Biaxial Integral Geogrid Products from China

Investigation Nos. 701-TA-554 and 731-TA-1309 (Review)

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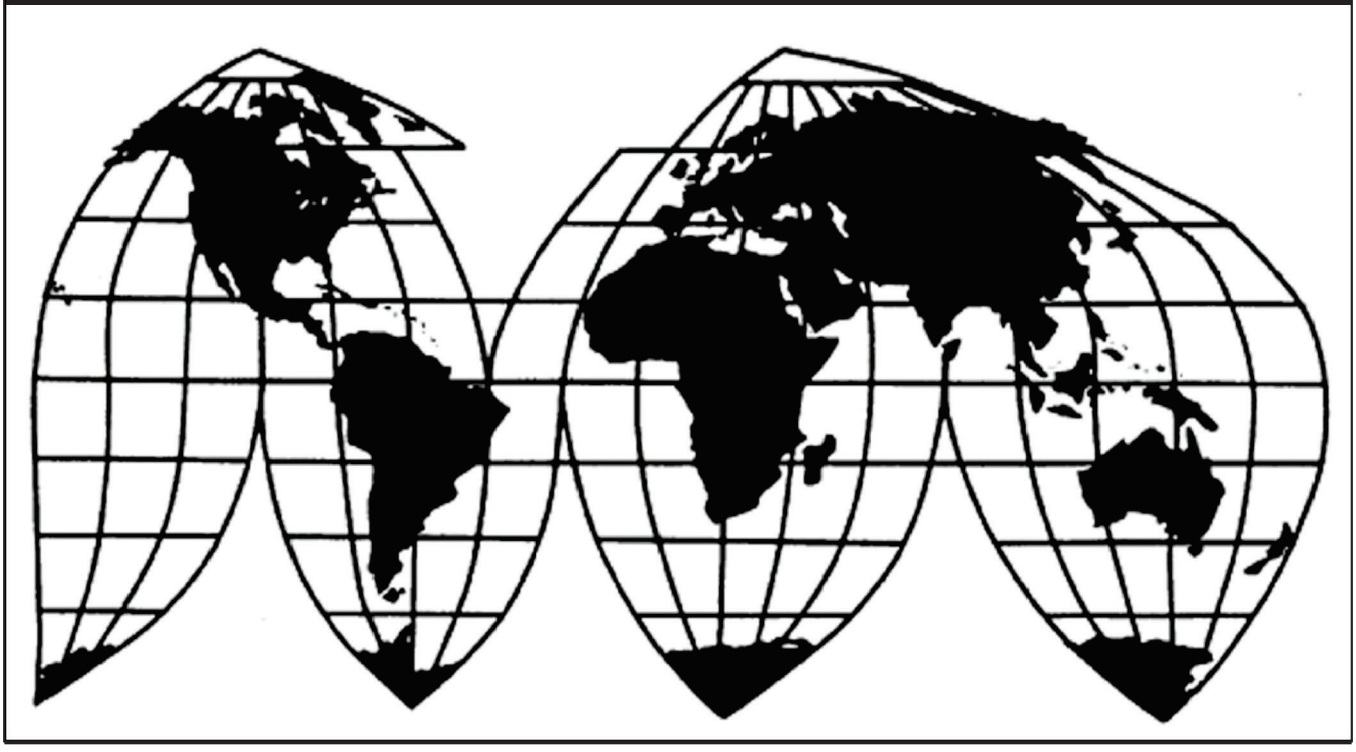
U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-554 and 731-TA-1309 (Review)

Biaxial Integral Geogrid Products from China

DETERMINATIONS

On the basis of the record[1] developed in the subject five-year reviews, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the countervailing and antidumping duty orders on biaxial integral geogrid products from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted these reviews on February 1, 2022 (87 FR 5508) and determined on May 9, 2022, that it would conduct expedited reviews (87 FR 53489, August 31, 2022).

[1] The record is defined in § 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping and countervailing duty orders on biaxial integral geogrid products ("biaxial geogrids") from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigations: The Commission instituted the original investigations in January 2016 in response to petitions filed by Tensar Corporation ("Tensar"), a domestic producer of biaxial geogrids.[1] In February 2017, the Commission determined that an industry in the United States was materially injured by reason of imports of certain biaxial integral geogrids from China that were being sold at less than fair value and subsidized by the government of China.[2] The U.S. Department of Commerce ("Commerce") issued antidumping and countervailing duty orders on imports of certain biaxial integral geogrids from China on March 3, 2017.[3]

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[1] *Certain Biaxial Integral Geogrid Products From China, Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*, 81 Fed. Reg. 3,157 (Jan. 20, 2016).

[2] *Certain Biaxial Integral Geogrid Products from China*, Inv. Nos. 701-TA-554 and 731-TA-1309 (Final), USITC Pub. 4670 (March 2017) ("*Original Determinations*").

[3] *Certain Biaxial Integral Geogrid Products From the People's Republic of China: Antidumping Duty Order*, 82 Fed. Reg. 12,440 (March 3, 2017); *Certain Biaxial Integral Geogrid Products From the People's Republic of China: Countervailing Duty Order*, 82 Fed. Reg. 12,437 (March 3, 2017).

The Current Reviews: The Commission instituted these five-year reviews on February 1, 2022.[4] The Commission received a single response to the notice of institution from Tensar.[5] Tensar also submitted comments on adequacy and final comments supporting affirmative determinations.[6] No respondent interested party filed a response to the notice of institution or otherwise participated in these reviews. On May 9, 2022, the Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate.[7] The Commission did not find any other circumstances that would warrant conducting full reviews. Accordingly, the Commission determined that it would conduct expedited reviews.[8]

U.S. industry data are based on information supplied by Tensar in its response to the notice of institution, and account for an estimated *** percent of U.S. sales revenue for domestic production of the domestic like product in the United States in 2021.[9] U.S. import data and related information are based on information supplied by Tensar in its response to the

[4] *Biaxial Integral Geogrid Products From China: Institution of Five-Year Reviews,* 87 Fed. Reg. 5,508 (Feb. 1, 2022).

[5] Tensar's Substantive Response to the Notice of Institution, March 3, 2022 ("Substantive Response").

[6] Tensar's Comments on Adequacy, Apr. 18, 2022; Tensar's Final Comments, Sept. 1, 2022 ("Final Comments").

[7] *Biaxial Integral Geogrid Products From China: Scheduling of Expedited Five-Year Reviews,* 87 Fed. Reg. 53,489 (Aug. 31, 2022).

[8] *Biaxial Integral Geogrid Products From China: Scheduling of Expedited Five-Year Reviews*, 87 Fed. Reg. 53,489 (Aug. 31, 2022).

[9] Confidential Report, Memorandum INV-UU-040, Apr. 27, 2022 ("CR") at Table I-2; *Biaxial Integral Geogrid Products From China*, Inv. Nos. 701-TA-554 and 731-TA-1309 (Review), USITC Pub. 5369 (Sept. 2022) at Table I-2; Tensar's Substantive Response at 22-23 and Exh. 2.

notice of institution and information from the original investigations.[10] Foreign industry data and related information are based on information from the original investigations, information supplied by Tensar in these reviews, and publicly available information gathered by the Commission. The Commission received responses to its adequacy phase questionnaire from four U.S. purchasers of biaxial geogrids: ***.[11]

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."[12] The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."[13] The Commission's practice in five-year reviews is to examine the domestic like product definition from the original

[10] Tensar submitted subject import data from ***. Tensar's Substantive Response at 12 n.35 and Exh. 5. Official import statistics are not reliable for amounts of or trends in subject imports because the relevant HTS subheadings contain substantial quantities of out-of-scope merchandise. CR/PR at I-13 n.34.

[11] *See* CR/PR at Appendix D.

[12] 19 U.S.C. § 1677(4)(A).

[13] 19 U.S.C. § 1677(10); *see*, *e.g., Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Dep't. of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); *Torrington Co. v. United States*, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991); *see also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

investigation and consider whether the record indicates any reason to revisit the prior findings.[14]

Commerce has defined the imported merchandise within the scope of the orders under review as follows:

> The products covered by the scope are certain biaxial integral geogrid products. Biaxial integral geogrid products are a polymer grid or mesh material (whether or not finished, slit, cut-to-length, attached to woven or non-woven fabric or sheet material, or packaged) in which four-sided openings in the form of squares, rectangles, rhomboids, diamonds, or other four-sided figures predominate. The products covered have integral strands that have been stretched to induce molecular orientation into the material (as evidenced by the strands being thinner in width toward the middle between the junctions than at the junctions themselves) constituting the sides of the openings and integral junctions where the strands intersect. The scope includes products in which four-sided figures predominate whether or not they also contain additional strands intersecting the four-sided figures and whether or not the inside corners of the four-sided figures are rounded off or not sharp angles. As used herein, the term ''integral'' refers to strands and junctions that are homogenous with each other. The products covered have a tensile strength of greater than 5 kilonewtons per meter (kN/m) according to American Society for Testing and Materials (ASTM) Standard Test Method D6637/D6637M in any direction and average overall flexural stiffness of more than 100,000 milligram-centimeter according to the ASTM D7748/D7748M Standard Test Method for Flexural Rigidity of Geogrids, Geotextiles and Related Products, or other equivalent test method standards.
>
> Subject merchandise includes material matching the above description that has been finished, packaged, or otherwise further processed in a third country, including by trimming, slitting, coating, cutting, punching holes, stretching, attaching to woven or nonwoven fabric or sheet material, or any other finishing,

