

Santa Clara Journal of International Law

Volume 20 | Issue 2 Article 2

4-7-2022

A REGULATORY BACK DOOR: GENERAL PROHIBITION TEN AND AMERICA'S NATIONAL SECURITY

Ramachandran, Vilas

Follow this and additional works at: https://digitalcommons.law.scu.edu/scujil



Part of the International Law Commons

Recommended Citation

Ramachandran, Vilas, A REGULATORY BACK DOOR: GENERAL PROHIBITION TEN AND AMERICA'S NATIONAL SECURITY, 20 SANTA CLARA J. INT'L L. 31 (2022).

Available at: https://digitalcommons.law.scu.edu/scujil/vol20/iss2/2

This Article is brought to you for free and open access by the Journals at Santa Clara Law Digital Commons. It has been accepted for inclusion in Santa Clara Journal of International Law by an authorized editor of Santa Clara Law Digital Commons. For more information, please contact sculawlibrarian@gmail.com.

A REGULATORY BACK DOOR: GENERAL PROHIBITION TEN AND AMERICA'S NATIONAL SECURITY

By Vilas Ramachandran*

Abstract

American leadership in innovation requires, among other things, an export control regime that adapts to the realities of trade in the twenty-first century. The United States understands that the importance of American leadership in innovation reaches far beyond a theoretical debate about American hegemony; it has implications for the national security of the United States. However, Section 736.2(b)(10) of the Export Administration Regulations, known as General Prohibition Ten, creates vulnerabilities that jeopardize the national security of the United States while also adding unnecessary costs to American exporters.

General Prohibition Ten makes it impossible for an American exporter to take control of an export once a violation of the Export Administration Regulations has occurred or is about to occur, which threatens American national security. In particular, the regulation reduces American "lead time" in innovation, fails to adapt to new classes of exports and threats, and fails to consider the economic impact of General Prohibition Ten. This article argues that General Prohibition Ten does not comply with Congressional intent and that the Department of Commerce should immediately reform the regulation.

-

^{*} University of Virginia School of Law, J.D., 2021. Associate at Troutman Pepper Hamilton Sanders LLP. I would like to express my gratitude to Professor A. Sprightley Ryan for her advice and feedback. I want to thank my parents, Kandethody and Usha Ramachandran, for all their support. My siblings Vikas and Varsha, as well as my sister-in-law, Vandhana, thank you all for the constant encouragement. All views and errors are my own.

TABLE OF CONTENTS

Introduc	TION	34
	STORICAL DEVELOPMENTS AND STATEMENTS OF POLICY: CONGRESSIONAL POLICY AND RATIONALES FOR AMERICAN EXPORT LAWS	36
A.	The Export Control Act of 1949: America's Cold War Strategy	36
	The Export Administration Act of 1979: A Focus on American National Security are racing the "Lead Time" Approach While Minimizing Restrictions on American rters	
C.	Perpetual Emergencies and Recent Legislative Reforms	39
	CURRENT REGULATORY LANDSCAPE SURROUNDING THE EXPORT ADMINISTRATION ATIONS AND GENERAL PROHIBITION TEN: LANGUAGE AND ENFORCEMENT MECHANISM 1	IS
A.	Export Administration Regulations: Overview of US Export Control Regime	41
i.	Scope of EAR and Items Subject to Regulation	42
II.	Violations of the EAR	42
B.	General Prohibition Ten: Full-Stop on the Export Process	43
i.	General Prohibition Ten Knowledge Requirement	44
ii.	Punishments for Violating General Prohibition Ten	45
iii.	Rationale for General Prohibition Ten	45
	VULNERABILITIES CREATED BY GENERAL PROHIBITION TEN: FROM THEORETICAL TO	46
A.	Mistakenly Shipped Goods: Unauthorized and Unanticipated End-Users	46
B.	Stolen or Replicated Technology: Export Freeze and the Port Vulnerability	47
C. Vulne	From Theoretical to Empirical: Real-World Examples of General Prohibition Ten's erabilities	
i.	Installed Bases in Libya: Inability to Take Control	48
ii.	Foreign Servers and General Prohibition Ten: Access Issues	49
iii.	Inability to Secure Exports: At the Mercy of the End-User	50
	THREE STRIKES: GENERAL PROHIBITION TEN IS INCONSISTENT WITH THE LEGISLATIVE OF CONGRESS	51
A.	First Strike: A Threat to American Leadership in Innovation	51
В.	Second Strike: Inability to Address New Threats and a New System of Exports	53
C.	Third Strike: A Failure to Accomplish Foreign Policy Goals and A Failure to	54

V.	ADAPTING GENERAL PROHIBITION TEN TO THE REALITIES OF THE TWENTY-FIRST	
CENT	URY: RETAINING EFFECTIVE CONTROL	55
CONCLU	JSION	57

Introduction

The end of World War II brought about unprecedented international stability, which spurred economic growth both in the United States and in nations around the world. Investors began to move capital across the globe, and in the past few decades, international trade has increased drastically.² Recognizing the importance of the rule of law in trade, Congress enacted a series of laws meant to encourage trade and globalization while discouraging bad faith behavior on the part of exporters.³ The United States understood that its leadership in innovation is a national security interest and that it was important for the nation to use its power to protect its intellectual property.⁴ Protecting American innovation has been a clear priority of Congress over the last fifty years and garners sweeping bipartisan support.⁵

However, for decades, foreign nation-states have been attempting to gain an edge on American innovation through intellectual property ("IP") theft in that nation or through American supply chain vulnerabilities. Such attempts at stealing IP have been successful numerous times.⁶ For example, in 2018, a federal grand jury indicted a state-owned enterprise of the People's Republic of China, and others, for crimes related to stealing trade secrets of an American semiconductor company for the benefit of the Chinese government. Like other IP being stolen, Semiconductors are vital for "military and defense technology, weaponry, and equipment; broader geopolitically significant technologies, such as Artificial Intelligence (AI) and Quantum Computing; and the critical infrastructure and services upon which the daily functioning of societies rest, such as 5G networks."8 IP theft is a growing problem, and its threat to the United States extends far past a theoretical debate about American hegemony. Stolen IP can have a real and lasting

¹ Charles S. Maier, The Two Postwar Eras and the Conditions for Stability in Twentieth-Century Western Europe, 86 AM. HIST. REV. 327, 328 (1981).

² WTO, WORLD TRADE REPORT 2008: TRADE IN A GLOBALIZING WORLD 15 (WTO eds., 2008), https://www.wto.org/english/res e/booksp e/anrep e/world trade report08 e.pdf.

³ INST. OF MED., NAT'L, ACAD. OF SCI., & NAT'L ACAD. OF ENG'G, FINDING COMMON GROUND: U.S. EXPORT CONTROLS IN A CHANGED GLOBAL ENVIRONMENT 61 (1991).

⁴ *Id*.

⁵ 50 U.S.C. § 4811(3).

⁶ NAT'L BUREAU OF ASIAN RES., UPDATE TO THE IP COMMISSION REPORT - THE THEFT OF AMERICAN INTELLECTUAL PROPERTY: REASSESSMENT OF THE CHALLENGE AND UNITED STATES POLICY 3 (Natl' Bureau of Asian Res. eds., 2017), https://www.nbr.org/wpcontent/uploads/pdfs/publications/IP Commission Report Update.pdf.

⁷ PRC State-Owned Company, Taiwan Company, and Three Individuals Charged with Economic Espionage, JUST. NEWS (Nov. 1, 2018), https://www.justice.gov/opa/pr/prc-state-owned-companytaiwan-company-and-three-individuals-charged-economic-espionage.

⁸ Melissa K. Griffith & Sophie Goguichvili, The U.S. Needs a Sustained Comprehensive, and Cohesive Semiconductor National Security Effort, THE WILSON CTR.: CTRL FORWARD. (Mar. 23, 2021), https://www.wilsoncenter.org/blog-post/us-needs-sustained-comprehensive-and-cohesivesemiconductor-national-security-effort.

⁹ The Damaging Effects of IP Theft, BERKLEY SCH. OF INFO. (Aug. 24, 2018), https://ischoolonline.berkeley.edu/blog/damaging-effects-ip-theft/.

impact on the national security of the United States, whether it be from a defense standpoint or an economic stability one. ¹⁰.

Any system of export regulation by a nation must balance the policy gains to be achieved through controls with the economic costs of their use. ¹¹ This article will argue that Section 736.2(b)(10) of the Export Administration Regulations ("EAR"), known as General Prohibition Ten, fails to balance policy rationales by creating vulnerabilities that jeopardize the national security of the United States and adds unnecessary costs to American exporters. This regulation, which sets forth appropriate export behavior, creates significant vulnerabilities for American exports that are in transit and poses serious national security concerns in both the short-and long-term for the United States.

