November 26, 2018

Filed Via Online Submission at www.regulations.gov

Edward Gresser
Chair, Trade Policy Staff Committee
Office of the U.S. Trade Representative, Executive Office of the President
600 17th Street, N.W.
Washington, D.C. 20508


INTRODUCTION

The Semiconductor Industry Association (SIA) welcomes the opportunity to provide comments on negotiating objectives for a U.S.-Japan Trade Agreement. SIA is the voice of the U.S. semiconductor industry, one of America’s top export industries and a key driver of America’s economic strength, national security, and global competitiveness. Semiconductors and its value chain are the bedrock of the modern American economy, powering virtually everything digital from cellphones and cars to supercomputers and military systems.

International trade is vital to the U.S. semiconductor industry, and thus we welcome the Administration’s decision to enter into negotiations for a U.S.-Japan Trade Agreement. Access to global markets has enabled U.S.-based companies to secure nearly half of the $412 billion global semiconductor market share in 2017. Semiconductors are America’s fourth largest export, with a trade surplus of over $6 billion in 2017. Nearly half of the manufacturing operations of major U.S. semiconductor firms is located here in the United States, across 19 states, directly employing close to 250,000 workers in the U.S. with well-paying jobs.

The United States and Japan have historically been leading trade partners in semiconductors. In 2017, Japan was the 13th leading destination for U.S. semiconductor exports and the 8th leading source of U.S. semiconductor imports. In 2017, total two-way semiconductor trade between the United States and Japan totaled over $2.7 billion, with U.S. exports to the Japan accounting for $848 million and U.S. imports from Japan accounting for roughly $1.9 billion. The importance of the Japan market to U.S. companies is much greater since they often design and

fabricate products in the United States, export to third countries for assembly and test, and ship to Japan from these third countries. SIA estimates that the U.S. semiconductor industry shipped $14.6 billion worth of semiconductors to the $36.6 billion Japan market in 2017. Furthermore, the Japanese and American semiconductor industries have a close working relationship as evidenced by long standing membership in the World Semiconductor Council (WSC) and Government/Authorities Meeting on Semiconductors (GAMS) – respectively industry and government bodies that further cooperation on policy matters related to the worldwide semiconductor industry. Thus, the Parties have a unique opportunity to promote sound semiconductor policies across the world.

Given Japan’s status as a top semiconductor trading partner, and a valued member of the world trading community, a U.S.-Japan trade agreement is a valuable opportunity to strengthen and cement global trade rules related to the ICT sector. SIA strongly encourages the U.S. government to prioritize negotiating objectives that strengthen digital trade and combat the rising trend of digital nationalism in 3rd-party countries. We offer the below product-specific negotiating objectives, including priorities aimed at digital trade, state-owned enterprises (SOEs), and trade-related intellectual property rights (IPR) issues that impact the semiconductor industry.

**NEGOTIATING PRIORITIES FOR THE U.S. SEMICONDUCTOR INDUSTRY**

**I. Ensure access to global markets for innovative encryption products**

Semiconductor-enabled encryption is now used in nearly all commonly used and globally traded ICT products to provide security and protect data. Government restrictions on the use, import, or sale of commercial products with encryption (i.e. import bans, technology mandates, or requirements to transfer or provide access to proprietary information) undermine security and could threaten the large trade flows of semiconductors and other ICT products on the scale of hundreds of billions of dollars. SIA is concerned about encryption-related practices and regulations in some regions that act as non-tariff barriers, such as regulations that directly or indirectly favor specific technologies, block companies from using the strongest available security technologies in the marketplace, or force disclosure of sensitive information.

We recommend that all U.S. trade agreements contain specific commitments preventing parties from placing discriminatory restrictions on commercial foreign products with encryption. SIA urges the inclusion of encryption disciplines as based on World Semiconductor Council Encryption Principles as follows:

---

2 World Semiconductor Trade Statistics, 2017
1) Parties agree to not prohibit or restrict the importation of commercial products containing cryptographic capabilities;

2) With respect to an ICT good that uses cryptography and is designed for commercial applications, Parties agree to:
   - No requirements to transfer or provide access to any proprietary information relating to cryptography, including disclosure of a technology, production process, source code, private key or other secret parameter, algorithm specification, or design details, as a condition of market access.
   - No requirements to partner or otherwise cooperate with a domestic entity in order to develop, manufacture, sell, distribute, import, or use a product.
   - No requirements to use or integrate a particular cryptographic algorithm or cipher.

3) The Parties agree to transparent and predictable procedures related to the notification, evaluation, approval, or licensing of goods containing encryption technology that are consistent with international standards, norms, and practices (i.e., not discriminatory, unnecessarily trade restrictive or burdensome).

Such disciplines have already been incorporated into the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and U.S.-Mexico-Canada Agreement (USMCA).