[14] *See*, *e.g.*, *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); *Crawfish Tail Meat from China*, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

> packaging, or other further processing that would not otherwise remove the merchandise from the scope of the Order if performed in the country of manufacture of the biaxial integral geogrid.
>
> The products subject to the scope are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under the following subheading: 3926.90.9995. Subject merchandise may also enter under subheadings 3920.20.0050 and 3925.90.0000. The HTSUS subheadings set forth above are provided for convenience and U.S. Customs purposes only. The written description of the scope is dispositive.[15]

Geogrids are produced from an extruded polymer in which the grid material has been stretched and possesses homogeneous or "integral" junctions. The term "geogrids" refers to materials used primarily in earth reinforcement and stabilization applications.[16]

Geogrids can be categorized based on shape, which include uniaxial geogrids (oriented in one direction), biaxial geogrids (oriented in two directions), and triaxial geogrids (oriented in three directions). In biaxial geogrids, the grid has been produced in a manner that creates quadrangular openings or apertures within the grid. The strands or "ribs" have working strength in two directions – longitudinal and transverse. The term "integral" means that the geogrid is a monolithic structure in which the junctions that connect the strands of the quadrangle are all a part of the same starting material.[17]

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[15] *Certain Biaxial Integral Geogrid Products From the People's Republic of China: Final Results of the Expedited First Sunset Review of the Countervailing Duty Order*, 87 Fed. Reg. 31,521, 31,523-24 (May 24, 2022). The scope of the antidumping duty order under review is identical. *See* Department of Commerce memorandum from James Maeder to Lisa W. Wang, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Antidumping Duty Order on Certain Biaxial Integral Geogrid Products from the People's Republic of China*, June 1, 2022, at 2 (EDIS Document No. 772668). The scope has not changed since the original investigations.

[16] CR/PR at I-6.

[17] CR/PR at I-7. As the Commission stated in the original determinations, because the scope is limited to geogrids in which "four-sided openings in the form of squares, rectangles, rhomboids, (Continued…)

Uses for geogrids include applications such as roadways, rural projects for subdivisions and land development, certain wall systems, marine mattresses, and other surface stabilization and reinforcement applications. The most common use is in construction of paved (usually asphalt) and unpaved roads.[18]

Original Investigations. In the original investigations, petitioner Tensar argued that the Commission should define the domestic like product to consist only of biaxial geogrids, coextensive with the scope, while respondent Hanes Companies Inc. ("Hanes"), an importer of subject merchandise, argued that the Commission should define the like product to consist of both biaxial geogrids (within Commerce's scope definition) and triaxial geogrids (outside the scope definition).[19] The Commission defined the domestic like product to include both kinds of geogrids, finding that they were similar in several important respects, in that both were made from the same raw materials, were produced in the same facilities using much of the same machinery and employees, were frequently sold through the same channels of distribution, and were used for similar projects, principally road construction. It noted some differences between the two kinds of geogrids: they had different physical qualities because of the greater tensile strength, radial stiffness, and thickness of triaxial geogrids; customer perceptions were mixed; and triaxial geogrids were sold at significantly higher prices than biaxial geogrids. On balance, the Commission found that the record supported finding that there were more

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diamonds, or other four-sided figures predominate," triaxial geogrids are not within the scope. *Original Investigations*, USITC Pub. 4670 at 6.

[18] CR/PR at I-8.

[19] *Original Investigations*, USITC Pub. 4670 at 7.

similarities than differences between biaxial geogrids and triaxial geogrids, and defined a single domestic like product including both types of geogrids.[20]

The Current Reviews. In these reviews, the record contains no new information indicating that the characteristics or uses of biaxial or triaxial geogrids have significantly changed since the original investigations so as to warrant reconsideration of the Commission's domestic like product definition from the original investigations.[21] Tensar does not contest the Commission's definition of the domestic like product in the original investigations.[22] Consequently, we again define a single domestic like product consisting of both biaxial geogrids and triaxial geogrids.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[23] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

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[20] *Original Investigations*, USITC Pub. 4670 at 7-11.

[21] *See generally* CR/PR at I-6 to I-9, I-10. Tensar has developed a new geogrid product since the end of the original period of investigation called InterAx, which Tensar describes as a substitute for triaxial geogrids, and which entered the market in the second half of 2021. CR/PR at I-7 and Figure I-2; Tensar's Substantive Response at 26. The information in the record on this new product is limited, and no party has argued that the domestic like product should be redefined to include this product.

[22] Tensar's Substantive Response at 26.

[23] 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[24] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[25]

In the original investigations, the Commission defined the domestic industry to include all U.S. producers of biaxial geogrids and triaxial geogrids.[26] The Commission did not exclude any related parties under 19 U.S.C. § 1677(4)(B). It noted that Tensar had an affiliated producer of biaxial geogrids in China, but found that this affiliated Chinese producer *** subject merchandise to the United States during the original period of investigation ("POI").

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[24] *See Torrington Co v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.,* 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[25] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

(1) the percentage of domestic production attributable to the importing producer;

(2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);

(3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;

(4) the ratio of import shipments to U.S. production for the imported product; and

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); *see also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[26] *Original Investigations*, USITC Pub. 4670 at 12.

Thus, the Commission concluded that Tensar was not a related party by virtue of its affiliation with the Chinese producer.[27]

In these reviews, three domestic producers may qualify as related parties by virtue of their affiliation with subject Chinese producers: Tensar, BOSTD America LLC ("BOSTD America"), and TMP America, Inc. ("TMP America"). Tensar is affiliated with a Chinese producer of subject merchandise, Tensar Geosynthetics (China) Ltd. ("Tensar China").[28] However, Tensar reports that Tensar China *** subject merchandise to the United States during the period of review.[29] Accordingly, we find that Tensar is not a related party.

According to Tensar, both BOSTD America and TMP America are owned by Chinese producers of subject merchandise.[30] Tensar also asserts that import data from *** indicate that BOSTD America imported subject merchandise during the period of review.[31] However, it is not clear from the *** data whether the shipments reported were of subject

[27] *Original Investigations*, USITC Pub. 4670 at 12 n.67; Original Investigations Confidential Views at 16-17 n.67 (EDIS Document No. 767484).

[28] CR/PR at I-12; Tensar's Substantive Response at 20.

[29] Tensar's Substantive Response at 20 and Exh. 15. While the reliability and completeness of the *** import data provided by Tensar are not clear, we note that those data *** during the period of review. *Id.* at Exh. 5.

[30] According to Tensar, TMP America is owned by Chinese producer TMP Geosynthetics, and BOSTD America is owned by Chinese producer BOSTD. Tensar's Substantive Response at 20-21, 25-26. Apart from Tensar's assertions, the record contains no other evidence concerning the affiliations between BOSTD America and TMP America and producers of subject merchandise in China. *See* Tensar's Substantive Response, Exh. 21 at 3. Both companies began U.S. production after the original POI, CR/PR at Table I-3; therefore, there is no information regarding these companies' affiliations from the record of the original investigations.

[31] Tensar's Substantive Response at 21.

merchandise, or whether the listed shipments were import shipments or export shipments.[32] We therefore have insufficient information to ascertain whether the subject producers affiliated with BOSTD America or TMP America exported subject merchandise to the United States, or whether BOSTD imported subject merchandise, so as to be subject to possible exclusion under the related parties provision. Even assuming *arguendo* that BOSTD America and TMP America would qualify for possible exclusion under the related parties provision, we have insufficient information on the record to determine whether appropriate circumstances exist to exclude either firm from the domestic industry, or any data from them to exclude, because neither BOSTD America nor TMP America responded to the notice of institution with information on their domestic operations. Tensar does not argue that either firm should be excluded from the domestic industry pursuant to the related parties provision.[33]

In sum, consistent with our definition of the domestic like product, we define the domestic industry to include all U.S. producers of biaxial geogrids and triaxial geogrids.

[32] The third page of *** data in the exhibit appears to reflect ***. Tensar's Substantive Response at Exh. 5. The second page of *** data in the exhibit appears to reflect *** and ***. *Id.*

[33] Tensar's Substantive Response at 26-27.

III. Revocation of the Antidumping and Countervailing Duty Orders Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[34] The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."[35] Thus, the likelihood standard is prospective in nature.[36] The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.[37]

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[34] 19 U.S.C. § 1675a(a).

[35] SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id*. at 883.

[36] While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[37] *See NMB Singapore Ltd. v. United States*, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), *aff'd*
(Continued…)

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time."[38] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."[39]

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."[40] It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce

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mem., 140 Fed. Appx. 268 (Fed. Cir. 2005); *Nippon Steel Corp. v. United States*, 26 CIT 1416, 1419 (2002) (same); *Usinor Industeel, S.A. v. United States*, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); *Indorama Chemicals (Thailand) Ltd. v. United States*, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); *Usinor v. United States*, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

[38] 19 U.S.C. § 1675a(a)(5).

[39] SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

[40] 19 U.S.C. § 1675a(a)(1).

regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).[41] The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.[42]

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.[43] In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.[44]

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to

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[41] 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the antidumping duty order under review. *See* Department of Commerce memorandum from James Maeder to Lisa W. Wang, *Issues and Decision Memorandum for the Final Results of the Expedited First Sunset Review of the Antidumping Duty Order on Certain Biaxial Integral Geogrid Products from the People's Republic of China*, June 1, 2022, at 3 (EDIS Document No. 772668).