Under General Prohibition Ten, once an exporter discovers that a violation of the EAR has occurred, ¹² the transport process must be halted completely, and products are left sitting along a supply chain route subject to theft, replication, damage, etc. Through legislation, Congress has directed the Department of Congress to create an export control regime that protects American innovation and national security. ¹³ As it stands, General Prohibition Ten does not achieve the intent of Congress and must be reformed.

To illustrate the need for reform and the tangible security risks that General Prohibition Ten poses to the United States, this article will holistically analyze General Prohibition Ten from enactment to the present day. Part One of the article will discuss the historical developments of the EAR's authorizing statutes and analyze Congress' intent for America's export control regime. Part Two will examine the current regulatory framework of General Prohibition Ten including the enforcement mechanisms. It will also highlight the policy rationale of the regulation. Part Three of the article will highlight the vulnerabilities created by General Prohibition Ten. Part Four will describe General Prohibition Ten's inconsistency with Congressional intent. Finally, Part Five will propose new language for General Prohibition Ten that accomplishes the Department of Commerce's goals, complies with Congressional intent, and protects the national security of the United States.

¹⁰ Cyber Espionage and the Theft of U.S. Intellectual Property and Technology: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. On Energy & Com., 113th Cong. 113-67 (2013) (statement of Rep. Henry A. Waxman, Member, H. Comm. On Energy & Commerce); Reggie Ash, Protecting Intellectual Property and the Nation's Economic Security, Am. Bar Ass'n: Landslide May 2014,

https://www.americanbar.org/groups/intellectual_property_law/publications/landslide/2013-14/may-june/protecting-intellectual-property-nations-economic-security/#33.

¹¹ Christopher J. Donovan, *The Export Administration Act of 1979: Refining United States Export Control Machinery*, 4 B.C. INT'L & COMP. L. REV. 77 (1981).

¹² Donovan, *supra* note 11, at 77.

¹³ 50 U.S.C. § 4811(3); 50 U.S.C. § 4813.

I. HISTORICAL DEVELOPMENTS AND STATEMENTS OF POLICY: CONGRESSIONAL POLICY GOALS AND RATIONALES FOR AMERICAN EXPORT LAWS

When Congress deliberated the United States' export control regime, its main goal was to secure America's national security and further the nation's interests around the world. 14 General Prohibition Ten as it is currently written does not conform to Congressional intent, as demonstrated by statements from Senators during Congressional debate as well as the language within the legislation itself. The section will provide a roadmap on the EAR and provide insight into how General Prohibition Ten was created and why it was created.

A. The Export Control Act of 1949: America's Cold War **Strategy**

The Cold War was the primary motivating factor for the development of export control regimes in the United States, just as it was for many policy decisions in the second half of the twentieth century. 15 In 1948, the United States began to impose licensing requirements on exports to the Soviet bloc, and then in 1949, Congress recognized the need for controls in the Export Control Act of 1949. ¹⁶ The primary objective of the export controls authorized in the Export Control Act of 1948 was to prevent or delay improvements in Soviet and Chinese military capabilities that could be accomplished or facilitated through the acquisition of Western technology and end products.¹⁷

The rationale behind preventing or delaying improvements in the military capabilities of our adversaries was derived from an understanding that, for political and economic reasons, it was neither possible nor even desirable for the West to maintain numerical equality with the mobilized troop strength or weaponry of Communist nations. 18 This understanding led to the "force multiplier" strategy of maintaining military superiority over potential adversaries. ¹⁹ The "force multiplier" strategy is just as important in the current geopolitical landscape as it was during

¹⁴ Export Control Provisions, FAS (Oct. 12, 1998, 5:19 PM), https://fas.org/nuke/control/export/provisions.htm#:~:text=The%20Export%20Control%20Act%2 0of, security%2C%20foreign%20policy%2C%20and%20short.

¹⁵ Institute of Medicine, National Academy of Sciences, & National Academy of Engineering, supra note 3; Alice Friend & Joseph Kiernan, The U.S. Government in the Cold War, in BY OTHER MEANS PART II: ADAPTING TO COMPETE IN THE GRAY ZONE 68, 68-71 (Ctr. For Strategic & Int'l Stud. eds., 2019), https://www.csis.org/analysis/case-study-us-government-cold-war.

¹⁶ Institute of Medicine, National Academy of Sciences, & National Academy of Engineering, supra note 3.

¹⁷ Institute of Medicine, National Academy of Sciences, & National Academy of Engineering, supra note 3.

¹⁸ Institute of Medicine, National Academy of Sciences, & National Academy of Engineering,

¹⁹ Institute of Medicine, National Academy of Sciences, & National Academy of Engineering, supra note 3.

the Cold War. The largest military threats to the United States come from China, Russia, and North Korea, most of which have a larger conventional force than the United States, which reinforces the need for the United States to be technologically superior to those nations. ²⁰ An inevitable outgrowth of this strategy, during the Cold War, was to control exports of goods and technology that had commercial, as well as military, applications. ²¹ By relying on the force multiplier strategy, NATO actively controlled "the export of militarily significant goods and technology, including arms and so-called dual-use items, which has continued until the present day." ²²

Unlike the current EAR, the regulations authorized by the Export Control Act of 1949 did not restrict exporters from securing exports once a violation has been discovered or should have been discovered.²³ The subsequent regulations made it unlawful to knowingly "export, dispose of, divert, transship, or reexport" goods in violation of any export control document or prior representation.²⁴

B. The Export Administration Act of 1979: A Focus on American National Security and Embracing the "Lead Time" Approach While Minimizing Restrictions on American Exporters

While the Export Administration Act of 1979 is not the authorizing legislation for the current EAR, it was the initial authorizing legislation of the EAR and was used as a pretext to create General Prohibition Ten.²⁵ The Act further illustrates General Prohibition's inconsistency with Congressional intent as it relates to safeguarding national security and minimizing costs on American Exporters. Congress enacted the Export Administration Act of 1979, the successor to the Export Control Acts of 1949 and 1969, because of a series of geopolitical and economic events that required a change in American export regimes.²⁶ This Act

²⁰ Forrest E. Morgan & Raphael S. Cohen, MILITARY TRENDS AND THE FUTURE OF WARFARE: THE CHANGING GLOBAL ENVIRONMENT AND ITS IMPLICATIONS FOR THE U.S. AIR FORCE 11 (RAND Corp. eds., 2020).

 ²¹ See Export Administration Regulation; Simplification of Export Administration Regulations 61
 Fed. Reg. 12714 (Mar. 25, 1996).
 ²² Id

²³ Paul H. Silverstone, *The Export Control Act of 1949: Extraterritorial Enforcement*, 107 U. Pa. L. Rev. 331, 337 (1959).

²⁴ 15 C.F.R. § 387.6 (1974).

²⁵ The Export Administration Act of 1979, previously codified at 50 U.S.C. §§ 4601-4623 ("EAA"), lapsed on August 20, 2001.The President, through Executive Order 13222 of August 17, 2001 (3 C.F.R., 2001 Comp. 783 (2002)) continued the Export Administration Regulations in effect under the International Emergency Economic Powers Act (50 U.S.C. § 1701, et seq.) (2012) ("IEEPA").

²⁶ Extension and Revision of the Export Administration Act of 1969: Hearings and Markup before the

Subcomm. on Int'l Econ. Pol'y and Trade of the House Comm. on Foreign Aff., 96th Cong., 1st Sess. 46 (1969) (statement of Marshall I. Goldman, Professor of

was also the origin of the EAR. The Act states that "it is the policy of the United States that export trade by United States citizens be given a high priority and not be controlled except when such controls (A) are necessary to further fundamental national security, foreign policy, or short supply objectives, (B) will clearly further such objectives, and (C) are administered consistent with basic standards of due process."²⁷ Legislators also understood that the Act must jointly minimize restrictions and achieve the foreign policy and national security goals of the United States. The Act says, "[i]t is the policy of the United States to restrict the ability to export only after full consideration of the impact on the economy of the United States and only to the extent necessary to further significantly the foreign policy of the United States or to fulfill its declared international obligations."²⁸

Congress' emphasis on minimizing restrictions arose as a result of a few factors. One was that the Soviet Union was increasingly becoming one of the world's major economic and military powers despite the embargo, so the United States needed to lower the cost on exporters to promote trade superiority by minimizing restrictions.²⁹ Trade superiority required an expansion of trade between Eastern and Western nations and the Export Administration Act of 1979 indicated a willingness to lower costs on American exporters by minimizing restrictions and thus facilitating increased trade.³⁰ The preface of the statute discloses that it is "[a]n Act to provide authority to regulate exports, to improve the efficiency of export regulation, and to minimize interference with the ability to engage in commerce."³¹ However, improvements to the technical and functional aspects of export licensing and more careful considerations of the economic and balance of payments impacts of controls, illustrated that the legislation was aimed to "free many unjustifiably controlled commodities" without sacrificing the United States' commitment to preserving national security.³²

A key aspect of geopolitics is that a nation cannot prevent another nation from eventually catching up, in terms of technological ability. ³³ But, it should take action to delay another nation from stealing its technological innovations.³⁴ This is known as the "lead time" approach. 35 The creation of the 1979 Act began with this basic presumption that controls only serve to delay rather than prevent the acquisition of technology.³⁶ In theory, such a lead time will allow the United States

²⁹ Donovan, *supra* note 11, at 84.

