UNITED STATES DEPARTMENT OF COMMERCE
Assistant Secretary for Export Administration
Washington, D.C. 20230

Statement of
Thea D. Rozman Kendler
Assistant Secretary of Commerce for
Export Administration
Before the House Foreign Affairs Committee Indo-Pacific Subcommittee
Hearing Entitled, "Protecting Emerging Technologies for Peace and Stability in the Indo-Pacific"

January 17, 2024

Chairwoman Kim, Ranking Member Bera, distinguished members of the House Foreign Affairs Committee Subcommittee on the Indo-Pacific, thank you for inviting me to testify about the ongoing efforts of the Commerce Department, Bureau of Industry and Security's (BIS's) Export Administration to administer U.S. export controls to protect U.S. national security and foreign policy interests. Central to our approach is our ongoing work to address the challenges posed by the People's Republic of China (PRC's) Government's military modernization and human rights abuses, as well as the Russian Federation's (Russia's) ongoing invasion of Ukraine. This important work cannot be accomplished as effectively without collaboration among allies and partners on multilateral export controls and the expansion of technology partnerships.

BIS is responsible, along with interagency partners, for protecting U.S. national security and foreign policy interests by ensuring that U.S. technology is not used by adversaries to harm the United States and by working to promote American technological leadership. This responsibility stems from BIS's authorizing statute, the Export Control Reform Act of 2018 (ECRA), which describes the policy goals for BIS's administration and enforcement of the export control system.

Through the Export Administration arm of BIS, we identify sensitive U.S. technologies that would risk giving our adversaries an advantage, develop policies and strategies for protecting these technologies, and review licenses applications submitted by exporters to determine whether specific transactions are consistent with U.S. national security and foreign policy interests. We also analyze data, industry information, and classified reporting to assess the effectiveness of our controls, the availability of foreign technology (including identifying sensitive technologies developed by ally and partner countries), and foreign end users that require extra scrutiny before receiving U.S. technology.

In administering U.S. export controls in close coordination with the Department of State, we endeavor to take a multilateral approach. To be sure, there are times where unilateral export

controls are necessary, however, as ECRA notes, "[e]xport controls that are multilateral are most effective[.]" Accordingly, coordinating with our allies and partners on export controls is a longstanding BIS priority. Moreover, as evidenced by BIS's approach to Russia's invasion of Ukraine, multilateralism has reinvigorated our close and continuing international partnerships, particularly with countries in Europe and the Indo-Pacific.

Today's hearing provides an opportunity to focus on the national security and foreign policy challenges we face and our efforts to collaborate with regional partners in the Indo-Pacific.

Our National Security Setting

BIS has long focused on the challenges of slowing as much as possible the acquisition by U.S. adversaries of dual-use items that enable the proliferation of nuclear, chemical, and biological weapons and their delivery systems, as well as the advancement of their conventional arms-related capabilities, including those of non-state actors that might use them for terrorism or to destabilize countries and regions.

We recognize, however, that the PRC and Russia present unique national security challenges for the United States and the Indo-Pacific region.

As Secretary Raimondo has stated: "China today poses a set of growing challenges to our national security. It is deploying its military in ways that undermine the security of our allies and partners and the free flow of global trade. . . ." The Chinese Communist Party (CCP) under President Xi Jinping has set a goal to develop the People's Liberation Army (PLA) into a "world class military" and overtake the United States and its allies and partners by dominating certain advancing technology sectors such as artificial intelligence (AI); autonomous systems; advanced computing, semiconductors and microelectronics; quantum information sciences; biotechnology; space systems; and advanced materials and manufacturing.

To fulfill this vision, the PRC Government is going to great lengths to obtain key advanced technologies with military potential. Export controls usually operate by trying to control military uses while allowing civilian uses of technology. The PRC Government's military-civil fusion (MCF) strategy deliberately blurs lines between commercial sectors and the PRC's defense industrial base. This strategy is even more concerning where the PRC's Government structure gives leadership the power to coerce information and assistance from companies that have little choice but to comply. Accordingly, the goals of the PRC's MCF strategy, situated within the PRC's Government system, have necessitated stronger export controls by the U.S. that target predominantly commercial items that can be used in military applications.

In the face of the PRC's challenges to global peace and security, the United States and our allies and partners must safeguard our core technologies by continuously and proactively reviewing and updating our export control policies.