[42] 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[43] 19 U.S.C. § 1675a(a)(2).

[44] 19 U.S.C. § 1675a(a)(2)(A-D).

consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.[45]

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.[46] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.[47]

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[45] *See* 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

[46] 19 U.S.C. § 1675a(a)(4).

[47] The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be (Continued…)

No respondent interested party participated in these expedited reviews. The record, therefore, contains limited new information with respect to the biaxial geogrids industry in China. There also is limited information on the biaxial and triaxial geogrids market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigations, and the limited new information on the record in these five-year reviews.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[48] The following conditions of competition inform our determinations.

1. Demand Conditions

Original Investigations. In the original investigations, the Commission found that demand for biaxial and triaxial geogrids depended on the demand for the downstream applications in which they were used, primarily road construction in both the public and private sectors. The Commission observed that the major demand drivers were public spending on highways and roads, and private construction spending for streets, housing developments, and

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contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

[48] 19 U.S.C. § 1675a(a)(4).

parking lots. Apparent U.S. consumption increased from *** square yards ("SY") in 2013 to *** SY in 2015.[49]

The Current Reviews. Tensar asserts that demand for biaxial and triaxial geogrids continues to depend on demand for downstream applications in which they are used, primarily road construction, and that data regarding highway spending and housing starts accordingly are relevant indicators of demand for biaxial and triaxial geogrids. It states that these indicators suggest that demand for biaxial and triaxial geogrids generally increased over the period of review, but claims that demand may not continue to increase in light of the decline in housing starts in 2020 due to the COVID-19 pandemic and a decline in highway spending in 2021.[50]

Responding purchaser *** reported that ***, and that ***.[51] Responding purchaser *** reported that ***, but that ***.[52]

[49] *Original Investigations*, USITC Pub. 4670 at 16; Original Investigations Confidential Views at 23 (EDIS Document No. 767484).

[50] Tensar's Substantive Response at 8-9, 24-25.

[51] CR/PR at D-3, D-4.

[52] CR/PR at D-3, D-4. Responding purchaser *** reported ***. *Id.*

Due to the absence of reliable import data in these reviews, there is no reliable basis on which to calculate apparent U.S. consumption in 2021.[53]

2. Supply Conditions

Original Investigations. The Commission found that the U.S. market for geogrids was satisfied almost entirely by the domestic industry and subject imports during the original POI, while nonsubject imports were minimal.[54]

The Commission also found that there were two domestic producers of biaxial geogrids during the original POI, Tensar and Tenax Corporation.[55] Tensar's patent on biaxial geogrids in the United States expired in May 2012, before the original POI. Tensar was the only producer of triaxial geogrids, having held the patent on triaxial geogrid products since 2003, and there were no imports of triaxial geogrids during the original POI.[56] Tensar exported a significant portion of its biaxial and triaxial geogrid production.[57] The domestic industry's share of the U.S. market for biaxial and triaxial geogrids decreased from *** percent of apparent U.S. consumption in 2013 to *** percent in 2015.[58]

The Commission observed that the record contained conflicting information regarding the number of biaxial geogrid producers in China; Tensar stated that there were over 75 subject

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[53] *See* CR/PR at Table I-5. Tensar supplied data for 2021 indicating that U.S. shipments by Tensar were *** SY in 2021, and *** data reflecting U.S. shipments of subject imports from China of *** SY. CR/PR at Table I-5; Tensar's Substantive Response at 1-13 and Exh. 5. However, Tensar did not provide any data concerning nonsubject imports, which are necessary for the calculation of total apparent U.S. consumption.

[54] *Original Investigations*, USITC Pub. 4670 at 17-18.

[55] *Original Investigations*, USITC Pub. 4670 at 17.

[56] *Original Investigations*, USITC Pub. 4670 at 17.

[57] *Original Investigations*, USITC Pub. 4670 at 17.

[58] *Original Investigations*, USITC Pub. 4670 at 17; Original Investigations Confidential Views at 24 (EDIS Document No. 767484).

producers, while Hanes contended that that there were only four major producers of subject merchandise.[59] The market share of subject imports increased from *** percent of apparent U.S. consumption in 2013 to *** percent in 2015.[60]

Nonsubject imports of biaxial geogrids had a very small presence in the U.S. market during the original POI; their share of apparent U.S. consumption was *** percent in 2013, *** percent in 2014, *** percent in 2015, and *** percent in interim 2016.[61] The largest nonsubject source of biaxial geogrid products was ***.[62]

The Current Reviews. The information available indicates that the domestic industry remained the largest source of biaxial and triaxial geogrids in the U.S. market in 2021, with U.S. shipments of *** SY that year.[63] In addition to the two domestic producers of biaxial geogrids in the original POI (Tensar and Tenax), there have been three new entrants in the U.S. market during the period of review: Industrial Fabrics, Inc. ("Industrial Fabrics"), TMP America, and BOSTD America.[64] Industrial Fabrics began producing geogrids at its plant in Houston, Texas during the period of review.[65] TMP America was established in 2016 and began

[59] *Original Investigations*, USITC Pub. 4670 at 17.

[60] *Original Investigations*, USITC Pub. 4670 at 17; Original Investigations Confidential Views at 25 (EDIS Document No. 767484); Original Investigations Confidential Report, INV-PP-008 (Jan. 18, 2017), at Table IV-5 (EDIS Document No. 767483).

[61] *Original Investigations*, USITC Pub. 4670 at 18; Original Investigations Confidential Views at 25 (EDIS Document No. 767484).

[62] *Original Investigations*, USITC Pub. 4670 at 18; Original Investigations Confidential Views at 25 (EDIS Document No. 767484).

[63] CR/PR at Table I-5. Due to the lack of reliable import data in these reviews, there are no reliable market share data for the domestic industry, subject imports, or nonsubject imports in 2021. *See id.*

[64] CR/PR at Table I-3; Tensar's Substantive Response at 25.

[65] CR/PR at Table I-3.

production of geogrids in its factory in Alpharetta, Georgia in September 2017.[66] According to Tensar, TMP America is owned by Chinese producer TMP Geosynthetics.[67] BOSTD America was founded in 2015 to import, warehouse, and sell geosynthetic construction products (primarily biaxial geogrids) in North America.[68] BOSTD America commissioned a geogrids plant in Blackwell, Oklahoma in June 2018, which has been operating ever since.[69] According to Tensar, BOSTD America is owned by Chinese producer BOSTD.[70] Tensar reports that it has introduced a new geogrid product called InterAx, which it developed as a substitute product for triaxial geogrids, in the second half of 2021.[71]

The information available indicates that subject imports were *** SY in 2021.[72] Although there is no information on the record concerning nonsubject imports in the U.S. market during the period of review, the information available indicates that the nonsubject producers in Greece, Italy, and Poland that existed during the original investigations remain in operation.[73]

Responding purchaser *** reported that ***, and it ***

[66] CR/PR at Table I-3; Tensar's Substantive Response, Exh. 21, at 4.
[67] Tensar's Substantive Response at 20-21, 25-26.
[68] Research Material on BOSTD at 3 (EDIS Document No. 767825).
[69] CR/PR at Table I-3; Tensar's Substantive Response, Exh. 17, at 1.
[70] Tensar's Substantive Response at 20-21, 25-26.
[71] Tensar's Substantive Response at 26; CR/PR at I-7 and Figure I-2.
[72] CR/PR at Table I-5.
[73] CR/PR at I-16; *see also Original Investigations*, USITC Pub. 4670 at VII-5.

***.[74] Responding purchaser *** reported that ***, and that ***.[75] It also reported ***.[76]

3. Substitutability and Other Conditions

Original Investigations. In the original investigations, the Commission found that there was a moderate-to-high degree of substitutability between the domestic like product and subject imports, noting that all responding U.S. producers and the majority of importers and purchasers reported that domestically produced biaxial geogrid products, subject imports, and nonsubject imports were always or frequently interchangeable.[77] The Commission also found that price was an important factor in purchasing decisions, while noting that price was most frequently named as the most important factor in purchasing decisions.[78] The Commission explained that quality, reliability, and the availability of supply could also be important factors, and noted that product service and technical support were also important factors, although somewhat less important than the factors listed above.[79]

[74] CR/PR at D-3, D-4.
[75] CR/PR at D-3.
[76] CR/PR at D-4.
[77] *Original Investigations*, USITC Pub. 4670 at 18.
[78] *Original Investigations*, USITC Pub. 4670 at 18.
[79] *Original Investigations*, USITC Pub. 4670 at 18.

The Commission found that the principal raw material used in biaxial geogrid production was polypropylene resin.[80]

The Current Reviews. The record in these reviews contains no new information to indicate that the degree of substitutability between the domestic like product and subject imports or the importance of price in purchasing decisions has changed since the original investigations.[81] Accordingly, we continue to find that there is a moderate-to-high degree of substitutability between subject imports and the domestic like product, and that price remains an important factor in purchasing decisions for biaxial geogrids.