Economics, Wellesley College, and Associate Director, Russian Research Center, Harvard University).

²⁷ The Export Administration Act of 1979, Pub. L. No. 96-72, § 3, 93 Stat. 503 (1979).

³⁰ Donovan, *supra* note 11, at 84.

³¹ The Export Administration Act of 1979, Pub. L. No. 96-72, § 3, 93 Stat. 503 (1979).

³² Donovan, *supra* note 11, at 84.

³³ Donovan, *supra* note 11, at 94.

³⁴ Donovan, *supra* note 11, at 94.

³⁵ Donovan, *supra* note 11, at 94.

³⁶ Department of Defense Policy Statement on Export Control of United States Technology: Hearing Before the Subcomm. on Int'l Econ. Pol'y and Trade of House Comm. on Int'l Relations, 95th Cong., 1st Sess. 11-12 (1977) (Statement of Dr. Ellen Frost of the Department of Defense:

to advance technologically, so that when another nation eventually catches up to the previous technological standard, the United States is already at a higher level of technological superiority.³⁷ Though a complex global information landscape makes it almost impossible to completely prevent another nation from stealing technological innovations from the United States, General Prohibition Ten impedes Congress' intent of lengthening the lead time of American technological innovation by prohibiting exporters from securing exports, which makes it easier for a nation to steal American technology.

Further, Congress understood the necessity of avoiding lengthy delays for export licenses. For example, while detailing the provisions of the act, then-Congressman Bingham said that "[P]rocedural requirements for processing export license applications, including time limits for making licensing determinations, are established in order to reduce the long delays which frequently occur under current practice." Preventing delays is not only important from a purely financial perspective, but also from a national security and technological competitiveness standpoint. The longer the process takes of getting a product from exporter to customer, the more opportunity other nations have to steal technological information and reduce the "lead time" of the United States, jeopardizing American technological leadership. General Prohibition Ten dramatically increases delivery time, especially if during the Bureau of Industry and Security's ("BIS") investigation into the export violation, the export is damaged, stolen, lost, etc.

The Export Administration Act of 1979 illustrates Congressional intent as it relates to the export control regime of the United States, during a time where the United States had a formidable adversary in the Soviet Union. However, it is important to know whether the nation's policy goals have changed since the fall of the Soviet Union and whether General Prohibition Ten is in-line with post-Cold War Congressional intent, especially in an era of increased competition and confrontation with nations such as China.

C. Perpetual Emergencies and Recent Legislative Reforms

Although the Export Administration Act of 1979 expired in 1994, Presidents Clinton, Bush, Obama, and Trump reauthorized it, using their powers

[&]quot;Now our object is not, and cannot, be to delay the export of something once and for all. Technology is a moving train and the Russians are going to get there anyway in their own way and their own time. But our object is to delay their acquisition of certain critical technologies for certain periods of time. We are dealing here with a marginal concept. That is what "lead time" means.").

³⁷ *Id*.

³⁸ 98th CONG. REC. 13054-55 (daily ed. May 21, 1984) (statement of Rep. Bingham).

³⁹ Lauren G. Paul, *How to Improve Supply Chain Security (The Trick is to Keep it Moving)*, CSO (Sep. 30, 2004 7:00 AM), https://www.csoonline.com/article/2117699/supply-chain-security-how-to-improve-supply-chain-security-the-trick-is-to-keep-it-moving.html.

under the International Emergency Economic Powers Act. 40 Each President cited a threat to the national security, foreign policy, and economy of the United States to issue their executive order declaring that an emergency existed and that the 1979 act should be reauthorized.⁴¹

Congress understood the growing challenges that a highly competitive global trade network presented to the United States and mandated that the Department of Commerce respond to those challenges adequately, through the Export Control Reform Act of 2018.⁴² One of the primary policy motivations behind the John S. McCain National Defense Authorization Act, which contains the Export Control Reform Act of 2018 was the need to enhance U.S. export and investment controls to address concerns regarding the release of critical technologies to end uses, end users, and destinations of concern primarily China; as well as allowing American exporters to better compete against competing regulatory frameworks of competitor nations.⁴³ The statements of policy in the Export Control Reform Act of 2018 represent Congress' unambiguous intent as it pertains to the nation's export control regime. However, despite Congress' authorization, the Department of Commerce has not reformed General Prohibition Ten.

The Export Control Reform Act of 2018 gave the Department of Commerce the required authority to address the vulnerabilities in the export control regime such as those that General Prohibition Ten creates. 44 Congress tasked the BIS with updating U.S. export controls on emerging and foundational technologies that were essential to the national security of the United States. 45

In addition, the Export Control Reform Act of 2018 made Congress' intent clear as to the policy goals that any regulations the Department of Commerce going forward enacts must accomplish. First, Congress noted that "[t]he national security of the United States requires that the United States maintain its leadership in the science, technology, engineering, and manufacturing sectors, including foundational technology that is essential to innovation."⁴⁶ Further, Congress

⁴⁰ IEEPA grants sweeping powers to the President to control economic transactions. Congress has directed the President on numerous occasions to use IEEPA authorities to impose sanctions. Letter to Congressional Leaders on Continuation of Emergency Regarding Export Control Regulations, 2009, DAILY COMP. PRES. DOC. (Aug. 13, 2009); Message to the Congress Reporting on Export Control Regulations, 1995, WEEKLY COMP. PRES. DOC. (Mar. 21, 1995). ⁴¹ *Id.* at 10.

⁴² The Export Control Reform Act of 2018 became law in August of 2018 as part of the John S. McCain National Defense Authorization Act and passed with bipartisan support with a total of 87 votes in the Senate and 351 votes in the House of Representatives. H.R. 5515 Roll Call Vote, (https://clerk.house.gov/Votes/2018230); H.R. 5515 As Amended Senate Roll Call Vote,

⁽https://www.senate.gov/legislative/LIS/roll call lists/roll call vote cfm.cfm?congress=115&ses sion=2&vote=00128).

⁴³ H. R. REP. 116-333, at 667 (2019) (Conf. Rep.).

⁴⁴ 50 U.S.C. § 4811.

⁴⁶ 50 U.S.C. § 4811(3).

understood the need for America's export regime to adapt to the needs of the twenty-first century. Thus, Congress mandates that "[t]he export control system must ensure that it is transparent, predictable, and timely, has the flexibility to be adapted to address new threats in the future and allows seamless access to and sharing of export control information among all relevant United States national security and foreign policy agencies."⁴⁷ In addition to adapting to new threats, Congress intended for the nation's export control regime to be competitive with those of other nations, so that exporters are able to set prices at international market rates. Congress directed the Department of Commerce "[t]o use export controls only after full consideration of the impact on the economy of the United States and only to the extent necessary to restrict the export of items if necessary to further significantly the foreign policy of the United States or to fulfill its declared international obligations."⁴⁸

II. CURRENT REGULATORY LANDSCAPE SURROUNDING THE EXPORT ADMINISTRATION REGULATIONS AND GENERAL PROHIBITION TEN: LANGUAGE AND ENFORCEMENT MECHANISMS

The United States has established a complex export control regime and exporters have a duty to stay up to date on the regulations or be subject to large penalties and punishments. ⁴⁹ Beginning with a discussion of the EAR, followed by prohibited actions, under General Prohibition Ten, that an exporter must avoid once a violation has occurred or is reasonably likely to occur in connection with the item, this section will describe the current regulatory landscape surrounding the EAR and General Prohibition Ten. This section will illustrate the rigid structure of the EAR by walking through the scope of the regulations.

A. Export Administration Regulations: Overview of US Export Control Regime

The Export Administration Regulations, which house General Prohibition Ten, are administered by BIS.⁵⁰ The regulations control dual-use items as well as less-sensitive defensive articles.⁵¹ Dual-use items refer to certain items that can be used for both civil and military purposes.⁵² Some examples of dual-use items are lasers and sensors, navigation and avionics, propulsion systems and space vehicles, telecommunications and information security, etc.⁵³ The EAR's Commerce Control List ("CCL") provides a list of goods, software, and technology with varying levels

⁴⁷ 50 U.S.C. § 4811(8).

⁴⁸ 50 U.S.C. § 4811(1).