BIS has long restricted access by PRC entities to dual-use items of national security and foreign policy concern, including emerging technologies. Together with our interagency partners in the Defense Department's Defense Technology Security Administration, the Energy Department's National Nuclear Security Administration, and the State Department's Bureau of International

Security and Nonproliferation, we work to address national security threats and foreign policy concerns posed by the PRC Government. These efforts include U.S. control list proposals to the appropriate multilateral export control regimes, amendments to the Export Administration Regulations (EAR), review of export license applications, and identifying specific end users of concern. Because each agency brings different considerations and understanding, BIS relies on the interagency for its varied perspectives to ensure decisions that best protect U.S. national security and foreign policy interests.

To succeed in using our tools to contend with the strategic challenge posed by the PRC Government, our interagency and international partnerships are more valuable than ever before.

While we engage in strategic competition with the PRC Government, Russia's brutal war against Ukraine has reinvigorated our close and continuing international partnerships, particularly with countries in Europe and the Indo-Pacific. With Russia relying on pariah states like North Korea and Iran for ballistic missiles, drones, and ammunition, and increasingly turning to PRC suppliers for support, we see in Russia's attacks on Ukraine the complexity of restraining armed conflict. Multilateral export controls have been one of the primary tools available for us to impose costs on Russia, and the challenge is that much greater for addressing the PRC Government's malign ambitions.

The U.S. security interests in our approach are clear, and we all understand that the United States should not go it alone. The global fissures that developed over the past decade helped embolden authoritarians seeking to capitalize on external stresses. We cannot allow— let alone facilitate — disrupters of global peace and security to have access to military and WMD technologies that advance destabilizing behavior. As AI and other critical and emerging dual-use technologies evolve and proliferate, we require a global consensus to ensure their safe application and dissemination.

Traditional Multilateral Controls and Partnerships

For approximately seventy years, a foundation of U.S. dual-use export controls has been the U.S. Government's close work with allies and partners to coordinate policies to control the spread of weapons of mass destruction and conventional weapons. This global task has evolved and is currently being steered through four multilateral regimes—the Wassenaar Arrangement (WA), which focuses on conventional arms and military capable dual-use items, the Australia Group (AG), which focuses on chemical and biological weapons controls, and the Nuclear Suppliers Group (NSG) and the Missile Technology Control Regime (MTCR), whose names identify their objectives. Each regime has different membership, in part because effective export control regimes must include countries that have both the technology and capacity to contribute to proliferation and a clear commitment to nonproliferation. These four regimes have formal mechanisms with set annual schedules for reviewing technologies with our export control partners. They generate common control lists and common export control strategies, with each participating state implementing controls through their domestic legal systems.

For most countries, including some of our partners, these voluntary regimes are so intrinsic to global export control systems that their domestic laws may only account for controls adopted via

multilateral mechanisms. In some countries, laws have long barred the adoption of export controls on technologies that are not part of these four regimes. Without these four regimes, many U.S. allies and partners, including in the Indo-Pacific, would not have the domestic export control authorities and rules that they have today. However, the regimes can be slow to shape a needed control and are complicated by the need for unanimity, the latter being a factor that can both help or hinder U.S. objectives.

The United States remains deeply engaged in these regimes, and we continue working through them to counter the national security and proliferation of weapons of mass destruction concerns that they were designed to address. Specifically, BIS provides technical expertise to these regimes. With the assistance of industry members on our five Technical Advisory Committees,[1] BIS formulates proposals for new and/or increased controls, as well as removal of items from the list that no longer require controls due to their widespread availability. For example, to add items to the control list under the WA, the regime with the widest scope of dual-use items under its jurisdiction, the technical experts meet three times a year. During these sessions, BIS technical experts engage, along with the Departments of State, Defense and Energy, with WA participant states to discuss the merits of every proposal, and ensure all participants clearly understand what is being controlled and why. In the last three years, the United States developed numerous proposals to add new items, remove items, modify parameters, or make editorial changes to its own control lists. Thirty-one proposals were ultimately adopted and published as rules. In addition to the technical engagements, BIS contributes to "best practices" for the WA, and the WA Licensing and Enforcement Officers Meeting, which provides an opportunity to share with participating states various aspects of the duties and responsibilities of those government officials charged with carrying them out.

The other regimes—MTCR, AG, and NSG are narrower in scope than the WA and focus on items and technologies related to weapons of mass destruction and their delivery systems. They follow a similar format as the WA. BIS technical experts and interagency experts develop proposals for their guidelines' respective control lists and meet to discuss these proposals two or three times a year. BIS and other interagency technical experts contribute considerably to this process.