As noted above, biaxial geogrid products may enter the United States under multiple HTS subheadings and these subheadings encompass out-of-scope merchandise as well as the in-scope geogrid products. Geogrids produced in China are subject to additional duties under Section 301 of the Trade Act of 1974.[82] Goods produced in China provided for in HTS subheading 3926.90.99 were subject to a 15 percent *ad valorem* duty under Section 301 effective September 1, 2019, but that rate was reduced effective February 14, 2020 to 7.5 percent *ad valorem*, which remains the current rate.[83] Further, goods produced in China provided for in HTS subheading 3920.20.00 became subject to a 25 percent *ad valorem* duty under Section 301 effective August 23, 2018.[84] Moreover, goods produced in China provided for in HTS subheading 3925.90.00 became subject to a 10 percent *ad valorem* duty under

[80] *Original Investigations*, USITC Pub. 4670 at 18.
[81] *See* Tensar's Substantive Response at 10; Tensar's Final Comments at 6-7.
[82] 19 U.S.C. § 2411.
[83] CR/PR at I-5.
[84] CR/PR at I-5 to I-6.

Section 301 effective August 23, 2018, but that rate was increased to 25 percent *ad valorem* effective May 10, 2019.[85] While the Office of the U.S. Trade Representative granted exclusions for some merchandise that entered under each of the three subheadings listed above, none of those exclusions pertained to geogrid products.[86]

Responding purchaser *** reported that ***, and that ***.[87] Responding purchaser *** reported that ***.[88]

C. Volume of Subject Imports

Original Investigations. In the original investigations, the Commission found that subject import volume and the increase in that volume were significant in absolute terms and relative to apparent U.S. consumption. It found that the quantity of subject imports increased by *** percent from *** SY in 2013 to *** SY in 2015, while the market share of subject imports increased from *** percent of apparent U.S. consumption in 2013 to *** percent in 2015.[89] The Commission found that the *** percentage point increase in subject import market share between 2013 and 2015 came entirely at the expense of the domestic industry, which lost *** percentage points of market share over the period.[90]

[85] CR/PR at I-6.
[86] CR/PR at I-5 to I-6.
[87] CR/PR at D-3, D-4.
[88] CR/PR at D-3.
[89] *Original Investigations*, USITC Pub. 4670 at 19; Original Investigations Confidential Views at 27 (EDIS Document No. 767484).
[90] *Original Investigations*, USITC Pub. 4670 at 19; Original Investigations Confidential Views at 27 (EDIS Document No. 767484).

The Commission rejected respondent Hanes's contention that the increases in subject import volume and market share could be fully explained by the expiration of Tensar's U.S. patent on in-scope biaxial geogrids in 2012. It observed that the patent expired seven months before the beginning of the POI, while the significant increases in subject import volume and market share continued in each year of the POI.[91]

The Current Reviews. As previously discussed, there are no reliable import data for the current period of review. Tensar argues that the available import data from *** indicate that the orders have had a significant restraining effect on the level of subject imports during the period of review.[92] These data indicate that subject import volume was *** SY in 2021.[93]

Due to the expedited nature of these reviews, the record contains limited information on the subject industry in China. However, the information available indicates that subject producers have the means and incentive to increase their exports of subject merchandise to the U.S. market to significant levels if the orders were revoked. According to information submitted by Tensar, subject producers in China maintained substantial capacity and, in some instances, increased their capacity during the period of review. Specifically, Tensar provided a

[91] *Original Investigations*, USITC Pub. 4670 at 19.

[92] Tensar's Substantive Response at 12-13; Tensar's Final Comments at 3. Tensar states that *** data reflect subject imports from China of *** kilograms ("KG") in 2015, *** KG in 2016, *** KG in 2017, *** KG in 2018, *** KG in 2019, *** KG in 2020, and *** KG in 2021. Tensar's Substantive Response at 13. The *** data for subject imports from China in 2021 equated to *** SY, using a conversion factor of 194.55 KG = 1,000 SY. CR/PR at Table I-5. We recognize that these data may be overstated due to the possible inclusion of out-of-scope merchandise.

[93] CR/PR at Table I-5.

list of 78 possible producers of geogrids in China,[94] as well as the following information concerning six subject producers, from their respective websites, indicating that they possess substantial capacity.[95] Subject producer Taian Road Engineering Materials reports an annual production capacity of 358.8 million SY.[96] Subject producer BOSTD reported a 2014 expansion of its biaxial geogrids production lines to produce an additional 33.9 million SY annually.[97] Subject producer TMP Geosynthetics reports an annual production capacity of more than 119.6 million SY.[98] Subject producer Shandong Dageng Project Material Co. Ltd. reports a monthly production capacity of 30.8 million SY.[99] Subject producer Ningbo Honghuan Geotextile Co., Ltd. reports an annual production capacity of 71.8 million SY and a new factory having launched in 2018.[100] Subject producer Quingdao Sunrise Dageng Import and Export Co., Ltd. reports an annual production output of 190.1 million SY.[101]

The information available also indicates that the U.S. market remains attractive to subject producers. Subject imports maintained a presence in the U.S. market during the current review period, thereby maintaining ready distribution networks in the United States through affiliated importers and sales agents.[102] Subject producer TMP Geosynthetics indicates on its website that it is focused on "worldwide distribution," including to the United States,

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[94] CR/PR at I-14 to I-15; Tensar's Substantive Response at 21-22 and Exh. 19.
[95] Tensar's Substantive Response at 14-15.
[96] Tensar's Substantive Response at 14 & n.38 and Exh. 6.
[97] Tensar's Substantive Response at 14 & n.39 and Exh. 7.
[98] Tensar's Substantive Response at 14 & nn.40-41 and Exhs. 8-9.
[99] Tensar's Substantive Response at 15 & n.42 and Exh. 10.
[100] Tensar's Substantive Response at 15 & nn.43-44 and Exh. 11-12.
[101] Tensar's Substantive Response at 15 & n.45 and Exh. 13.
[102] Tensar's Substantive Response at 12-15 and Exhs. 5, 9; Tensar's Final Comments at 3-5; CR/PR at Table I-5.

indicating its continued interest in serving the U.S. market.[103] Finally, the U.S. production operations established by subject producers TMP Geosynthetics and BOSTD during the period of review indicate that both producers remain interested in serving the U.S. market, and maintain relationships with U.S. customers through their U.S. affiliates.[104]

Given the significant and increasing volume and market penetration of subject imports during the original investigations, the continued presence of subject imports in the U.S. market during the period of review, the subject industry's substantial capacity, and the attractiveness of the U.S. market to subject producers, we find that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the orders were revoked.[105]

D. Likely Price Effects

Original Investigations. In the original investigations, the Commission found that there was a moderate-to-high degree of substitutability between subject imports and the domestic like product and that price, along with availability and quality, was an important consideration for purchasers.[106] The Commission found that subject imports pervasively undersold the domestic like product throughout the POI, with branded subject imports underselling the domestic like product in 40 of 62 (or 64.5 percent of the) quarterly comparisons.[107] Moreover,

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[103] Tensar's Substantive Response at 14 and Exh. 9.

[104] Tensar's Substantive Response at 25-26.

[105] There are no known antidumping or countervailing duty orders or investigations on biaxial geogrids from China in third-country markets. CR/PR at I-15. The record of these expedited reviews does not contain data addressing existing inventories of the subject merchandise or the potential for product shifting. No responding purchaser reported that ***. *See* CR/PR at D-3 to D-4.

[106] *Original Investigations*, USITC Pub. 4670 at 20.

[107] *Original Investigations*, USITC Pub. 4670 at 21.

purchasers confirmed purchasing a substantial quantity of subject imports instead of the domestic like product due to their lower price, and the domestic industry lost *** percentage points of market share to subject imports between 2013 and 2015.[108] The Commission further found that direct import purchase cost data concerning private label subject imports showed that subject imports were consistently priced lower than domestically produced product, in that the landed duty-paid costs of private label subject imports were lower than the private label sales prices of the domestic like product in 29 of 30 (or 96.7 percent of the) quarterly comparisons.[109] Given the predominant underselling by subject imports and the importance of price in purchasing decisions, the Commission found the underselling to be significant, particularly since it resulted in a market share shift to subject imports.[110]

The Commission also found that subject imports depressed prices for the domestic like product to a significant degree, with prices of both domestically produced and imported branded biaxial geogrid products declining during the POI, despite increasing apparent U.S. consumption.[111] It found that the record did not support Hanes's arguments that the declining prices were caused by declining raw material costs or the domestic industry's private label practices.[112] Moreover, the Commission noted that eleven purchasers reported that U.S.

[108] *Original Investigations*, USITC Pub. 4670 at 21.
[109] *Original Investigations*, USITC Pub. 4670 at 21.
[110] *Original Investigations*, USITC Pub. 4670 at 22.
[111] *Original Investigations*, USITC Pub. 4670 at 22.
[112] *Original Investigations*, USITC Pub. 4670 at 22-23 and nn. 135, 137.

producers reduced prices to compete with lower-priced subject imports.[113] Thus, the Commission concluded that subject imports had significant price effects.[114]

The Current Reviews. As discussed above, we continue to find that there is a moderate-to-high degree of substitutability between subject imports and the domestic like product, and that price is an important consideration for purchasers.

