UNITED STATES – LAWS, REGULATIONS AND METHODOLOGY FOR CALCULATING DUMPING MARGINS ("ZEROING")

RECOURSE TO ARTICLE 22.6 OF THE DSU BY THE UNITED STATES

(DS294)

Response of the United States to Further Additional Questions from the Arbitrator

UNITED STATES - LAWS, REGULATIONS AND METHODOLOGY FOR CALCULATING DUMPING MARGINS ("ZEROING") (DS294)

Response to Further Additional Questions from the Arbitrator to the Parties

Question to both parties:

104. In its written submission, the U.S. argues that in order to arrive at a single elasticity for the formula used to calculate lost trade (EU methodology 2), the EU selected a weighting scheme of 30 percent for the domestic to import substitution elasticity and 70 percent for the import to import substitution elasticity. But it contends that the EU has provided no support for this particular weighting scheme other than to say substitution is more likely to occur between import sources than switching from domestic. In the oral hearing, the EU acknowledged the fact that its selected weighting scheme was not based on any economic model or existing empirical evidence, but simply reflected what the EU thought was reasonable. They added that perhaps the weighting could be 50/50 instead of 30/70.

To reiterate, the EU's formula for calculating lost trade is:

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= 0.3 * domestic-import elasticity * duty * trade value + 0.7 * import-import elasticity * duty * trade value
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= duty * trade value (0.3 * domestic-import elasticity + 0.7 * import-import elasticity)

Given the above, the Arbitrator would like to refer the parties to a theoretical economic model by Francois and Reinert (1997), referred to in U.S. Exhibit 28, which shows that:

Home country elasticity of demand for imports from country 'i' with respect to the price of the good produced in country 'i' = market share of country 'i' in total imports of home country * aggregate import price elasticity of demand in home country + (1 - market share of country 'i' in total imports of home country) * elasticity of substitution between different import sources.

The above formula is almost identical to the formula used by the EU to arrive at a single elasticity. Given this, do the parties agree that use of market shares would be a less arbitrary way of selecting the weighting scheme used?

1. The United States agrees that market shares would be less arbitrary than the EU's ad-hoc approach, provided market shares are used appropriately in a framework such as Francois and Reinert. As discussed below, the Francois and Reinert framework requires specific information

to transform substitution elasticities into import demand elasticities. Unfortunately, not all the required information is available to properly replicate the Francois and Reinert framework for all the products in this dispute. Moreover, applying market shares inappropriately will not correct the flaws in the EU's use of the GTAP elasticities in its analysis. Therefore, the World Bank elasticities are the best alternative available.

- 2. The Arbitrator's consideration of the Francois and Reinert framework is appropriate because such framework clearly demonstrates that substitution elasticities must be suitably transformed before they can be used to determine import demand elasticities. The Francois and Reinert framework provides a method to generate an import demand elasticity if six pieces of information are available: (1) the U.S. domestic market share, (2) U.S. market share of those EU member States with producers subject to the antidumping orders in question, (3) rest-of-world share of the U.S. market, (4) the U.S. aggregate elasticity of demand, (5) the domestic-import elasticity of substitution. The EU approach in contrast, only includes two pieces of the required information: the domestic-import elasticity of substitution and the import-import elasticity of substitution.
- 3. There is a rather large difference between the ad-hoc EU approach and the Francois and Reinert framework. It is worthwhile to write out the Francois and Reinert formula for a simple case to see the difference. In this simple example, assume there are three regions: the United States (denoted with the subscript 1), the EU member States with producers subject to the antidumping orders in question (denoted with the subscript 2) and the rest of the world (denoted with the subscript 3). In this case, following Francois and Reinert equation 5.44 on page 138, N₂₂ is the home country (the United States) elasticity of demand for imports from the EU member State(s) under the antidumping order with respect to the price of the goods produced in the EU member State(s). The formula for this elasticity is given by:

$$N_{22} = \theta_2 \times NA - \theta_1 \times \sigma_{12} - \theta_3 \times \sigma_{13}$$

where:

 N_{22} is the home country elasticity of demand for imports from country 2

 θ_1 is the U.S. market share

 θ_2 is the EU member State(s) with product under the dumping order

 θ_3 is the rest of world market share

NA is the U.S. aggregate demand elasticity

 σ_{12} is the domestic-import elasticity of substitution

 σ_{13} is the import-import elasticity of substitution

4. As the Arbitrator has recognized, market shares are an integral part of this equation. It is important that these shares be applied to the correct terms, however. For example, the US market share must be multiplied by the domestic-import elasticity of substitution.

