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Before the U.S.-China Economic and Security Review Commission Hearing on China's Military Modernization and U.S. Export Controls

Mr. Chairman and Commissioners, I am grateful for the opportunity to present my remarks to you today along with those of my colleagues from the Departments of Commerce and State, representing our respective roles in the United States export control process. Today, I will provide you the Department of Defense perspective on this process and implications of the export of defense-related and dual-use articles on China's military modernization.

China's Rise

As you are well aware, the People's Republic of China continues to grow in strength as a regional power with increasing political and economic influence. The United States and China have a complex relationship, one conducted on a number of different levels. Despite some notable and important differences, we continue to share common goals of peace, stability, security, and prosperity.

With respect to China's military modernization and increase in military power, we seek greater transparency and continue to monitor the direction, objectives, and intent of this modernization in terms of its quest for advanced technology and, toward that end, increasing military capabilities.

China's expressed concerns over its technology gap with the West will continue to have an impact on its desire to alter the military balance and developments in the Asia Pacific region to its favor. To close this technology gap, we expect China to continue making a concerted effort to acquire asymmetric and "leap ahead" technologies from the U.S. through legal and illegal means - as well as from direct military sales from Russia and other foreign sources. As we monitor these developments, the Department of Defense and the Defense Technology and Security Administration (DTSA) in particular recognizes the importance of our role to:

• Preserve critical U.S. military technological advantages.

- Support legitimate defense cooperation with foreign friends and allies.
- Control and limit transfers that could prove detrimental to U.S. and allied security interests.
- Prevent proliferation of weapons of mass destruction (WMD) and their means of delivery.
- Prevent diversion of defense-related goods to terrorists, potential adversaries, or regimes that are hostile to U.S. and allied interests.
- Assure the health of the U.S. defense industrial base.

We continue to see China's People's Liberation Army (PLA) concentrate its actions to expand its capabilities in long and short-range ballistic missiles, cruise missiles, submarines, advanced aircraft, and other modern military systems. The PLA continues to improve its capabilities by acquiring foreign weapons systems and developing domestic weapon systems and military technologies. These trends are further complicated by China's ability to maximize to its advantage the acquisition of dual-use items to further enhance their military.

We are concerned most about China's efforts in the following areas:

- Modernizing its strategic missile force with improved survivability, reliability and accuracy.
- Technology for research, development, production and weaponization of biological agents and an advanced chemical warfare program.
- Pursuit of a viable indigenous space force, along with its satellite launch capability, and C4ISR enhancements relative to space.
- Aspirations for its pre-emptive long-range precision strike capabilities, information dominance, command and control, and integrated air defense.
- Serving as a key source of proliferating technologies used in military and missile systems and WMD-related components including nuclear and ballistic missile programs.
- Coordinated strategic efforts to obtain dual-use technologies through trade, joint ventures, and corporate acquisitions, particularly in the area of software and

integrated circuit industries that are vital for information technology and network centric warfare.

- Development of an indigenous microelectronics industry in support of military and commercial modernization particularly sophisticated integrated circuits with applications in future military systems, such as advanced phased-array radars.
- Intent to acquire Western state-of-the-art thermal-imaging, night-vision, and infrared technologies.

Effective Export Control System

The United States employs an effective export control system to prevent the transfer, migration, or illegal exploitation of sensitive technologies to unauthorized entities. In conjunction with these efforts, we engage in bilateral partnerships and multilateral regimes to encourage similar approaches among allies and international partners.

Although the Departments of Commerce and State will address their respective roles in our dual-use and munitions regulatory systems, I want to share DoD's observations of recent trends in export control matters relative to China. The bulk of our license reviews for China are for dual-use items. The interagency export licensing community of the Departments of State, Commerce, and Defense provides us with an effective means and well-established procedures for monitoring and controlling dual-use commodities that could be used for military purposes.

The Export Administration Regulations for dual-use commodities fall under four categories: 1.) national security, 2.) nuclear nonproliferation, 3.) missile technology and 4.) chemical and biological weapons. Under this arrangement, we employ a policy of license denial for such commodities that would make "direct and significant" or "material" contributions to Chinese military capabilities.