The record does not contain recent product-specific pricing information due to the expedited nature of these reviews. Based on the information available, including the moderate-to-high degree of substitutability of subject imports and the domestic like product, the importance of price in purchasing decisions, and the likely significant increase in subject import volume, we find that subject producers would likely undersell the domestic like product in the event of revocation of the orders, consistent with their behavior in the original investigations. Absent the discipline of the orders, the significant volumes of low-priced subject imports would likely force the domestic industry to lower prices, restrain price increases necessary to cover increasing costs, or lose sales and market share to subject imports, as they did in the original investigations. Consequently, we find that if the orders were revoked, the likely significant volumes of subject imports would likely have significant price effects on the domestic industry.

[113] *Original Investigations*, USITC Pub. 4670 at 22.
[114] *Original Investigations*, USITC Pub. 4670 at 23.

E. Likely Impact

Original Investigations. In the original investigations, the Commission found that the domestic industry's performance was impaired during the POI as it lost market share to subject imports and its prices were depressed.[115] The Commission observed that the industry's production, capacity utilization, employment, and productivity declined between 2013 and 2015, while the percentage increase in the industry's U.S. commercial shipments was far less than the percentage increase in apparent U.S. consumption.[116] Because of lost market share and declining prices, the domestic industry experienced declining financial performance, including declines in net sales revenues, gross profits, and operating income in each year of the POI, while its per-unit cost of goods sold increased in each year of the POI.[117]

The Commission found that subject imports prevented the domestic industry from benefitting fully from increased demand over the POI. By capturing market share from the domestic industry and depressing domestic prices, subject imports caused the industry to forgo revenues it otherwise would have received, making the industry less profitable than it would have been otherwise.[118] Thus, the Commission found that the subject imports had a significant impact on the domestic industry.[119]

In its analysis to ensure that it was not attributing to the subject imports any injury to the domestic industry caused by other factors, the Commission considered the role of

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[115] *Original Investigations*, USITC Pub. 4670 at 23.
[116] *Original Investigations*, USITC Pub. 4670 at 23-24.
[117] *Original Investigations*, USITC Pub. 4670 at 23, 25.
[118] *Original Investigations*, USITC Pub. 4670 at 26.
[119] *Original Investigations*, USITC Pub. 4670 at 26.

nonsubject imports. It found that the limited presence of nonsubject imports during the POI could not explain the domestic industry's loss of market share and revenue.[120]

The Current Reviews. Due to the expedited nature of these reviews, the record contains limited information concerning the domestic industry's performance since the original investigations.

The information available indicates that most indicators of the domestic industry's performance were better in 2021 than in 2015, the last full year of the original POI.[121] In 2021, the domestic industry's capacity and production were lower than in 2015, at *** SY, and *** SY, respectively, but its capacity utilization rate was higher, at *** percent.[122] The industry's 2021 U.S. shipments, at *** SY, and operating income, at $*** (equivalent to *** percent of net sales), were also higher than in 2015.[123] This limited information on the record is insufficient for us to make a finding on whether the domestic

[120] *Original Investigations*, USITC Pub. 4670 at 26.

[121] In the original investigations, the Commission's U.S. producer data largely reflected information provided by Tensar, because Tenax, the other domestic producer during the original POI, failed to provide complete trade, financial, or pricing data. *Original Investigations,* USITC Pub. 4670 at 3 n.2. In the current reviews, Tensar is the only domestic producer to have provided data in response to the notice of institution. CR/PR at I-2. We recognize that the domestic industry's performance in 2021 may be understated relative to the industry's performance in 2015 because the data reported by Tensar in its response to the notice of institution accounted for approximately *** percent of U.S. sales revenue for the domestic like product in 2021, whereas the domestic industry data collected in the original investigations from Tensar accounted for all but a small percentage of domestic production in 2015. *Id.* at I-2; *Original Investigations,* USITC Pub. 4670 at 3 n.2.

[122] CR/PR at Table I-4. In 2015, the domestic industry's capacity was *** SY, its production was *** SY, and its capacity utilization was *** percent. *Id.*

[123] CR/PR at Table I-4. In 2015, the domestic industry's U.S. shipments were *** SY and its operating income was $***, equivalent to *** percent of net sales. *Id.*

industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the orders.

Based on the information available in these reviews, we find that revocation of the orders would likely result in a significant volume of subject imports that would likely undersell the domestic like product to a significant degree, as a means of gaining market share. Given the substantial degree of substitutability between subject imports and the domestic like product and the importance of price to purchasers, the likely significant volume of low-priced subject imports would likely force domestic producers to cut prices or forgo necessary price increases to retain sales, or relinquish sales and market share to subject imports. Consequently, the likely significant volume of low-priced subject imports and their significant price effects would negatively affect the domestic industry's production, shipments, sales, market share, and revenues, which, in turn, would have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital and make and maintain necessary capital investments. We conclude that, if the orders were revoked, subject imports of biaxial geogrids from China would be likely to have a significant impact on the domestic industry within a reasonably foreseeable time.

We have also considered the role of factors other than subject imports of biaxial geogrids, including the presence of nonsubject imports, so as not to attribute any injury from other factors to the subject imports. The Commission found in the original investigations that nonsubject imports had an insignificant presence in the U.S. market during the original POI and

could not explain the domestic industry's loss of market share and revenue.[124] Although the record contains no data regarding the quantity of nonsubject imports during the period of review, the information available indicates that the nonsubject producers in Greece, Italy, and Poland that existed during the original investigations remain in operation.[125] Nevertheless, there is no information on the record indicating that nonsubject imports have increased their presence in the U.S. market since the original investigations, or would likely do so if the orders were revoked. There also is no information indicating that the presence of nonsubject imports would prevent the likely significant impact by subject imports as detailed above. Consequently, we find that subject imports would likely cause adverse effects on the domestic industry that are distinct from any impact of nonsubject imports in the event of revocation.

Accordingly, we conclude that if the antidumping and countervailing duty orders on biaxial geogrids from China were revoked, subject imports would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the foregoing reasons, we determine that revocation of the antidumping and countervailing duty orders on biaxial geogrids from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

[124] *Original Investigations*, USITC Pub. 4670 at 26.
[125] CR/PR at I-16; *see also Original Investigations*, USITC Pub. 4670 at VII-5.

Information obtained in these reviews

Background

On February 1, 2022, the U.S. International Trade Commission ("Commission") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"),[1] that it had instituted reviews to determine whether revocation of antidumping and countervailing duty orders on biaxial integral geogrid products ("geogrids") from China would likely lead to the continuation or recurrence of material injury to a domestic industry.[2] All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.[3] [4] Table I-1 presents information relating to the background and schedule of this proceeding:

Table I-1
Geogrids: Information relating to the background and schedule of this proceeding

Effective date	Action
February 1, 2022	Notice of initiation by Commerce (87 FR 5467)
February 1, 2022	Notice of institution by Commission (87 FR 5508)
May 9, 2022	Commission's vote on adequacy
May 24, 2022	Commerce's final result of its expedited review of the countervailing duty order
June 1, 2022	Commerce's results of its expedited reviews
June 8, 2022	Commerce's final result of its expedited review of the antidumping duty order
September 28, 2022	Commission's determination and views

[1] 19 U.S.C. 1675(c).

[2] 87 FR 5508, February 1, 2022. In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders. 87 FR 5467, February 1, 2022. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

[3] As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in the original investigations are presented in app. C.

[4] Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the domestic like product and the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

Responses to the Commission's notice of institution

Individual responses

The Commission received one submission in response to its notice of institution in the subject reviews. It was filed on behalf of Tensar Corporation ("Tensar"), a domestic producer of geogrids.

A complete response to the Commission's notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

Table I-2
Geogrids: Summary of completed responses to the Commission's notice of institution

Interested party	Type	Number of firms	Coverage
U.S. producer	Domestic	1	***%

Note: The domestic interested party is not aware of any industry publication or other source that provides an estimate of the total quantity of geogrid production in the United States and used sales revenue as a proxy for calculating its share of domestic production. The domestic interested party calculated its share by dividing sales revenue of its reported production ($***) by the estimate of total U.S. sales revenue, as reported by Dun & Bradstreet ($***). Domestic interested party's response to the notice of institution, March 3, 2022, pp. 22-23 and exh. 2.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews from Tensar. Tensar requests that the Commission conduct expedited reviews of the antidumping and countervailing duty orders on geogrids.[5]

The original investigations

The original investigations resulted from petitions filed on January 13, 2016, with Commerce and the Commission by Tensar Corporation ("Tensar"), Morrow, Georgia.[6] On January 11, 2017, Commerce determined that imports of geogrids from China were being sold

[5] Domestic interested party's comments on adequacy, April 18, 2022, p. 4.

[6] Certain Biaxial Integral Geogrid Products from China, Inv. Nos. 701-TA-554 and 731-TA-1309 (Final), USITC Publication 4670, March 2017 ("Original publication"), p. I-1.

at less than fair value ("LTFV") and subsidized by the Government of China.[7] The Commission determined on February 24, 2017, that the domestic industry was materially injured by reason imports sold at LTVF and subsidized by the government of China.[8] On March 3, 2017, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margin of 372.81 percent and net subsidy rates ranging from 15.61 to 152.50 percent.[9]

Previous and related investigations

Geogrids have not been the subject of any prior countervailing or antidumping duty investigations in the United States.

Commerce's five-year reviews

Commerce announced that it would conduct expedited reviews with respect to the orders on imports of geogrids from China with the intent of issuing the final results of these reviews based on the facts available not later than June 1, 2022.[10] Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at http://enforcement.trade.gov/frn/. Issues and Decision Memoranda contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping and countervailing duty orders on imports of geogrids from China are noted in the sections titled "The original investigations" and "U.S. imports," if applicable.