II. **Ensure that state-owned enterprises (SOEs) compete fairly and transparently based on market considerations and without undue government advantage**

SOE activity guided or aided by government influence, rather than by commercial considerations, can cause harmful market and investment distortions. When private companies are competing directly against a government, the playing field is certainly not level. While SOE’s are not major consumers of semiconductors in Japan, they are important players in other markets. In particular, the efforts by some governments to provide substantial equity infusions to develop their domestic semiconductor capabilities has the potential to seriously distort semiconductor markets. The inclusion of strong SOE and government assistance disciplines in a future U.S.-Japan agreement will send an important message to our other trading partners with large SOEs in the electronics sector that governments cannot use SOEs to discriminate against U.S. companies.

SIA encourages the Administration to prioritize the inclusion of SOE and government assistance disciplines that align with the U.S.-Japan-EU trilateral work to strengthen WTO subsidy rules⁴ and the GAMS Guidelines and Best Practices for Regional Support.⁵ SIA recommends the Administration prioritize the inclusion of the following key disciplines:

---

⁴ EU-Japan-Scoping Paper, 31 May 2018
⁵ In November 2017, the Governments and Authorities Meeting on Semiconductors (GAMS) – comprised of the governments/authorities of China, Chinese Taipei, EU, Japan, Korea, and the United States- established a set of
A. Raise transparency requirements for provisions of equity capital or non-commercial assistance to SOEs

The WTO SCM notification and surveillance procedure has turned into an empty shell. Some countries which practice an unprecedented level of state capitalism notify only a small fraction of their domestic subsidies to the WTO. Many of the notifications that are provided lack key details of the relevant subsidy programs to sufficiently inform other WTO Members or the SCM Committee of their operation and likely trade effects. SIA notes the U.S.-Japan-EU trilateral discussions to strengthen WTO subsidies disciplines and encourages both governments to use this opportunity to establish key transparency provisions, as included in the USMCA.

B. Clearly define SOEs and “public body” based on an objective control standard

Most foreign government subsidies for semiconductors of relevant concern are being provided by state-owned banks or government-guided investment funds that may not possess or exercise “government authority,” or perform a “government function,” but are directly or indirectly controlled by the government through majority or minority ownership interests. SOEs and public bodies should be defined on an objective “control” or “power to control,” standard, such as that included in the USCMA. This will prevent SOEs, acting on behalf of governments, to take actions that discriminate against foreign investors and then evade challenge by asserting that they are not covered by the disciplines of the agreement.

C. Expand prohibited assistance (non-commercial assistance) to more effectively capture assistance that creates excess capacity or leads to market displacement

The most trade-distorting forms of domestic assistance in the semiconductor industry are production subsidies with the goal of import substitution, particularly those that create or maintain market-distorting excess capacity. Certain governments understand how to craft these harmful assistance programs in a way that may avoid WTO scrutiny under the current SCM agreement, including through equity infusions, loans, and grants. These assistance programs are sometimes referred to as “indigenization” or “nationalization” (which are code words for prohibited import substitution) or “global dominance efforts” (which is a code word for boosting export volumes in international markets). SIA notes that the USMCA prohibits certain forms of non-commercial assistance, including 1) loans or guarantees to an uncreditworthy SOE; 2) non-commercial assistance to an SOE that is insolvent or on the brink of insolvency without

“Regional Support Guidelines and Best Practices,” which are designed to clarify and improve the transparency of semiconductor support programs provided by GAMS regions.
a credible restructuring plan; and 3) debt-equity conversions that would be inconsistent with usual private investment practice. SIA recommends that the Administration prioritize the prohibition of these forms of non-commercial assistance in a U.S.-Japan agreement.

D. Ensure non-commercial assistance does not cause or threaten to cause adverse effects or injury to a targeted industry

We encourage the Administration to include criteria for situations in which non-commercial assistance threatens to cause broad-based adverse effects or injury, so that action can be taken before a U.S. industry is seriously harmed. The WTO SCM’s current provisions regarding “serious prejudice” and “threat” are flawed and ineffective since action typically cannot be taken until an industry is on death’s door or until the subsidizing WTO member is irrevocably committed to expanding capacity in a manner that will lead to market disruption. Threat of adverse effects or injury should cover situations in which non-commercial assistance would clearly create or lead to market-distorting excess capacity.

III. Strengthen trade secret protections

Trade secrets represent core business assets for semiconductor companies. In our industry, trade secrets include manufacturing know-how, chemical formulations, chip designs, and other proprietary information. Yet despite their tremendous importance, trade secrets remain extremely vulnerable, especially in jurisdictions with weak laws and/or enforcement practices. There are difficulties in enforcing trade secrets especially as related to gathering evidence of theft. Unlike other areas of IP, key evidence of misappropriation is not always readily available, and the burden is on the rights holder to produce such evidence, particularly with respect to inevitable disclosure when an employee departs one entity to work for a competitor. There are also difficulties in enforcing trade secrets. Enforcement against the third-party inducer (the hiring entity of a departed employee) is often difficult and remedies against the ex-employee are often inadequate. Also, sanctions are often lenient and thus do not act as a deterrent.