⁴⁹ 15 C.F.R. § 732.1(c).

⁵⁰ 15 C.F.R. § 764.1; Ian F. Fergusson, *The Export Administration Act: Evolution, Provisions, and Debate* 1 Cong. Rsch. Serv., RL31832, (2009); 50 U.S.C. § 4801(4).

⁵¹ 15 C.F.R. § 730.3.

⁵² *Id*.

⁵³ 15 C.F.R. pt. 774.

of controls, which are based upon a variety of national security and foreign policy reasons as well as the product's country of destination.⁵⁴

Scope of EAR and Items Subject to Regulation i.

The EAR applies to items, that are located within the United States, such as items shipped within the United States or items shipped from abroad that are currently located on U.S. soil; items that originated in the United States; foreignproduced items that contain more than a de minimis amount of controlled US-origin content; 55 and certain foreign-made products that are the direct product of specified American technology and software, such as a computer or phone that contains specified software.⁵⁶ The EAR also applies to re-exports, which is when an item is sent from one foreign country to another foreign country, as well as transfers, which is when an item is moved around within the United States.⁵⁷ It is the exporter's responsibility to determine whether the item/software they are exporting falls within the EAR through the CCL list.⁵⁸ The CCL contains a list of items used by BIS to identify more sensitive dual-use or civil items, as well as some less sensitive defense articles not falling under the ITAR.⁵⁹

Violations of the EAR ii.

Section 764.2 of the EAR specifies conduct that constitutes a violation of the EAR and defines the sanctions that may be imposed for such violations.⁶⁰ Section 764 describes the administrative sanctions that may be imposed by BIS and the criminal sanctions that may be imposed by a United States court.⁶¹ The following is a list of actions that constitute a violation: engaging in prohibited conduct, such as exporting a controlled item to embargoed nations like Cuba, Iran, and Syria⁶² or exporting a controlled item to an unauthorized end-user⁶³; causing, aiding, or abetting a violation; solicitation and/or attempting of a violation; conspiracy; acting with knowledge of a violation; misrepresentation and concealment of facts; evasion; failure to comply with reporting or, recordkeeping requirements; license alteration; and acting contrary to the terms of a denial order. ⁶⁴

⁵⁴ 15 C.F.R. § 738.1.

⁵⁵ 15 C.F.R. § 734.4.

⁵⁶ 15 C.F.R. § 734.3(a).

⁵⁷ 15 C.F.R. § 734.14.

⁵⁸ 15 C.F.R. § 732.1(d)(1).

⁵⁹ Meredith Rathbone and Hena Schommer, Export Controls in the United States, GLOBAL INVESTIGATIONS REVIEW (Aug. 17, 2020), https://globalinvestigationsreview.com/guide/theguide-sanctions/first-edition/article/export-controls-in-the-united-states.

⁶⁰ 15 C.F.R. § 764.2.

⁶¹ 15 C.F.R. pt. 764.

^{62 15} C.F.R. § 736.2(b)(6).

⁶³ 15 C.F.R. § 736.2(b)(5).

⁶⁴ 15 C.F.R. § 764.2.

B. General Prohibition Ten: Full-Stop on the Export Process

The EAR has been amended over the years with an eye towards simplification, although those efforts have failed.⁶⁵ The General Prohibitions, including General Prohibition Ten, were created when the Department of Commerce revised the EAR in 1996.⁶⁶ In 1996, the Secretary of Commerce submitted a report to Congress declaring that the Bureau of Export Administration would undertake a comprehensive review of the EAR to "simplify, clarify, and make the regulations more user friendly."⁶⁷ The Bureau of Export Administration developed a proposed rule, containing General Prohibition Ten, for seven months and streamlined the rules for when an export or reexport would require a license by creating ten general prohibitions.⁶⁸

Compared to the list of prohibited actions under the Export Control Act of 1949, General Prohibition Ten, which does not allow an exporter to sell, transfer, export, reexport, finance, order, buy, remove, conceal, store, use, loan, dispose of, transport, forward, or otherwise service its products; the restrictions, is more stringent. There is no available evidence that the list of prohibited actions under the Export Control Act of 1949 was underinclusive and led bad faith exporters to take advantage of the legislation as it is written. In fact, several commenters to the proposed rule, during the notice and comment phase, expressed a similar concern. ⁶⁹ The commenters stated that the proposed rule continued to present a complex set of requirements, and many commenters suggested fundamental decontrols and elimination of longstanding regulatory requirements. ⁷⁰ In response, BIS argued that they did not have the capacity to make fundamental changes to the policy set forth by the Congress.⁷¹ As mentioned previously, Congress intended for controls to protect American leadership in innovation and for such controls to take into account its impact on the American economy and exporters. To achieve such an end, Congress gave the Department of Commerce the authority to develop controls. BIS

⁶⁵ 15 C.F.R. pt. 768 et al (1994); 15 C.F.R. pt. 740 et al (1996); 15 C.F.R. pt. 736 et al; 15 C.F.R. pt. 732 et al; 15 C.F.R. pt. 734 et al; Notice of Proposed Revision and Simplification of export administration regulations, 59 Fed. Reg. 28 (Feb. 10, 1994); Export Administration Regulation; Simplification of Export Administration Regulations, 61 Fed. Reg. 12714 (Mar. 25, 1996); Conforming Changes to Certain End-User/End-Use Based Controls in the EAR: Clarification of the Term "Transfer" and Related Terms as Used in the EAR, 73 Fed. Reg. 68321-68328 (Nov. 18, 2008); Revisions to the Export Administration Regulations (EAR): Export Control Classification Number 0Y521 Series, Items Not Elsewhere Listed on the Commerce Control List (CCL), 77 Fed. Reg. 22191 (Apr. 13, 2012).

⁶⁶ Export Administration Regulation; Simplification of Export Administration Regulations, 61 Fed. Reg. 12714 (Mar. 25, 1996).

⁶⁸ Export Administration Regulation; Simplification of Export Administration Regulations, 60 Fed. Reg. 91 (proposed May 11, 1995).

⁶⁹ Export Administration Regulation; Simplification of Export Administration Regulations, 61 Fed. Reg. 12714, 12719 (Mar. 25, 1996).

⁷⁰ *Id*.

⁷¹ *Id*.

is correct in noting that it does not have the capacity to make fundamental changes to the policy set forth by Congress, however BIS does not need to change Congressional policies, but instead needs to comply with existing Congressional policies.⁷²

The specific language of General Prohibition Ten has not changed in almost thirty years. Under General Prohibition Ten, exporters must halt all activity associated with the item once a violation has been discovered by the exporter or BIS.⁷³ Section 736.2(b)(10) states that:

Proceeding with transactions with knowledge that a violation has occurred or is about to occur (Knowledge Violation to Occur). You may not sell, transfer, export, reexport, finance, order, buy, remove, conceal, store, use, loan, dispose of, transport, forward, or otherwise service, in whole or in part, any item subject to the EAR and exported or to be exported with knowledge that a violation of the Export Administration Regulations, the Export Administration Act or any order, license, License Exception, or other authorization issued thereunder has occurred, is about to occur, or is intended to occur in connection with the item. Nor may you rely upon any license or License Exception after notice to you of the suspension or revocation of that license or exception. There are no License Exceptions to this General Prohibition Ten in part 740 of the EAR.⁷⁴

As is evident from the regulatory language, once a violation has been discovered or is imminent, an exporter is almost powerless to take control of the export and secure it pending an investigation or BIS approval.

General Prohibition Ten Knowledge Requirement i.

Since General Prohibition Ten explicitly creates a scienter requirement, a simple violation by the exporter is not enough to trigger an export freeze. The exporter must have knowledge that a violation has occurred, is about to occur, or is intended to occur in connection with an item. 75 In practice, there are effectively two standards for punishing violators of General Prohibition Ten: A standard when pursuing criminal charges, and a standard for civil penalties. When pursuing criminal charges, the National Security Division of the Department of Justice ("DOJ") employs a willfulness standard to determine whether an exporter should have known whether a violation occurred. 76 In pursuing such charges, the DOJ employs the definition of willful from Bryan v. United States, which held that an act is willful if done with the knowledge that it is illegal. ⁷⁷ For civil cases under the

⁷² See discussion infra pt. IV.

⁷³ 15 C.F.R. § 764.4(b) (1996).

⁷⁴ 15 C.F.R. § 736.2(b)(10) (1996).

⁷⁵ *Id*.

⁷⁶ See Dep't of Just. Guidance Regarding Exp. Control and Sanctions Enf't Pol'y for Bus. Orgs., (Dec. 2019), https://www.justice.gov/jm/jm-9-90000-national-security.

⁷⁷ Bryan v. United States, 524 U.S. 184 (1998).