[7] 82 FR 3282 and 82 FR 3284, January 11, 2017.

[8] 82 FR 12368, March 2, 2017. The Commission found that imports subject to Commerce's affirmative critical circumstances determinations were not likely to undermine seriously the remedial effect of the countervailing and antidumping duty orders on certain biaxial integral geogrid products from China.

[9] 82 FR 12437 and 82 FR 12440, March 3, 2017.

[10] Letter from Abdelali Elouaradia, Director, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, March 21, 2022.

The product

Commerce's scope

Commerce has defined the scope as follows:

> *The products covered by the scope are certain biaxial integral geogrid products. Biaxial integral geogrid products are a polymer grid or mesh material (whether or not finished, slit, cut-to-length, attached to woven or non-woven fabric or sheet material, or packaged) in which four-sided openings in the form of squares, rectangles, rhomboids, diamonds, or other four-sided figures predominate. The products covered have integral strands that have been stretched to induce molecular orientation into the material (as evidenced by the strands being thinner in width toward the middle between the junctions than at the junctions themselves constituting the sides of the openings and integral junctions where the strands intersect. The scope includes products in which four-sided figures predominate whether or not they also contain additional strands intersecting the four-sided figures and whether or not the inside corners of the four-sided figures are rounded off or not sharp angles. As used herein, the term ''integral'' refers to strands and junctions that are homogenous with each other. The products covered have a tensile strength of greater than 5 kilonewtons per meter (''kN/m'') according to American Society for Testing and Materials (''ASTM'') Standard Test Method D6637/D6637M in any direction and average overall flexural stiffness of more than 100,000 milligram-centimeter according to the ASTM D7748/D7748M Standard Test Method for Flexural Rigidity of Geogrids, Geotextiles and Related Products, or other equivalent test method standards. Subject merchandise includes material matching the above description that has been finished, packaged, or otherwise further processed in a third country, including by trimming, slitting, coating, cutting, punching holes, stretching, attaching to woven or nonwoven fabric or sheet material, or any other finishing, packaging, or other further processing that would not otherwise remove the merchandise*

from the scope of the investigations if performed in the country of manufacture of the biaxial integral geogrid. [11]

U.S. tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under statistical reporting number 3926.90.9985[12] of the Harmonized Tariff Schedule of the United States ("HTS"), a basket category that covers articles of plastic not elsewhere specified or indicated. Covered merchandise may also be imported under HTS statistical reporting numbers 3920.20.0055 and 3925.90.0000.[13] The 2022 general rate of duty is 4.2 percent ad valorem for statistical reporting number 3920.20.0055 (a residual provision for plates, sheets, etc. of polymers of propylene) and 5.3 percent ad valorem for statistical reporting numbers 3925.90.0000 (a residual for builders' wares of plastics) and 3926.90.9985.[14]

Section 301

Section 301 was not in effect during the original investigations. Currently, geogrids produced in China are subject to additional duties pursuant to Section 301 of the Trade Act of 1974. The Section 301 duties for goods produced in China provided for in HTS subheading 3926.90.99 are currently at an ad valorem rate of 7.5 percent. Historically, on August 20, 2019, a 10 percent additional ad valorem duty was announced, but on August 30, 2019, it was increased to 15 percent and became effective on September 1, 2019. On January 22, 2020, the U.S. Trade Representative announced the rate would be reduced from 15 percent to 7.5 percent, with an effective date of February 14, 2020. There were numerous exclusions granted

[11] 82 FR 12440, March 3, 2017.

[12] The original investigations referenced HTS 3926.90.9995; however, this statistical reporting number was changed to its current statistical reporting number, 3926.90.9985. Harmonized Tariff Schedule of the United States, Basic Edition, USITC Publication 5277, January 2022, Chapter 39, p. 38. https://hts.usitc.gov/view/release?release=2022HTSABasic.

[13] Statistical reporting numbers 3920.20.0055 and 3925.90.0000 have not changed since the original investigations. Harmonized Tariff Schedule of the United States, Basic Edition, USITC Publication 5277, January 2022.

[14] Harmonized Tariff Schedule of the United States, Basic Edition, USITC Publication 5277, January 2022. https://hts.usitc.gov/view/release?release=2022HTSABasic.

by the U.S. Trade Representative for merchandise entered under HTS subheading 3926.90.99, but none of the exclusions were for geogrid products.[15]

The Section 301 duties for goods produced in China provided for HTS subheading 3920.20.00 became effective on August 23, 2018, at an ad valorem rate of 25 percent. There were exclusions granted by the U.S. Trade Representative for merchandise entered under HTS subheading 3920.20.00, but none of the exclusions were for geogrid products.[16]

The Section 301 duties for goods produced in China provided for in HTS subheading 3925.90.00 became effective on September 24, 2018, at an ad valorem rate of 10 percent, but effective May 10, 2019, this additional duty increased from 10 percent to 25 percent ad valorem. There were exclusions granted by the U.S. Trade Representative for merchandise entered under HTS subheading 3925.90.00, but none of the exclusions were for geogrid products.[17] In certain cases, the Section 301 duties for goods produced in China provided for in HTS subheading 3925.90.00 are subject to an additional ad valorem rate of 10 percent instead of 25 percent.[18] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Description and uses[19]

Geogrids are produced from an extruded polymer where the grid material has been stretched ("oriented") and possesses homogeneous or "integral" junctions. The geogrids term refers to materials primarily in earth reinforcement and stabilization applications. Geogrids are part of a broader category known as geosynthetics, which consist of a number of synthetic products used to solve various civil engineering and earth construction challenges.

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[15] Duties are effective under 9903.88.15. 85 FR 28693; 85 FR 17936; 85 FR 3741; Harmonized Tariff Schedule of the United States, Basic Edition, Chapter 99, U.S. Notes 20(r) and 20(s), p. 99-lll-85, 91, USITC Publication 5277, January 2022. For all subheadings, see HTS Notice on China Tariffs, January 27, 2022, https://hts.usitc.gov/view/China%20Tariffs?release=2022HTSABasicRev1B.

[16] Duties are effective under 9903.88.02. 83 FR 40823, pp. 40823-40838; Harmonized Tariff Schedule of the United States, Basic Edition, Chapter 99, U.S. Note 20(c), p. 99-lll-22, 24 USITC Publication 5277, January 2022.

[17] Duties are effective under 9903.88.03. 83 FR 47974, September 21, 2018; 84 FR 20459, May 9, 2019; Harmonized Tariff Schedule of the United States, Basic Edition, Chapter 99, U.S. Notes 20(e) and 20(f), p. 99-lll-25-26, 36, USITC Publication 5277, January 2022.

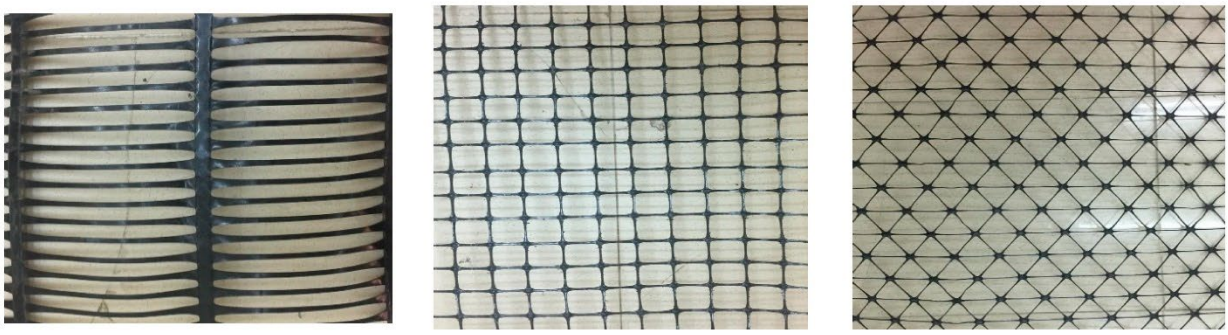
[18] The 10 percent duty under 9903.88.09 applies to HTS subheading 3925.90.00 goods that were exported before May 10, 2019 and entered into the United States on or after May 10, 2019, and before June 1, 2019. The 25 percent duty is applied under 9903.88.03. 84 FR 21892, pp. 21892-21893. Harmonized Tariff Schedule of the United States, Basic Edition, Chapter 99, U.S. Notes 20(l), p. 99-lll-57. USITC Publication 5277, January 2022.

[19] Original publication, pp. I-8-9.

Geogrids can be categorized based on shape, which include uniaxial geogrids (oriented in one direction), biaxial geogrids (oriented in two directions), and triaxial geogrids (oriented in three directions). In biaxial geogrids, the grid has been produced in a manner that creates quadrangular openings or apertures within the grid. The strands or "ribs" have working strength in two directions – longitudinal and transverse. The term integral means that the geogrid is a monolithic structure in which the junctions that connect the strands of the quadrangle are all a part of the same starting material. This is differentiated from other products, for example, which did not start from the same structure (are not integral), such as strands welded together. The term biaxial integral geogrids may also be referred to as "homogeneous," "integral," "oriented," or "punched and drawn" geogrids. Products are shown in figure I-1.