- The MTCR technical experts, in the previous three years, considered numerous new proposals, a total of 14 proposals were agreed upon in that time frame and will be incorporated into U.S. regulations.

- The AG technical experts, in the last three years, considered numerous proposals and a total of eight proposals were agreed upon in that time frame and are incorporated into U.S. regulations.

[1] BIS's Technical Advisory Committees (TACs) advise the Department of Commerce on the technical parameters and administration of export controls applicable to commodities, software, and technology subject to BIS jurisdiction. The TACs are composed of representatives from industry, academia, and Government representing diverse points of view on the concerns of the exporting and national security communities.

- The NSG technical experts, in the last three years, have reviewed numerous proposals a total of twenty-four proposals were agreed upon in that time frame and are incorporated into U.S. regulations.

Beyond the technical work BIS does on behalf of the U.S. Government in these regimes, State's Export Control and Border Security (EXBS) program utilizes BIS experts when the United States has been designated to help a country that has applied for membership in any of the four export control regimes to improve their control lists and establish procedures and best practices to implement and enforce conditions for regime membership.

Emerging Technology and an Expanded Plurilateral Focus

While we remain committed to existing export control regimes, we also recognize that the world has changed dramatically since their establishment after the Cold War. The digital revolution complicates strategies built around the regulation of tangible goods. Advancements in science and technology mandate that we become more nimble as we develop updated strategies suited to both the global geopolitical context we face and the advanced technologies of our day.

Under ECRA, the United States is not constrained to act only within the four multilateral regimes. When Russia further invaded Ukraine in February 2022, the U.S. Government worked swiftly align export control efforts with thirty-eight other like-minded allies and partners. Key Pacific participants include Japan, Republic of Korea (South Korea), Taiwan, Australia, and New Zealand. Together, this coalition is working to impede Russia's ability to wage war through essentially a blanket denial on the tools and technologies needed for reconstituting and sustaining its weapon systems. We are collectively degrading Russia's military-technological capabilities.

Russia's war against Ukraine has been seriously hampered by our unprecedented level of coordinated export controls and sanctions. To be sure, Russia is desperately seeking workarounds. Yet it is also important that the technologies we—and our allies and partners—innovate are not being used to massacre Ukrainian civilians or to pursue an imperial war of aggression. Given that items like semiconductors are physically very small and produced in large quantities and given that there are many legacy items—even recycled items—that are usable in Russia's weapons and in the drones Iran makes for Russia, the challenge of keeping our goods from being used in Russia's war is formidable and constant.

Over time, particularly with the joint leadership of the European Union, Japan, the United Kingdom, and the United States, we have expanded the items we are denying to Russia and are working to stop the transshipment of goods that aid Russia's war. Last October, we agreed on and publicly released a list of 45 Harmonized System codes covering the microelectronics and other items of military significance sought by Russia and Iran for missiles and drones.[2] And we have jointly shared this "Common High Priority Goods List" with other countries, leveraging a shared concern around the world. These plurilateral efforts—outside of the traditional export control regimes—are now fundamental to BIS's approach. Technology supply chains span

[2] https://www.bis.doc.gov/index.php/all-articles/13-policy-guidance/country-guidance/2172-russia-export-controls-list-of-common-high-priority-items.

borders, and technological expertise is dispersed throughout the world. The best way to truly keep potentially dangerous technologies and know-how out of the hands of malign actors is to work together. Coordinated controls reduce instances of evasion or backfill by other suppliers from other countries, ensuring that our controls remain effective over the long term.

Of course, there are rare cases where the United States is sufficiently predominant in production of a critical technology to the extent that unilateral controls can be effective. However, these areas of unilateral dominance are few and far between. Technology continues to advance. While the United States may be dominant in one area today, this does not mean that our technology will be dominant tomorrow. Therefore, imposing unilateral controls when other key supplier countries do not is akin to "damming half the river," and this fails to protect our national security interests or advance U.S. technological leadership.

Concurrently, we cannot hinder U.S. exports only to create a market opportunity that firms based in other countries quickly fill. In this respect, unilateral export controls are most likely to result in an unlevel playing field for U.S. industry. While there is a place for unilateral controls, particularly when necessary to reaffirm American values, as ECRA affirms, acting alone is not the preferred approach.