More problematic is the misappropriation of trade secrets enabled or encouraged as a result of government industrial policy. For example, China provides its domestic semiconductor industry, including SOEs, with massive subsidies and establishes specific technology development goals. While some Chinese semiconductor companies seek to develop technology by legitimate means, other Chinese state institutions, firms, and/or associated individuals may be enticed to illegally acquire or misappropriate technologies as a short-cut to achieving industry development goals and compete in the global marketplace. There have been numerous publicly reported instances in
which individuals employed by Chinese state-owned firms and/or their partners/affiliates have chosen to steal or misappropriate intellectual property from their previous employer.\footnote{Authorities Bust Group Stealing Win Semiconductors Trade Secrets. Focus Taiwan, November 6, 2015 \url{https://www.eetimes.com/document.asp?doc_id=1331144}, Samsung Electronics Executives Pass on Core Technology. SBS News, September 22, 2016: \url{http://v.media.daum.net/v/20160922211514100} (Korean).}

Another concern is the implementation by some governments of overbroad certification systems and other regulatory schemes that require the unnecessary disclosure of trade secrets and other IP as a condition of market access. The risk that the required sensitive information will leak to domestic competitors is compounded by the reality that many governments have inadequate safeguards to protect such information and some of those same governments desire increased technology transfer from developed to developing countries.

SIA takes note of the recent actions by the Department of Justice and the Department of Commerce to address the misappropriation of trade secrets in the semiconductor industry.\footnote{DOJ has announced a new initiative to combat IP theft from China, see \url{https://www.justice.gov/opa/speech/file/1107256/download}, and Commerce has recently taken action against one Chinese state-owned semiconductor company for using misappropriated technology in the development of its own products. See 83 Fed. Reg. 54,519 (Oct. 30, 2018).} We also applaud the strong trade secret disciplines in the USMCA. We call on the Administration to maintain a strong focus on the misappropriation of trade secrets by including strong protections in a U.S.-Japan Trade Agreement. Our specific recommendations are as follows:

1. Include the application of robust criminal prosecution and penalties for trade secret theft, including penalties for government officials who wrongfully disclose trade secrets
2. Ensure stronger confidentiality safeguards for trade secrets during litigation proceedings
3. Ensure enhanced remedies for trade secret theft, including compensatory damages
4. Ban excessive or discriminatory licensing conditions that dilute the value of trade secrets
5. Ban the forced disclosure of source code, or an algorithm embedded in that source code, as a condition or market access.

IV. **Prevent forced localization of digital infrastructure and technology transfer**

Governments are increasingly using “forced localization” tactics to advantage domestic companies and/or force foreign investors to use domestic technology, transfer their own technology, localize data storage and processing, or build expensive infrastructure in a region as a condition of market access. These rules raise costs, distort markets, reduce global interoperability, and increase the risk of unauthorized disclosure or theft of IP. SIA applauds the strong digital trade outcomes incorporated in the USMCA to counter these measures and encourages the Administration to prioritize similar disciplines in the U.S.-Japan negotiations - and all future U.S. trade agreements - to protect and strengthen digital trade. Specifically, Parties should agree to prohibit:

---

- local content requirements (the requirement to purchase or use local technology in products/services)
- technology transfer requirements (the requirement to transfer technology, production processes, or other proprietary information such as source code) as a condition of market access
- technology/infrastructure localization requirements (the requirement to build technology infrastructure, such as data storage centers, within a country’s borders)

V. **Permanently eliminate duties on electronic transmissions of data, data flows, and digital downloads**

The U.S. and Japan have long eliminated tariffs on ICT products and digital products transmitted electronically through their participation in WTO agreements like the Information Technology Agreement and WTO e-commerce moratorium. This duty-free treatment for both tangible and intangible ICT goods has helped ensure the free flow of ICT and digital products across borders, to the benefit of U.S. goods and services exporters of all sizes. However, some governments are challenging the WTO e-commerce moratorium banning customs duties on electronic transmissions, a ban that has been in effect on a rolling two-year basis since 1998. Noting the effort by some governments to let this moratorium expire and establish duty/tariff mechanisms on data flows, we encourage the US and Japan governments to establish a clear, unified position supporting duty-free treatment for digital goods (i.e. apps, ebooks, music) by including a permanent commitment to (i) not impose customs duties or fees on trade in electronic transmissions and digital products in a U.S.-Japan agreement; and (ii) jointly promote that ban to other governments.

**CONCLUSION**

Existing global trade rules are insufficient or ineffective at combatting discriminatory and market-distorting practices in the ICT sector. Current global trade tensions underscore the importance of establishing more robust global trade disciplines that protect and strengthen the U.S. semiconductor industry and the broader global digital economy. We urge the Administration to pursue these and other strong digital trade outcomes, as described in “The Semiconductor Seven: SIA’s Top Priorities for Trade Agreements,” in the U.S.-Japan negotiations. Firmly establishing digital trade rules will help counter growing restrictions on U.S. trade and set examples for other countries developing their own digital trade rules. SIA looks forward to working with the Administration on these important issues.