Since the imposition of the orders, Tensar hasdeveloped a new product called InterAx, which is a substitute product for triaxial geogrids. InterAx entered the market in the second half of 2021.[20] The InterAx structure consists of continuous and non-continuous ribs forming three aperture geometries (hexagon, trapezoid, and triangle) and an unimpeded suspended hexagon, as depicted in figure I-2. It has optimized geometry for maximum confinement of granular fill, which creates an efficient stabilized layer for foundations and surfaces that carry traffic.[21]

Figure I-1
Geogrids: Uniaxial, biaxial, and triaxial geogrid products



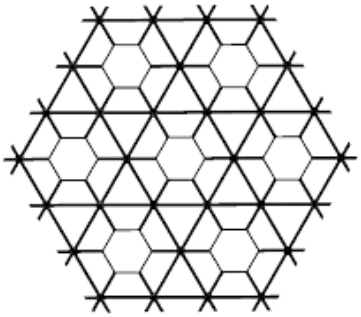
(a) Uniaxial (b) Biaxial (c) Triaxial

Source: Fares et al., *Fibers,* April 13, 2020, https://doi.org/10.3390/fib8040023.

[20] Domestic interested party's response to the notice of institution, March 3, 2022, p. 26.

[21] Tensar, "Product Data Sheet,"accessed April 11, 2022, https://www.tensarcorp.com/getattachment/63057717-50ff-4ac2-bd31-5bfe261c115c/InterAx_NX850_TIC_04-21-Material-Property-Data-Sheet.pdf.

Figure I-2
Geogrids: InterAx geogrids



Source: Tensar, "Product Data Sheet," accessed April 11, 2022, https://www.tensarcorp.com/getattachment/63057717-50ff-4ac2-bd31-5bfe261c115c/InterAx_NX850_TIC_04-21-Material-Property-Data-Sheet.pdf.

Uses for geogrids include applications such as building roadways, rural projects for subdivisions and land development, certain wall systems, marine mattresses, and other surface stabilization and reinforcement applications. The most common use of the subject product is the construction of paved (usually asphalt) and unpaved roads. The primary driver of demand for the product is road construction. When a road is constructed, materials such as stone (aggregate) and asphalt are used. Geogrids hold the aggregate in place. The result is that less aggregate is required for construction, saving costs to a project. The product interlocks with aggregate to prevent lateral movement of the road and to increase the road's load-bearing capacity.

Manufacturing process[22]

The typical production process for geogrids includes melting, extrusion, punching, stretching, winding and cutting. Tensar begins production with a mixture of polymer of polypropylene resin pellets and black masterbatch, which are melted and extruded to form a sheet. The purpose of the black masterbatch is to provide coloring and ultra-violet light protection to the blend. Any recovered scrap is reintroduced into the melting and extrusion processes. The manufactured sheet is passed through a punch press which makes quadrangular holes in the sheet. After the holes have been punched, the product goes through a machine called the "orienter," which heats the punched sheet and then pulls it in two directions, lengthwise, also referred to as to as "longitudinal" or the "machine" direction, and then sideways, also referred to as the "cross-machine" or "transverse" direction. Because the

[22] Unless otherwise noted, this information is based on the original publication, pp. I-9-10.

material is stretched, it lengthens and widens the final product. Stretching also aligns the molecules in a homogenous chain-like pattern which results in greater strength to the product. This is important in downstream applications where the product will provide load-bearing capacity. After the product goes through the heated orienter machine, it goes through a cooling water bath. Next, the product goes through a winding machine and a cutter, which winds, cuts to length, spools in rolls, and wraps for shipment.

The subject imported and domestically produced biaxial geogrid products are made of polypropylene. The domestic interested party differentiates its manufacturing process of grid formation with that of other geotextiles. Specifically, its grids are not the result of knitting, weaving, or welding together individual strands of strips of polymer. It notes that this is important because the extruded integral oriented geogrid produced by the domestic interested party has advantages in junction strength, tensile strength, junction efficiency, resistance to deformation, and stiffness.

The industry in the United States

U.S. producers

During the final phase of the original investigations, the Commission received a usable U.S. producer questionnaire from Tenser and a partially-completed response from Tenax. These two firms accounted for all known production of geogrids in the United States during 2015.[23]

In response to the Commission's notice of institution in these current reviews, the domestic interested party provided a list of five known and currently operating U.S. producers of geogrids. One firm providing U.S. industry data in response to the Commission's notice of institution accounted for approximately *** percent of production of geogrids in the United States during 2021.[24]

[23] Investigation Nos. 701-TA-554 and 731-TA-1309 (Final): Certain Biaxial Integral Geogrid Products from China, Confidential Report, INV-PP-008, January 18, 2017 ("Original confidential report") p. III-1. The Commission did not incorporate Tenax's data into the staff report.

[24] The domestic interested party is not aware of any industry publication or other source that provides an estimate of the total quantity of geogrids production in the United States and used sales revenue as a proxy for calculating its share of domestic production. The domestic interested party calculated its share by dividing sales revenue of its reported production ($***) by the estimate of total U.S. sales revenue, as reported by Dun & Bradstreet ($***). Domestic interested party's response to the notice of institution, March 3, 2022, pp. 20 and 22-23 and exh. 2.

Recent developments

Since the Commission's original investigations, the following developments have occurred in the geogrids industry: (1) New entrants into the market, and (2) The domestic interested party developed a new product that acts as a substitute for triaxial geogrids. There have also been no significant changes in end uses and applications among domestically-produced geogrids, subject imports, and nonsubject imports since the original investigations.[25]

Table I-3 presents events in the U.S. industry since the original investigations.

Table I-3
Geogrids: Recent developments in the U.S. industry

Item	Firm	Event
New entrant and new production	TMP America	In September 2017, TMP America began production of geogrids in its factory in Alpharetta, Georgia. The firm is owned by Chinese producer TMP.
New entrant and new production	BOSTD America	In June 2018, BOSTD America commissioned a geogrids production plant in Blackwell, Oklahoma. According to the domestic interested party, the firm is owned by the Chinese. The firm states it plans to expand.
Expansion	Industrial Fabrics, Inc.	During the period of review, Industrial Fabrics, Inc. began producing geogrids at its plant in Houston, Texas.
Expansion	Tensar	Expanded product line by introducing InterAx, a substitute product for triaxial geogrids in the second half of 2021.

Source: Domestic interested party's response to the notice of institution, March 3, 2022, pp. 21, 25-26; TMP America, "Home," accessed April 27, 2022, https://tmpamerica.com/; TMP America, "Company Background," accessed April 27, 2022, https://tmpamerica.com/company/; BOSTD America, "Ownership, Management, and Organization," accessed April 27, 2022, https://www.bostd-america.com/ownership-management-and-organization; BOSTD America, "Current Operations," accessed April 27, 2022, https://www.bostd-america.com/current-opperations; BOSTD America, "Expansion Plans and Space Available for Complementary Manufacturing," accessed April 27, 2022, https://www.bostd-america.com/expansion-plans.

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in the current five-year reviews.[26] Table I-4 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigations and these current five-year reviews.

[25] Domestic interested party's response to the notice of institution, March 3, 2022, p. 26.
[26] Individual company trade and financial data are presented in app. B.

Table I-4
Geogrids: Trade and financial data submitted by U.S. producers, by period

Quantity in 1,000 square yards; value in 1,000 dollars; unit value in dollars per square yard; ratio is in percent

Item	Measure	2013	2014	2015	2021
Capacity	Quantity	***	***	***	***
Production	Quantity	***	***	***	***
Capacity utilization	Ratio	***	***	***	***
U.S. shipments	Quantity	***	***	***	***
U.S. shipments	Value	***	***	***	***
U.S. shipments	Unit value	***	***	***	***
Net sales	Value	***	***	***	***
COGS	Value	***	***	***	***
COGS to net sales	Ratio	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***
SG&A expenses	Value	***	***	***	***
Operating income or (loss)	Value	***	***	***	***
Operating income or (loss) to net sales	Ratio	***	***	***	***

Source: For the years 2013-15, data are compiled using data submitted in the Commission's original investigations. For the year 2021, data are compiled using data submitted by the domestic interested party. Domestic interested party's response to the notice of institution, March 3, 2022, exh. 1.

Note: For a discussion of data coverage, please see "U.S. producers" section.

Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties provision, the Commission may exclude a U.S. producer from the domestic industry for purposes of its injury determination if "appropriate circumstances" exist.[27]

[27] Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

In its original determinations, the Commission defined a single Domestic Like Product consisting of biaxial geogrids and triaxial geogrids, and the Domestic Industry to include all U.S. producers of biaxial geogrids and triaxial geogrids.[28]

In these reviews, the domestic interested party states that it is not a related party by virtue of its affiliation with Chinese producer Tensar Geosynthetics (China) Ltd. ("Tensar China") because ***.[29] It also claims that U.S. producers BOSTD America and TMP America are related parties within the meaning of 19 U.S.C.§ 1677(4)(B), as both are owned by Chinese producers of the subject merchandise and BOSTD America was an importer of the subject merchandise during the period of review.[30]

U.S. imports

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from 14 firms, which accounted for a large majority of total U.S. imports of geogrids from China between January 2013 and September 2016.[31] Import data presented in the original investigations are based on questionnaire responses.