This understanding of the limits of unilateral strategies goes back decades. We learned this lesson during the early Cold War, and for over fifty years BIS has been instructed when we impose new controls to prioritize multilateral strategies and to consider whether an item is readily available from suppliers in other parts of the world.

In this difficult moment, we are fortunate to have vibrant export controls partnerships, particularly in the Indo-Pacific. Under Japan's leadership, in the May 2023, G7 Hiroshima Leaders' Communiqué, leaders reaffirmed that export controls are "a fundamental policy tool to address the challenges posed by the diversion of technology critical to military applications as well as for other activities that threaten global, regional, and national security." The leaders further noted the "importance of cooperation on export controls on critical and emerging technologies such as microelectronics and cyber surveillance systems to address the misuse of such technologies by malicious actors and inappropriate transfers of such technologies through research activities." This statement demonstrated a seminal moment in export controls collaboration.

Applied to the PRC Government threat, these principles drive our calibrated and targeted approach. At the U.N. and elsewhere, the PRC Government has tried to characterize U.S. export controls on advanced semiconductor production, supercomputing, and artificial intelligence as an economic measure aimed at restraining its economic growth. Restraining technological development and growth is not our goal. Our goal is to use a strategic, calibrated approach to hamper the PRC's military modernization efforts by restricting key sensitive technologies, while allowing trade that does not undermine our interests and values.

We recognize that the PRC Government's efforts to develop and employ advanced artificial intelligence in its military modernization demanded a clear and proactive export controls strategy. On October 7, 2022, and in updates issued on October 17, 2023, BIS released new

controls restricting the PRC Government's access to critical advanced computing items and supercomputing capability.[3] These controls were strategically crafted and calibrated to address, among other concerns, the PRC Government's efforts to obtain semiconductor manufacturing equipment essential to producing advanced integrated circuits needed for the next generation of advanced weapon systems, as well as high-end advanced computing semiconductors necessary to enable the development and production of technologies such as AI used in military applications.

Advanced AI capabilities—facilitated by supercomputing, built on advanced semiconductors—present U.S. national security concerns because they can be used to improve the speed and accuracy of military decision making, planning, and logistics. They can also be used for cognitive electronic warfare, radar, signals intelligence, and jamming. These capabilities can also create concerns when they are used to support facial recognition surveillance systems for human rights violations and abuses. At the same time, artificial intelligence has been described as the "quintessential" dual-use technology given its tremendous potential for civilian applications, including life-saving medicine.

These PRC-focused controls are not multilateral. We do not yet have consensus for our advanced chip and semiconductor manufacturing equipment controls through a multilateral regime. Because we have a deep national security concern stemming from the misuse of an emerging technology, we took action.

Fortunately, other countries that produce the most advanced semiconductor manufacturing equipment have adopted similar controls independently under their national regulations. And we are working on multilateral or plurilateral controls to address those advanced semiconductors that are not yet controlled. Even when fabricated outside the United States, such as in Taiwan, the advanced chips controlled under our regulations are produced using U.S. tooling and software. Accordingly, under our Foreign Direct Product (FDP) rules, we have unique control over this technology even without other countries formally joining us at this time.

Along with our updates to the advanced chips and semiconductor manufacturing equipment controls in October 2023, BIS also issued a rule updating our general authorizations for key South Korean semiconductor firms operating fabrication facilities in the PRC that support these companies' worldwide operations.[4] These facilities in the PRC are Validated End-Users (VEUs), a term applied to specific facilities that have undergone a national security review and obtained approval from the U.S. Government to receive certain items that otherwise would require licenses. Our action was critical to maintain the viability of our global semiconductor supply chain and ensures that this supply chain remains as secure and transparent as possible.

Trusted Technology Ecosystems

[3] https://www.bis.doc.gov/index.php/documents/about-bis/newsroom/press-releases/3355-2023-10-17-bis-press-release-acs-and-sme-rules-final-js/file.
[4] https://www.bis.doc.gov/index.php/documents/about-bis/newsroom/press-releases/3351-2023-10-13-bis-press-release-rok-veus/file.

In addition to our efforts to prevent adversaries from obtaining U.S. tools and technologies, through export controls we are working to cultivate trusted ecosystems that will allow emerging technologies to develop in a safe space. Export controls set a clear line about who we trust when it comes to dual-use technologies. Through these ecosystems, partners that share our values, our commitment to a rules-based order, and security outlook benefit from trade in these technologies—while others do not.