EAR there is typically no willful intent required to prove a violation.⁷⁸ Parties can be found liable for actions based on fraud, gross negligence, and negligence.⁷⁹

ii. Punishments for Violating General Prohibition Ten

Section 764.3 of the EAR sets out the penalties that exporters can face for violating General Prohibition Ten, both administrative and criminal. ⁸⁰ The Export Control Reform Act (ECRA) sets forth the administrative penalties to be used in the EAR. Civil penalties can include up to \$300,000 or twice the value of the transaction for each violation, whichever is greater. ⁸¹ Further, BIS has the authority to revoke the license it issued to the exporter and restrict the exporter's ability to export, re-export, or transfer any items subject to the EAR. ⁸² Criminal penalties can include a fine of up to \$1,000,000 per violation for a company and up to \$1,000,000 or imprisonment for up to twenty years, or both, for an individual. ⁸³

BIS strongly encourages exporters to self-report violations through a process known as voluntary self-disclosure by providing a fifty percent reduction in the base penalty amount, in most cases, with the possibility of full penalty suspensions for cooperating exporters. ⁸⁴

iii. Rationale for General Prohibition Ten

By mandating that exporters pause their exporting activity as a result of a violation of the EAR, the Department of Commerce is aiming to prevent bad-faith actors from getting rid of an export that caused a violation before an investigation can be completed. Using a crime scene analogy, General Prohibition Ten aims to preserve the crime scene and allows BIS to obtain all the necessary evidence to make a case for an EAR violation. Furthermore, the current language aims to prevent bad-faith exporters from completing the export process, which makes it increasingly difficult for BIS to seize the export or the funds from the sale. Essentially, BIS aims to avoid turning a simple violation into a larger issue that involves more parties or actors, which makes an investigation more complicated.

⁷⁸ Under the BIS and OFAC Enforcement Guidelines, "Awareness of Conduct at Issue" is a factor to be considered by the agency in assessing penalties, i.e., if a respondent had knowledge or reason to know that the conduct constituted a violation, this would justify a higher penalty amount. *See* Guidance on Charging and Penalty Determinations in Settlement of Administrative Enforcement Cases, 15 C.F.R. pt. 766, Supp. 1, Sec. III (2016).

⁷⁹ 19 U.S.C. § 1592 (2020).

^{80 15} C.F.R. § 764.3 (2020).

^{81 50} U.S.C. § 4819(c)(1)(A) (2020).

^{82 50} U.S.C. §§ 4819(c)(1)(B)–(C) (2020).

^{83 22} U.S.C. § 2778(c) (2014).

⁸⁴ 15 C.F.R. pt. 766, Supp. 1 (2016).

⁸⁵ See 15 C.F.R. § 736.2(b)(10). The use of the terms "dispose of" illustrate the Bureau's desire for the export to not be discarded of, which would further complicate the investigation.

⁸⁶ *Id.* The use of terms "export," "re-export," "sell," etc. illustrate the Bureau's desire to prevent the completion of the export process while an investigation is being conducted.

The BIS' rationale is not unjustified, but General Prohibition Ten can and must accomplish the goals of BIS without jeopardizing our national security and foreign policy goals.

III. **VULNERABILITIES CREATED BY GENERAL PROHIBITION TEN:** FROM THEORETICAL TO DISASTROUS

A. Mistakenly Shipped Goods: Unauthorized and **Unanticipated End-Users**

It is a violation of the EAR to export a product to an unauthorized enduser.⁸⁷ Doing so triggers General Prohibition Ten's provisions and freezes the export in place. There are times where exporters intentionally and in bad faith export items or data to unauthorized end-users and the BIS investigates and penalizes such exporters.⁸⁸ However, there are other times where an exporter mistakenly exports an item to an unauthorized end-user, which still triggers the export freeze under General Prohibition Ten.⁸⁹ In this case, the exporter can either self-disclose its violation or the end-user may report the violation to the BIS.⁹⁰ Either way, the exporter essentially cannot take control of the export while the BIS investigates the violation.⁹¹

The inability to take control of an export leaves the exporter at the mercy of the unauthorized end-user to secure the item and not let the product be stolen, replicated, damaged, etc. while the investigation is completed. 92 Other nations may take advantage of this vulnerability by coercing the unauthorized end-user into turning over the export to that nation's control or by allowing that nation to replicate the export before sending it back to the American exporter. 93 To this end, the United States understands that unauthorized end-users, in certain nations, are vulnerable to the pressures of other nations. 94 For example, the United States took action to secure

⁸⁸ Robert F. Seely, The Legal Department Must Take a Serious Look at Export Compliance, CORP. COUNS. BUS. J. (May 1, 2005), https://ccbjournal.com/articles/legal-department-must-take-seriouslook-export-compliance.

https://www.bis.doc.gov/index.php?option=com_content&view=article&id=711&catid=89.

⁸⁷ 15 C.F.R. pt. 744.

⁸⁹ 15 C.F.R. pt. 744; Revisions to the Unverified List (UVL), 86 Fed. Reg. 1766 (Jan. 11, 2021); Update 2014 Conference: Remarks of Eric L. Hirschhorn, Under Secretary for Industry & Security, U.S. DEP'T OF COM. (July 29, 2014),

⁹⁰ 15 C.F.R. pt. 766, Supp. 1 (2016).

⁹¹ 15 C.F.R. § 736.2(b)(10) (1996).

⁹² JOHN BARKER ET AL., MORE RESTRICTIONS ON GLOBAL SALES OF GOODS & TECHNOLOGY TO HUAWEI, (BNA 2020), https://www.arnoldporter.com/-

[/]media/files/perspectives/publications/2020/06/restrictionsonsalestohuawei.pdf?.

⁹³ Fergus Hanson, Emilia Currey & Tracy Beattie, The Chinese Communist Party's Coercive Diplomacy, ASPI (Sept. 1, 2020), https://www.aspi.org.au/report/chinese-communist-partyscoercive-diplomacy, (examines 152 cases of Chinese coercion: 100 against foreign governments and 52 against individual companies).

⁹⁴ Thomas Wright, The U.S. and China Finally Get Real With Each Other, THE ATLANTIC (Mar. 21, 2021), https://www.theatlantic.com/ideas/archive/2021/03/the-us-and-china-finally-get-real-

Lockheed Martin's F-35 technology in 2019 when the Republic of Turkey contracted with Russia to buy Russian surface-to-air missiles. ⁹⁵ While the majority of defense exports are under the authority of the ITAR rather than the authority of the EAR, certain components of military aircraft fall under the jurisdiction of the EAR because they are considered dual-use items. ⁹⁶ The United States was worried that Russia would coerce Turkey to hand over technology related to the F-35, which poses a direct national security threat to the United States. ⁹⁷ The Department of Defense said it was "taking prudent steps to protect the shared investments made in our critical technology." ⁹⁸

The inability to confidently rely on the end-user to act in good-faith or be free from the coercive nature of other nations, highlights the need for American exporters to secure an item pending an investigation. While there may be financial incentives for the unauthorized end-user to act in good faith, such as if the end-user has a business relationship with the exporter, the real vulnerability is when the export is mistakenly sent to an unauthorized end-user that has no connection to the exporter and thus no incentive to act in good faith.

B. Stolen or Replicated Technology: Export Freeze and the Port Vulnerability

In addition to the vulnerability of mistakenly shipped goods being subject to the good faith of unauthorized end-users, General Prohibition Ten also creates a vulnerability that American exports will be tampered with during transit along the supply chain when the export freeze takes effect. According to the National Cargo Security Council, lost or stolen cargo is estimated to cost \$50 billion annually. That number incorporates mislaid and mislabeled cargo losses as well as losses involving criminal behavior such as breaking into ports to steal goods. Globally, eighteen percent of all cargo theft consists of theft from a facility, second only to

with-each-other/618345/; Joseph Choi, Blinken Warns of US Pushback to Any Chinese 'Coercion and Aggression', THE HILL (Mar. 16, 2021, 7:30 AM),

https://thehill.com/policy/international/china/543347-blinken-warns-of-us-pushback-to-any-chinese-coercion-and.

⁹⁵ Ryan Browne, *U.S. Suspends Delivery of F-35 Jet Equipment to Turkey*, CNN (Apr. 2, 2019, 1:02 AM), https://www.cnn.com/2019/04/01/politics/us-f-35-suspend-turkey.

⁹⁶ See 22 C.F.R. §121.1 n. 3 to paragraph (F).

⁹⁷ Karen De Young, U.S. Suspends Turkey's Participationin F-35 Fighter Program Over Ankara's Purchase of Russian System, The Washington Post (April 1, 2019),

https://www.washingtonpost.com/world/national-security/us-suspends-turkeys-participation-in-f-35-fighter-program-over-ankaras-purchase-of-russian-system/2019/04/01/c38a16be-54b6-11e9-8ef3-fbd41a2ce4d5_story.html (""I'm glad the administration is heeding the bipartisan call in Congress to delay the transfer of F-35 equipment to Turkey to help ensure U.S. military technology and capabilities cannot fall into the hands of the Kremlin," – Senator Shaheen).