5. In the simple example, assume that the United States, the EU member State(s) and the rest of the world each have U.S. market shares equal to one-third (so $\theta_1 = \theta_2 = \theta_3 = 1/3$). Also assume that the aggregate demand elasticity is equal to one (so NA = -1). Choosing sample elasticities of substitution from the EU submission, let the domestic-import elasticity be 4.05, and the import-import elasticity of substitution be twice that value (so $\sigma_{12} = 4.05$ and $\sigma_{13} = 8.1$). In this case, applying the EU ad-hoc method, one gets:

$$-0.3 \times 4.05 - 0.7 \times 8.1 = -6.9$$

6. The import demand elasticity given by the Francois and Reinert formula is -4.4:

$$1/3 \times (-1) - 1/3 \times 4.05 - 1/3 \times 8.1 = -4.4$$

- 7. The values -6.9 and -4.4 are substantially different, and will result in substantially different estimates of lost trade. It is clear from the Francois and Reinert formula that the calculation of the import demand elasticity can vary dramatically when the market shares change, which demonstrates the importance of correctly accounting for these shares.
- 8. All the data necessary to convert the GTAP substitution elasticities into an import demand elasticity by use of the Francois and Reinert formula are not available. The equation requires market shares of U.S. consumption of the various products by the different sources. These shares are not generally available for the specific products in this proceeding. Additionally, the elasticity of aggregate demand is also required to properly convert the substitution elasticities.
- 9. As the United States has explained in its written submission and answers to Arbitrator questions, the conceptually correct elasticity to use in the proposed lost trade equations by the United States and the EU is the import demand elasticity. Since the data necessary are not available to convert the GTAP elasticities into an import demand elasticity by the Francois and Reinert framework, the import demand elasticities estimated by the World Bank are the best alternative for the Arbitrator as the elasticity input into the lost trade equation. The World Bank import demand elasticities were specifically estimated for the United States. Moreover, the degree of aggregation provides for a much better estimate for these products than the highly aggregated GTAP substitution elasticities.

¹ The aggregate demand elasticity measures the price elasticity of demand for the composite of all goods consumed in the United States, both imported and domestic.

To the United States:

- 108. The Customs and Border protection (CBP) value of trade data for a product under consideration may consist of multiple HTS lines. For instance, in US Exhibit 13, it can be seen that case 18 stainless steel plate coils from Belgium consists of three 6-digit HTS lines.
 - (a) Please provide (CBP) value of trade data for each 10-digit HTS line within an order, individually. Please provide this data for 2007, 2008 and 2009.
 - (b) Please also provide data on the weighted average duty rate (both with and without AORs) for each 10-digit HTS line within each case, individually.
- 10. The requested CBP trade value data and weighted-average duty rates are attached as Exhibit US-61. There are no entries for the relevant years in Case 7. A copy of the data used to derive the data contained in Exhibit US-61 is attached at Exhibit US-62.

To both parties:

- 109. Please provide the data requested above as an excel file, in the format of a template which is attached.
- 11. An excel file containing the requested data in the requested format is attached as Exhibit US-61.
- 110. In addition, the Arbitrator requests the parties to incorporate into the same excel file, the following data that has already been provided by them in different exhibits:
 - (a) European Union Please incorporate into the excel file the simple average duty rate at case level.
 - (b) United States Please incorporate into the excel file the weighted average duty rate at case level (with and without AORs).
- 12. Weighted-average duty rates (with and without AORs) have been incorporated into the excel file at Exhibit US-61. The Arbitrator should note that the weighted-average duty rates (without AORs) provided in Exhibit US-61 differ from the rates provided in Exhibit US-48 because the rates in Exhibit US-61 do not exclude adverse facts available rates.

TABLE OF EXHIBITS

US-61	Excel File Containing Data Requested by the Arbitrator
US-62	CBP Trade Data