁵³⁰ The United States does not see how the mere linking of two rationales by the word “and” says anything about whether one or both of them are significant by themselves. In any event, the possibility of cancellations is clearly relevant to the analysis of threat of serious prejudice. The possibility of deferrals is also relevant because a deferral could result in a delivery changing from “imminent” to “not imminent.”

⁵²⁷ EC FWS, paras. 1467 and 1651.

⁵²⁸ EC FWS, para. 1562.

⁵²⁹ US FWS, paras. 1003-1008, 1091-1097, 1165-1171; US OS1, para. 107.

⁵³⁰ EC RPQ1, para. 548.