98 Id

⁹⁹ Eva Grey, *Cargo Theft: A Billion-Dollar Problem*, SHIP TECHNOLOGY (Feb. 4, 2020, 7:30 AM), https://www.ship-technology.com/features/featurecargo-theft-a-billion-dollar-problem-5882653/. ¹⁰⁰ See Grey, *supra* note 99.

hijackings. 101 Following the events of September 11th, the United States required federal agencies, ports, and vessel owners to take numerous steps to upgrade security. 102 Exporters prefer constant movement of product along the supply chain and into the authorized user's possession, as this allows the security risk of theft to be reduced. 103 However, General Prohibition Ten's export freeze forces an exporter to pause the export of a product whenever required, regardless of where it is along the supply chain, which increases the chances that the product will be stolen or damaged. The American exporter is unable to secure the item and is at the mercy of the warehouse or port, where the export has been halted, to secure the product and avoid theft. While ports across the world have increased security to avoid theft, the regulation still presents a vulnerability that an American export could be stolen as those with the intent of stealing the product are aware that during a freeze the export is at its most vulnerable. 104

C. From Theoretical to Empirical: Real-World Examples of General Prohibition Ten's Vulnerabilities

The inability to take control of an export, whether it be a tangible or intangible good, has made it difficult for American exporters to secure their export, comply with the EAR, and compete with foreign exporters. This section will illustrate how the vulnerabilities mentioned previously have been felt by American exporters.

Installed Bases in Libya: Inability to Take Control i.

In 2004, BIS announced its intention to amend the EAR to implement the President's decision to modify the United States' sanctions against Libya, in response to Libya's continuing efforts to dismantle its weapons of mass destruction and missile programs, and its renunciation of terrorism. 105 Two respondents to the notice of proposed rulemaking requested relief from General Prohibition Ten because the "application of this broad prohibition to U.S.-origin items already in Libya has already created considerable confusion among U.S. exporters and contractors, particularly those who may be requested to repair, upgrade or otherwise

¹⁰² See Maritime Transportation Security Act of 2002, Pub. L. No. 107-295 (2002).

¹⁰¹ DeYoung, *supra* note 97.

¹⁰³ Lauren G. Paul, How to Improve Supply Chain Security (The Trick is to Keep it Moving), CSO (Sep. 30, 2004, 7:00 AM), https://www.csoonline.com/article/2117699/supply-chain-securityhow-to-improve-supply-chain-security-the-trick-is-to-keep-it-moving.html.

¹⁰⁴ See Grey, supra note 99 ("Over the past few years, however, the industry has tightened regulations in order to boost the safety of containers at sea...In 2014, amendments to the Safety of Life at Sea (SOLAS) Convention required verification of container weights before packed containers may be loaded aboard ships. That same year, the International Maritime Organization (IMO), together with the United Nations Economic Commission for Europe (UNECE), approved a code of practice for the packing of Cargo Transport Units, with the aim of improving safety when handling containers.").

¹⁰⁵ Revision of Export and Reexport Restrictions on Libya, 69 Fed. Reg. 23626 (Apr. 29, 2004).

deal with these items or the systems in which they are incorporated." ¹⁰⁶ Essentially, the embargo made it a violation to service installed base items in Libya, which are the exporter's U.S.-origin items currently in use. 107 A commenter reported that "[o]ver the period of the embargo, it is inevitable that Libyan end-users acquired U.S.-origin equipment, systems, parts, or software from resellers around the world" and this would be a violation of General Prohibition Ten because at the time of the embargo the end-users were not authorized to have the installed base items. ¹⁰⁸ Some of these end-users may not have even been aware of the U.S. jurisdiction of the items they acquired, such as U.S.-origin software in computer systems produced outside the United States and carrying non-U.S. brand names. In other instances, end-users may have incorrectly assumed that non-U.S. equipment resellers had complied with the U.S. de minimis rules." The inability to take repair, upgrade, or otherwise deal with the item put American exporters at a competitive disadvantage, compared to foreign exporters in Libya, by allowing foreign exporters access to the IP of the American exporter unable to service its product and had "the potential to paralyze a significant portion of U.S. export trade and commerce with Libya." ¹¹⁰ In response, BIS was unwilling to grant general amnesty, in relation to General Prohibition Ten, but did allow the commenters to repair the items once the embargo was lifted. 111 This example also highlights an inconsistency with BIS' position on General Prohibition reform. In 1996, BIS argued that it did not have the authority to change its policy on General Prohibition Ten, but in 2004, BIS was simply unwilling to grant general amnesty, which implies that BIS recognizes its authority to revise General Prohibition Ten. 112 A one-time solution is not effective or efficient in the long-term and BIS must reform General Prohibition Ten to prevent this from happening again.

ii. Foreign Servers and General Prohibition Ten: Access Issues

As mentioned previously, BIS controls the export of dual-use and less sensitive military items through the EAR.¹¹³ In 2018, BIS sought public comment on criteria for identifying emerging technologies essential to U.S. national security to help inform the interagency process to identify and describe such emerging

¹⁰⁶ Industry Coalition on Technology Transfer, Record of Comments: Revision of Export and Reexport Restrictions on Libya, (Jun. 1, 2004),

 $[\]underline{https://efoia.bis.doc.gov/index.php/documents/public-comments/727-export-and-reexport-restrictions-on-libya/file.}$

¹⁰⁷ Id.

¹⁰⁸ AeA, Record of Comments: Revision of Export and Reexport Restrictions on Libya, (Jun. 1, 2004), https://efoia.bis.doc.gov/index.php/documents/public-comments/727-export-and-reexport-restrictions-on-libya/file.

¹⁰⁹ Id.

¹¹⁰ See Industry Coalition on Technology Transfer, supra note 107.

¹¹¹ See Revision of Export and Reexport Restrictions on Libya, supra note 106.

¹¹² See Export Administration Regulation, supra note 70.

¹¹³ See 15 C.F.R. § 730.3.

technologies. 114 One commenter highlighted the issues that the creation of new controls on previously uncontrolled technologies would create for American exporters because of the prohibited actions under General Prohibition Ten. 115 According to the commenter, "the creation of new controls on previously uncontrolled technologies could effectively result in immediate violations with respect to such technology located outside the United States, such as that stored on servers outside the U.S. that are accessed regularly by foreign persons. 116 Furthermore, the ability of such exporters to compete economically decreases, "as companies need to shut down access to previously open servers in order to create new control programs, determine how many violations occurred merely as a result of the change in control status of the technology."117 The identification of even one violation as a result of the change in control status triggers General Prohibition Ten, which then forbids the tech company from conducting the range of actions specified in the prohibition, including implementing new controls. In the best case scenario, an inability to take control of the technology forces the exporter to sacrifice research and economic competitiveness. In the worst-case scenario, General Prohibition Ten leaves the technology vulnerable to foreign interference. To prevent this, the Department of Commerce needs to reform General Prohibition Ten.

Inability to Secure Exports: At the Mercy of the iii. **End-User**

In May 2020, BIS announced changes to a rule that imposes restrictions on transfers, equipment, or software to Huawei Technologies Company, Ltd. 119 The rule amended General Prohibition Three, by imposing new control over certain foreign-produced items, when there is knowledge that such items are destined to a designated entity on the entity list. 120 U.S. exporters would be in compliance risk if the exporter provides the covered U.S. origin software or technology to a non-Huawei entity with knowledge or reason to know that the recipient will sell such technology to Huawei. 121 General Prohibition Three makes it a violation for the technology to end up in Huawei's possession. 122 However, General Prohibition Ten

¹¹⁴ Review of Controls for Certain Emerging Technologies, 83 Fed. Reg. 58201 (Nov. 19, 2018).

¹¹⁵ Semiconductor Industry Association, Comment on Advanced Notice of Proposed Rulemaking Regarding Review of Controls for Certain Emerging Technologies (Jan. 10, 2019), https://www.semiconductors.org/wp-content/uploads/2019/01/BIS-ANPRM-on-emergingtechnology-jan-10.pdf.

¹¹⁶ *Id*.

¹¹⁷ Id

¹¹⁸ See 15 C.F.R. § 736.2 (referencing GP10).

¹¹⁹ Export Administration Regulations: Amendments to General Prohibition Three (Foreign-Produced Direct Product Rule) and the Entity List, 85 Fed. Reg. 29849 (May 19, 2020).

¹²⁰ 15 C.F.R. §§ 730, 732, 736, 744 (2022); Export Administration Regulations; Amendments to General Prohibition Three (Foreign-Produced Direct Product Rule) and the Entity List, 85 Fed. Reg. 29849 (May 19, 2020) (to be codified as 15 C.F.R. pts 730-774).