In the Indo-Pacific, our partnerships are key to fostering trusted technology ecosystems, combatting economic coercion, and preventing the misuse of sensitive technologies to undermine our national security and the security of our allies and partners.

For example, in late 2022, I launched the U.S.-Korea Supply Chain and Commercial Dialogue (SCCD) Dual-use Export Controls Group. Building off of the work led by Secretary Raimondo and her Ministry of Trade, Industry and Energy (MOTIE) counterpart, we are using this Working Group to enhance collaboration and ensure that our use of export controls is consistent with the promotion of bilateral trade and the stability of the global supply chain in advanced manufacturing, as well as to share best practices and information and to increase stakeholder engagement and support across government, industry, and civil society.

Similarly, we maintain close contact with our counterparts in Japan through the Japan-U.S. Commercial and Industrial Partnership (JUCIP). In the Second JUCIP Ministerial Joint Statement, released in May, we reaffirmed our commitment to aligning on Russia controls, including by addressing circumvention and backfill efforts, conducting capacity building and outreach within Southeast Asia and with other countries outside the region, and implementing actionable recommendations received from stakeholders.

BIS's collaboration with Japanese and South Korean colleagues has also helped us navigate our relationships in Southeast Asia. This region is increasingly positioned as a reliable and responsible contributor to the development of the world's most critical technologies, and multinational corporations are evaluating the Southeast Asia as an option in their diversification and de-risking plans. In manufacturing, we are seeing countries including Vietnam, Malaysia, and Thailand emerging as key players in global technology supply chains, highlighting the important role that the Southeast Asia can play in helping to build more secure and resilient supply chains.

In June 2023, the India-U.S. Strategic Trade Dialogue (IUSSTD) was launched in conjunction with the Department of State, which, like our other dialogues, is designed to ensure that export controls are being used consistent with the promotion of bilateral trade. In addition, through the dialogue we explore ways of enhancing high-technology trade between the United States and India and conduct stakeholder outreach to strengthen export control awareness and compliance. As more U.S. companies move into India it is vital that the export control environment is robust and one of the objectives of this dialogue is to enhance export control compliance. I was most recently in India in December meeting with Indian industry and government officials to help further our export control collaboration. Our plan is to engage with the Indian government,

industry, and academia on export controls throughout the new year and beyond, in partnership with the interagency.

Finally, for countries in the Indo-Pacific that have developing export control systems, we work with the State's EXBS program to strengthen countries' domestic export control implementation, enforcement, and compliance with the EAR. In total, from FY 22-FY24 BIS has participated in 80 EXBS engagements worldwide. Approximately 40% of those engagements were for countries located in the Indo-Pacific (i.e. India, Mongolia, Thailand, Taiwan, Philippines, Indonesia, Singapore, the Philippines, Japan, Australia, and Malaysia). The focus of these engagements is strengthening of countries' domestic export control implementation and enforcement as well as fostering compliance with the EAR.

Institutionalizing BIS's International Work

To institutionalize much of the work BIS Export Administration is doing internationally, I formed an Office of International Policy (OIP). OIP leads BIS's Export Administration's increasing focus on engaging on a plurilateral and bilateral basis to address evolving threats and will continue to coordinate and support the various historical international engagements performed across Export Administration. In addition, OIP currently leads BIS's contributions to U.S. Government efforts to align sanctions and export controls with thirty-eight other likeminded allies and partners in response to Russia's aggression against Ukraine, develop new plurilateral controls on emerging technologies in coordination with interagency partners, track country-specific concerns, and support increasingly frequent engagements with foreign governments building their own export control systems, creating the foundation for continued bilateral outreach.

Conclusion

Trade and technology are poised to provide massive benefits to human progress and innovation, and we must maximize these collective benefits for governments, companies, workers, and citizens around the world. At the same time, these technological discoveries present adversaries and bad actors with new opportunities to improve their militaries and weapons systems. As we work through existing regimes and building new plurilateral and bilateral engagements, our partnerships in the Indo-Pacific are critical to the strategy's success. We all have a role to play in ensuring that the fruits of advanced technologies are applied to our shared security and prosperity.

U.S. export controls have been and will always be most effective when deployed in conjunction with those of governments that share our values. As technology evolves, we will have a stronger response if we continue to coordinate with our closest allies and as we continue to work towards a shared vision of global security.