Although the Commission did not receive responses from any respondent interested parties in these current reviews, in its response to the Commission's notice of institution, the domestic interested party provided a list of 21 potential U.S. importers of geogrids.[32] [33]

[28] 87 FR 5508, February 1, 2022.
[29] Domestic interested party's response to the notice of institution, March 3, 2022, p. 20.
[30] Domestic interested party's response to the notice of institution, March 3, 2022, p. 21.
[31] Original publication, p. IV-1.
[32] Domestic interested party's response to the notice of institution, March 3, 2022, exh. 18.
[33] Domestic interested party's response to the notice of institution, March 3, 2022, exh. 18.

U.S. imports[34]

The domestic interested parties reported that the volume of subject imports declined since the original reviews. [35]

Apparent U.S. consumption and market shares

Table I-5 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

[34] Import data are not available for the current reviews. In the original investigations, U.S. import data were based on questionnaire responses, which collected quantity data in 1,000 square yards. Official import statistics cannot be relied upon to disclose amounts of or trends in subject imports because (1) the Harmonized Tariff Schedule of the United States subheadings in question also cover substantial (about 99 percent) nonsubject imports within their scope and (2) the unit of quantity specified in the HTS for reporting subject merchandise under these subheadings is "number or KG" whereas the Commission relied upon quantity measured in 1,000 square yards. Instead, the Commission relies on import data provided by the domestic interested party. Domestic interested party's response to the notice of institution, March 3, 2022, pp. 11-12, exh. 5.

[35] Domestic interested party's response to the notice of institution, March 3, 2022, p.12.

Table I-5
Geogrids: Apparent U.S. consumption and market shares, by source and period

Quantity in 1,000 square yards; value in 1,000 dollars; share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent

Source	Measure	2013	2014	2015	2021
U.S. producers	Quantity	***	***	***	***
China	Quantity	***	***	***	***
Nonsubject sources	Quantity	***	***	***	***
Total imports	Quantity	***	***	***	***
Apparent U.S. consumption	Quantity	***	***	***	***
U.S. producers	Value	***	***	***	***
China	Value	***	***	***	***
Nonsubject sources	Value	***	***	***	***
All import sources	Value	***	***	***	***
Apparent U.S. consumption	Value	***	***	***	***

Source: For the years 2013-15, data are compiled using data submitted in the Commission's original investigations. For the year 2021, U.S. producers' U.S. shipments are compiled from the domestic interested party's response to the Commission's notice of institution and U.S. imports from China are compiled using ***. Domestic interested party's response to the notice of institution, March 3, 2022, pp. 12-13, exh. 5.

Note: The Commission used the following conversion factor for quantity of imports from China provided by the domestic interested party: ***. Email from ***, March 3, 2022.

Note: For 2013-15, apparent U.S. consumption is derived from U.S. shipments of imports, rather than U.S. imports. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeros, null values, and undefined calculations are suppressed and shown as "---".

Note: Because of rounding, figure may not add to total shown.

Note: For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections

The industry in China

During the final phase of the original investigations, the Commission received foreign producer/exporter questionnaires from one firm, which didn't provide an estimate of its share of biaxial geogrids production in China or an estimate of its share of exports of geogrids from China to the United States during 2015.[36]

In the original investigations, according to the respondents, there were four major biaxial integral geogrid producers in China: TMP, BOSTD, Feicheng Lianyi, and Tensar China. Although the Commission did not receive responses from any respondent interested parties in

[36] Original publication, p. VII-3.

these five-year reviews, the domestic interested party provided a list of 78 possible producers of geogrids in China.[37]

The domestic interested party notes that publicly available information indicates that geogrids producers in China have a large capacity.[38] Table I-6 presents events in the Chinese industry since the original investigations.

Table I-6
Biaxial Geogrids: Recent developments in the Chinese industry

Item	Firm	Event
Current Capacity	Taian Road Engineering Materials	The firm as an annual production capacity of 300 million square meters of geosynthetics.
Current Capacity	BOSTD	The Chinese producer advertised a 2014 expansion of its biaxial geogrids production lines to produce an additional 6,600 metric tons ("MT") annually, an amount that is equivalent to nearly 34 million square yards.
Current Capacity	TMP Geosynthetics	The Chinese producer has a yearly production capacity of "more than 100 million square meters" which is focused on "worldwide distribution," including to the United States.
Current Capacity	Shandong Dageng Project Material Co. Ltd.	The firm reports a monthly capacity of 6,000 MT.
Current Capacity	Ningbo Honghuan Geotextile Co., Ltd.	The firm reports a production capacity of 5.98 million square yards of biaxial geogrids every month, or 71.8 million square yards annually, and it launched a new factory in 2018.
Current Capacity	Qingdao Sunrise Dageng Import and Export Co., Ltd.	The firm has an annual output of 37,000 MT.

Source: Domestic interested party's response to the notice of institution, March 3, 2022, pp. 14-15.

Since no Chinese producers responded to the notice of institution, no further data are available specific to the production or capacity of subject biaxial integral geogrids from China. Global Trade Information Services, Inc., Global Trade Atlas, provides data for HS subheading 3926.90 that contains substantial quantities of products that are not covered by the scope of these reviews. Therefore, these data would overstate Chinese export data.

Third-country trade actions

There are no known antidumping or countervailing duty investigations on geogrids from China in third-country markets.

[37] Domestic interested party's response to the notice of institution, March 3, 2022, exh.19.
[38] Domestic interested party's response to the notice of institution, March 3, 2022, pp. 14-15.

The global market

In the original investigations, there was known production of geogrids in Greece (Thrace Group), Italy (Tenax S.p.A.), and Poland (Pietrucha Group). Of these three producing countries, Greece was the only reported source of nonsubject imports in the original investigations.[39] Currently, the Thrace Group, Tenax S.p.A., and the Pietrucha Group appear to remain in operation.[40]

[39] Original publication, p. VII-5.

[40] The Thrace Group, accessed April 11, 2022, https://www.thracegroup.com/br/en/technical-fabrics/geosynthetics/geogrids/; No. RF 1/2021, "Reinforced Fill Product Design Data Sheet for Tenax TT Geogrids," March 21, 2022, https://www.cedd.gov.hk/filemanager/eng/content_605/RF1_2021a.pdf; Pietrucha, accessed April 11, 2022, https://www.environmental-expert.com/downloads/polgrid-geogrids-brochure-1033160; Pietrucha, "Geogrids," accessed April 11, 2022, https://www.pietrucha.pl/en/offer/civil-engineering/geogrids/dproducts/biaxial-geogrids.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, Federal Register notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
87 FR 5467, February 1, 2022	*Initiation of Five-Year (Sunset) Reviews*	https://www.govinfo.gov/content/pkg/FR-2022-02-01/pdf/2022-02026.pdf
87 FR 5508, February 1, 2022	*Biaxial Integral Geogrid Products From China; Institution of Five-Year Reviews*	https://www.govinfo.gov/content/pkg/FR-2022-02-01/pdf/2022-01899.pdf

APPENDIX B

COMPANY-SPECIFIC DATA

RESPONSE CHECKLIST FOR U.S. PRODUCERS

Table B-1
Geogrids: Response checklist for U.S. producers

Yes = provided response; no = did not provide a response; NA = not available; not known = information was not known

Item	Tensar
Nature of operation	Yes
Statement of intent to participate	Yes
Statement of likely effects of revoking the order	Yes
U.S. producer list	Yes
U.S. importer/foreign producer list	Yes
List of 3-5 leading purchasers	Yes
List of sources for national/regional prices	Not known
Changes in supply/demand	Yes

* * * * * * *

APPENDIX C

SUMMARY DATA

Table C-1
Geogrids: Summary data concerning the U.S. market, 2013-15, January to September 2015, and January to September 2016
(Quantity=1,000 square yards; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per square yard; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sept
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from:									
Subject sources (China biaxial):									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources (fn3):									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages (dollars)	***	***	***	***	***	***	***	***	***
Productivity (square yards per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.
fn3.--Nonsubject sources includes triaxial geogrids from any source including China as well as and biaxial geogrids from sources other than China. ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Table C-2
Biaxial geogrids: Summary data concerning the U.S. market, 2013-15, January to September 2015, and January to September 2016
(Quantity=1,000 square yards; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per square yard; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sept
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from:									
China:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages (dollars)	***	***	***	***	***	***	***	***	***
Productivity (square yards per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires.

Table C-3
Triaxial geogrids: Summary data on U.S. producers 2013-15, January to September 2015, and January to September 2016
(Quantity=1,000 square yards; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per square yard; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sept
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages (dollars)	***	***	***	***	***	***	***	***	***
Productivity (square yards per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from domestic interested parties and it named the following five firms as top purchasers of biaxial integral geogrid products: ***. Purchaser questionnaires were sent to these five firms and four firms (***) provided responses, which are presented below.

1. Have there been any significant changes in the supply and demand conditions for biaxial integral geogrid products that have occurred in the United States or in the market for biaxial integral geogrid products in China since March 4, 2017?

Purchaser	Yes / No	Changes that have occurred
***	***	***.
***	***	***.
***	***	***.
***	***	***.

2. Do you anticipate any significant changes in the supply and demand conditions for biaxial integral geogrid products in the United States or in the market for biaxial integral geogrid products in China within a reasonably foreseeable time?

Purchaser	Yes / No	Anticipated changes
***	***	***.
***	***	***.
***	***	***.
***	***	***.