¹²¹ Export Administration Regulations: Amendments to General Prohibition Three (Foreign-Produced Direct Product Rule) and the Entity List, 85 Fed. Reg. 29849 (May 19, 2020). ¹²² *Id*.

makes it impossible to close access to the software or technology if the exporter determines that the non-Huawei entity will sell the item to Huawei because at that point General Prohibition Ten's export freeze would have already taken effect. ¹²³ The U.S. exporter could seek assurances from foreign manufacturers that the foreign manufacturer would not sell covered products to Huawei listed entities, but that would still leave the U.S. exporter at the mercy of that manufacturer to uphold such an assurance.

IV. THREE STRIKES: GENERAL PROHIBITION TEN IS INCONSISTENT WITH THE LEGISLATIVE INTENT OF CONGRESS

The intent of Congress in the Export Control Reform Act of 2018 was three-fold: first, the United States should maintain its leadership in innovation; second, the United States should adapt to address new threats in the future; and third, the United States should accomplish its foreign policy goals while considering the impact on the economy of the United States. This section will explain how General Prohibition Ten does not accomplish any of the three goals that Congress instructed the Department of Commerce to comply with. To borrow a line from baseball, it is three strikes and you are out for General Prohibition Ten.

A. First Strike: A Threat to American Leadership in Innovation

In 1960, the United States was the global leader in research and development, accounting for 69 percent of the world's research and development. Today, other nations have increased their aspirations to be the global leader in innovation, and the United States' share of the world's research and development has been cut to 30 percent. Thus, the United States' leadership in innovation is under threat. President Biden, during his presidential campaign and during the beginning days of his presidency, saw the increased competition regarding research and development as one between democracy and autocracy. A renewed commitment towards competition between the United States and other nations is multi-faceted and encompasses areas such as trade law, foreign policy, human rights law, IT and cyber regulations, the emerging cryptocurrency regulatory world, etc. Export controls are a large aspect of any competition campaign against nations such as China, and an important first step is identifying and correcting the vulnerabilities that exist within the current export control regime.

¹²³ 15 C.F.R. § 736.2(b)(10) (2022).

¹²⁴ John F. Sargent Jr., CONG. RES. SERV., R45403, The Global Research and Development Landscape and Implications for the Department of Defense (2021).

¹²⁶ Mir Sadat, *Why Innovation is so Important to America's Global Leadership*, THE HILL (Nov. 22, 2020, 9:00 AM), https://thehill.com/opinion/technology/526535-why-innovation-is-so-important-to-americas-global-leadership.

¹²⁷ David E. Sanger, *Biden Defines His Underlying Challenge with China: 'Prove Democracy Works'*, N.Y. TIMES (Mar. 26, 2021), https://www.nytimes.com/2021/03/26/us/politics/biden-china-democracy.html.

General Prohibition Ten threatens American leadership in innovation by creating vulnerabilities in the supply chain for bad-faith actors to steal, replicate, or otherwise tamper with American exports.

In Section I, the "lead time" approach was identified and defined. While the lead time approach has its origins in the Cold War, where the two superpowers were attempting to gain the edge in innovation and technology, it is still relevant and applicable today in a competitive environment with China. 128 The United States must ensure that dated regulations do not prevent American exporters from protecting their innovations. Nations like China publicly subscribe to aspirations of replacing the United States as the leader in science, technology, engineering, and manufacturing; and have attempted to steal such technology or information from the United States. 129 The National Intelligence Council, in a report on Global Trends for the next twenty years, predicts that "strengthened economic interdependence lowers the risk of the major powers pursuing armed conflicts; most of them engage in influence operations, corporate, espionage, and cyber-attacks that allow them to achieve goals without risking destructive wars. 130 Other nations will continue to find vulnerabilities to exploit American laws and regulations to gain an edge on the United States, and these moves threaten U.S. leadership in innovation and technology.

General Prohibition Ten negatively impacts the United States' ability to compete with other nations and jeopardizes the nation's leadership in innovation because it presents the opportunity for bad-faith actors to steal or replicate technology during export freezes. To reiterate, General Prohibition Ten prevents exporters from taking control of a product while an investigation into the EAR violation ensues. As noted earlier, a simple mis-shipment constitutes a violation under the EAR and leaves American exporters at the mercy of the incorrect enduser to send the item back without tampering with it or stealing valuable IP. If the end-user operates in bad faith, then the IP could be lost to other nations, which could replicate or steal the technology, hampering the United States' advantage in innovation. Essential IP valuable to the United States could end up in the hands of unauthorized parties, who instead of returning the export back to the American exporter could, theoretically, sell it to the highest bidder. That would significantly reduce American "lead-time" for certain products.

¹²⁸ Audrey Cher, 'Superpower Marathon': U.S. May Lead China in Tech Right Now — But Beijing has the Strength to Catch Up, CNBC (May 17, 2020, 9:43 PM), https://www.cnbc.com/2020/05/18/us-china-tech-race-beijing-has-strength-to-catch-up-with-uslead.html.

¹²⁹ David H. Laufman et al., The Department of Justice's National Security Division Chief Addresses China's Campaign to Steal U.S. Intellectual Property, NAT'L L. REV. (Aug. 24, 2020), https://www.natlawreview.com/article/department-justice-s-national-security-division-chiefaddresses-china-s-campaign-to; China's Got a New Plan to Overtake the U.S. in Tech, BLOOMBERG NEWS (May 20, 2020, 5:00 PM), https://www.bloomberg.com/news/articles/2020-05-20/china-has-a-new-1-4-trillion-plan-to-overtake-the-u-s-in-tech.

¹³⁰ NAT'L INTEL. COUNCIL, GLOB. TRENDS 2040: A MORE CONTESTED WORLD (2021).

B. Second Strike: Inability to Address New Threats and a New System of Exports

As mentioned before, General Prohibition Ten was created during the Clinton Administration's attempt to streamline the EAR. 131 The internet had yet to be widely commercialized, ¹³² and trade differed widely from the system of trade that exists today. 133 During the 1990s, the ability of foreign nations to intercept exports and steal valuable IP was limited to physically coming into contact with the product. The risk of this happening was fairly limited because the risk of being caught during this attempt would be high. However, trade has expanded from physical products to items such as software and IP theft has "been made easier and more anonymous" by modern technology. 134 The ease at which IP can be stolen using modern technology, also means it has increasingly become harder for U.S. tech exporters to protect it. Such an endeavor is made even harder or in some cases futile when General Prohibition Ten forbids the exporter from securing the software after knowing a violation has occurred or may occur. While trade now encompasses twenty-first-century technology like software, American regulations, specifically General Prohibition Ten have yet to catch up. Just as General Prohibition Ten makes it difficult for exporters to secure physical products, it also makes it almost impossible to secure non-tangible exports such as software and programs. In the case of an export being sent to an unauthorized end-user applies especially to intangible exports, American exporters will again have to rely on the unauthorized end-user to send the software back to the exporter without replicating or tampering with it. Relying on unauthorized end-users to act in good-faith, presents a glaring vulnerability that other nations will exploit to get American software either by paying the unauthorized user for the export or by recognizing that the export is at its most vulnerable from a security standpoint during an export freeze and proceeding to tamper with it. Uncontested is the fact that U.S. tech exporters will always face the threat of IP theft, and many exporters have created robust procedures to take action once a threat has been identified. However, when General Prohibition Ten is triggered, the exporter is unable to deploy such measures to secure their IP.

Not only does General Prohibition Ten not adapt to new categories of exports, it also does not adapt to the new non-tangible threats that have arisen. In many cases, nation-states sponsor cyber-attacks in an attempt to steal software from other nations. Software companies send products to customers through a series

¹³¹ Export Administration Regulation; Simplification of Export Administration Regulations, 61 Fed. Reg. 12714, 12719 (Mar. 25, 1996).

¹³² John Naughton, *The Evolution of the Internet: From Military Experiment to General Purpose Technology*, 1 J. CYBER POL'Y 5, 12 (2016) (First internet boom occurred in 1995).

¹³³ WTO, Trade in Goods and Services Has Fluctuated Significantly Over the Last Twenty Years (2015).

¹³⁴ Andrew F. Popper, *More than the Sum of All Parts: Taking on IP and IT Theft Through a Global* Partnership, 12 NW J. TECH. AND INTELL. PROP., 254, 254 (2014).

¹³⁵ Press Release, U.S. Dep't of Just., State-Sponsored Iranian Hackers Indicted for Comput. Intrusions at U.S. Satellite Co. (Sept. 17, 2020); *Cyber Espionage and the Theft of U.S.*

of servers located in different nations to ensure the product remains operational when it reaches the end-user. 136 While many companies ensure that their servers are secure despite the destination, as soon as software leaves the United States, the threat of a cyber-attack or state-sponsored coercion to steal the software increases. U.S. servers are subject to domestic laws and regulations that prevent the government from accessing such servers without proper process. 137 Such statutes and regulations create more secure servers in the United States, however foreign servers may not always be subject to such protective regulations, which can lead to vulnerabilities. 138 The vulnerability is only compounded because of General Prohibition Ten. In the example of the software company above, a violation of the EAR triggers General Prohibition Ten, which mandates that the software company halt the export of the software pending an investigation. Once triggered, the exporter can no longer take measures to secure the software. The inability to secure software while an investigation is pending is a vulnerability for tech companies that may lead to theft or tampering.

C. Third Strike: A Failure to Accomplish Foreign Policy Goals and A Failure to Consider the Economic Impact

Stolen IP from China alone costs American companies between \$225 billion and \$600 billion every year. 139 While the vast majority of the stolen IP is not a result of General Prohibition Ten, the regulation imposes significant costs on American exporters without accomplishing the foreign policy goals of the United States. The Biden Administration has made competition with China a large aspect of the foreign policy of the United States, which necessitates that American exporters need to trade at a competitive advantage. 140 General Prohibition Ten, as it is currently written, does not accomplish this goal. The regulation increases the costs on American exporters because it forces exporters to leave their IP unsecured while an investigation takes place, which leaves such property subject to theft. Stolen and subsequently replicated technology leaves American companies holding the bag for research and development costs, while the replicated technology is able to trade at

Intellectual Property and Technology: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. On Energy & Com., 113th Cong. 113-67 (2013) (statement of Larry M. Wortzel, Ph.D. Commissioner, U.S.-China Economic and Security Review Commission) ("The strong correlation between compromised U.S. companies and those industries designated by Beijing as strategic further indicate state sponsorship, direction, and execution of China's cyber espionage.").

¹³⁶ See Semiconductor Industry Association, supra note 115 (comment from vulnerability section). ¹³⁷ 18 U.S.C. § 2703 (2018).

¹³⁸ Roger Yu, More U.S. Companies Push Back on Foreign Must-Store-Data-Here Rule, USA TODAY (Aug. 12, 2017, 9:00 AM), https://www.usatoday.com/story/money/2017/08/12/more-u-scompanies-push-back-foreign-must-store-data-here-rule/558702001/.

¹³⁹ Sherisse Pham, How Much Has the US Lost From China's IP Theft?, CNN (Mar. 23, 2018, 5:35 AM), https://money.cnn.com/2018/03/23/technology/china-us-trump-tariffs-iptheft/index.html.

¹⁴⁰ Ella Nilsen & Alex Ward, Biden is Using His Economic Plan to Challenge China, Vox (Apr. 26, 2021, 8:30 AM), https://www.vox.com/22350402/biden-infrastructure-plan-foreign-policychina.

a far lower cost.¹⁴¹ This substantially reduces the competitive advantage of American exporters.

Congress has been explicit in its authorizing legislation over the EAR that its intent is to ensure that the export control regime of the United States would better the national security of the United States by maintaining American leadership in innovation, helping the U.S. adapt to new threats, and maintain American exporters competitiveness by not imposing large unnecessary costs. General Prohibition Ten, as it is currently written accomplishes none of Congress' goals set forth in the Export Control Reform Act of 2018.

V. ADAPTING GENERAL PROHIBITION TEN TO THE REALITIES OF THE TWENTY-FIRST CENTURY: RETAINING EFFECTIVE CONTROL

As mentioned previously, the Department of Commerce has the authority to change General Prohibition Ten. Congress was explicit as to its policy goals for the EAR; and General Prohibition Ten does not achieve the policy goals set forth. However, as mentioned in Part II, the underlying policy rationales, such as preventing bad-faith exporters from violating export controls, that serve as the foundation for General Prohibition Ten are important and new regulatory language should accomplish those as well.

This section presents a new approach to General Prohibition Ten that would prevent bad-faith exporters from taking advantage of the regulation, while also protecting American leadership in innovation and upholding American national security by allowing exporters to secure their exports while BIS conducts its investigation into the exporters' EAR violation.

The Department of Commerce should refine the list of prohibited actions to be less restrictive on the exporter, which would allow the exporter to secure the item. Further the Department of Commerce should incorporate §772.1(a) into General Prohibition Ten, which would allow the exporter to take effective control of the export. The proposed language is as follows:

Proceeding with transactions with knowledge that a violation has occurred or is about to occur (Knowledge Violation to Occur). You may not sell, export, reexport, finance, order, buy, remove, conceal, loan, dispose of, or otherwise service, in whole or in part, any item subject to the EAR and exported or to be exported with knowledge that a violation of the Export Administration Regulations, the Export Administration Act or any order, license, License Exception, or other authorization issued thereunder has occurred, is about to occur, or is intended to occur in connection with the item. Nor may you rely upon any license or License Exception after notice to you of the suspension or revocation of that license or

¹⁴¹ THE NAT'L BUREAU OF ASIAN RES., *The IP Commission Report: The Report of the Commission on the Theft of American Intellectual Property* (2013), https://www.nbr.org/wp-content/uploads/pdfs/publications/IP_Commission_Report.pdf.

exception. You may transfer, remove, store, use, transport, forward the item, in order to retain effective control of an item, pending an investigation into the violation. There are no License Exceptions to this General Prohibition Ten in part 740 of the EAR.

"Effective Control" is defined in §772.1(a) of the EAR in the following way: "You maintain effective control over an item when you either retain physical possession of the item, or secure the item in such an environment as a hotel safe, a bonded warehouse, or a locked or guarded exhibition facility." 142 Retention of effective control over an item is a condition of certain temporary exports and reexports.¹⁴³ Temporary exports and re-exports apply to products that are only exported to another nation for a short amount of time such as during an exhibition, assembly, etc. 144 It is clear that the purpose of §772.1(a) is to ensure security of an export, which is the reason that placing it in General Prohibition Ten provides great utility, as long as the Commerce Department includes software in the definition of "effective control."

The proposal is in line with the policy rationales of General Prohibition Ten when it was originally written. First, the proposal does not allow a bad-faith exporter from completing the export process and thus making a BIS investigation harder if not impossible. The bad-faith exporter will not be able to get rid of the product before an investigation because the proposal keeps "dispose of" in the prohibited list of actions.

In addition to achieving the policy goals of the Department of Commerce, this proposal also brings General Prohibition Ten into line with the intent of Congress in the Export Control Reform Act of 2018. In terms of American leadership in innovation, this proposal helps to maintain the "lead time" in technology of the United States by getting rid of the vulnerability that the regulation presented. It allows the exporter to secure the export and prevent other actors from stealing, replicating, or damaging the item. Further, the proposal adapts to the new threats that the twenty-first century presents. This proposal allows exporters of nontangible exports to secure the item by storing the software or forwarding the item to a more secure server, but only to gain effective control of the item. Finally, the proposal takes into account the economic costs of such a regulation, while accomplishing the foreign policy goals of the United States. The proposal understands the costs that exporters have spent to develop their IP by allowing the exporter to secure the item while the investigation is pending.

Overall, this preserves the "crime scene" so that BIS investigators can conduct their investigation properly and accurately. The proposal also allows exporters to secure their export in the interim while the investigation takes place,

¹⁴² 15 C.F.R. § 772.1(a) (1996).

¹⁴⁴ 15 C.F.R. § 740.9 (1996).

which is economically advantageous for the exporter but also advantageous for the national security and foreign policy goals of the United States.

CONCLUSION

The upcoming decades will be marked by strong competition between the United States and other emerging powers such as China. The nature of trade has evolved greatly from the end of World War II and the Cold War; and will continue to evolve as new technologies and exports become more common. Just as the nature of trade continues to evolve so must American regulations. General Prohibition Ten creates glaring vulnerabilities that can jeopardize American leadership in innovation and thus curtail American national security and foreign policy. General Prohibition Ten should be able to prevent bad-faith exporters from getting rid of evidence pertaining to an EAR violation, while also allowing exporters to secure items, during the BIS' investigation, to protect the exports from theft, replication, or damage. The proposal outlined above allows for both goals to be accomplished simultaneously. In doing so, the proposal secures the vulnerabilities that the current iteration of General Prohibition Ten creates and thus, protects America's leadership in innovation. While America's leadership in innovation is multi-faceted and reforming General Prohibition Ten is not a sufficient condition in maintaining such leadership, it is a necessary aspect of an effort to maintain it. In a century that will be marked by competition between democratic and autocratic governments, the United States should reform its regulatory environment to give American exporters the ability to secure its IP and such an effort must begin with the Department of Commerce reforming General Prohibition Ten.