Another means of regulating the flow of technology to China is the "Entity List" under the Department of Commerce. This list specifically identifies foreign entities that the U.S. government deems as posing proliferation risks; currently, 19 Chinese entities are on that list. Additionally, to establish international standards and safeguards to prevent the proliferation of WMD components and delivery systems and exploitation of dual-use items, we leverage our participation in multilateral regimes such as the Missile Technology Control Regime, the Australia Group, the Nuclear Suppliers Group, and the Wassenaar Arrangement.

With respect to the Wassenaar Arrangement, we are working with the Departments of Commerce and State to finalize language for the implementation of a "military catch-all"

regulation for China. This regulation will clarify our national policy to limit exports for military end-uses in China and will supplement our implementation of a 2003 Wassenaar Arrangement Statement of Understanding to control non-listed, dual-use items when intended for military end-uses in embargoed destinations. Once implemented, this regulation will allow us to carefully scrutinize a broader range of exports to China and will provide the regulatory framework to preclude those exports that are determined to enhance the military capabilities of China. We are pressing for implementation this year. One noteworthy caveat is that with regard to the EU arms embargo on China, such a "military catch-all" may not necessarily apply for EU members should they decide to lift their embargo on China.

DoD's Role

As a partner in the interagency export license process, DTSA experts, acting on behalf of the Department of Defense, review all sensitive munitions and dual-use license applications referred to us under the provisions of the International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR).

Through this review, we provide our defense and military expertise in crafting conditions and provisos to appropriately address national security concerns for export license applications. We accomplish this mission through the expertise and diligence of our personnel - roughly 200 military and career civilian members of the DTSA who represent a cadre of diverse and well-experienced subject-matter experts in the areas of science, technology, engineering, and manufacturing, as well as the fields of regional, functional, and regulatory specializations.

Additionally, in this process for license applications, we conduct corporate due diligence and comprehensive end-user checks to ensure accurate and appropriate end-use while minimizing the risk of diversion. We achieve this through our assessments unit which is augmented by a cadre of reserve intelligence specialists.

In our review of license applications, we closely consult and coordinate with the military services, the Joint Staff, and regional and functional offices in the Office of Secretary of Defense and, as required, other DoD components.

Additionally, we continue to improve our license turn-around times to maintain an appropriate balance of providing adequate time and treatment to scrutinize licenses to protect national security interests without unnecessarily delaying the process that might otherwise impede U.S. industry business interests.

In terms of volume and types of licenses, DTSA has approved only a few munitions export license applications for China in the last two years. The approved license

applications include an explosive ordnance disposal containment vessel for Chinese security training in preparation for the Beijing Summer Olympics, an inertial reference system for use in railway track curvature measurements, and several commercial satellite licenses. These licenses do not reveal any dedicated Chinese effort to exploit specific U.S. Munitions List controlled equipment or technology.

In the past four years for dual-use export license applications for China, DTSA has seen on average over 1,000 license applications per year for China. Of these, roughly 70% have been approved; and the remainder denied or returned without action. The export license applications for China ranged across each Commerce Control List (CCL) Category. However, our review of these license applications reveals the following concentrations of CCL controlled equipment and technology exported to China:

- Chemical manufacturing facilities and equipment, chemical manufacturing equipment related technology, chemical resistant materials, and toxic gas monitoring systems;
- Facilities and equipment used in handling biological materials and related technology;
- Electronic equipment, semiconductor manufacturing equipment, and systems with encryption;
- Navigation equipment for safety-of-flight considerations on commercial aircraft;
- Materials used in the semiconductor industry;
- Machine tools;
- Alloys and composite materials and technology; and,
- Thermal imaging systems.

Although there have been a large number of export licenses applications approved for technology, most have been for "deemed exports;" that is, approval of Chinese foreign nationals working in U.S. companies. Areas of concentration include:

- Electronics and semiconductor technology;
- Computer-related technology;
- Encryption technology; and,

• Telecommunications and information security technology.

Thus, our assessment of the overall trends with respect to export licenses for China indicates that the items appear to enhance a wide variety of Chinese industries and provide upgrades to their technology in general with a minor concentration in upgrading their electronics and semiconductor industries.

Our Way Ahead

China continues to pose challenges as it represents an attractive and vast market for the U.S., while simultaneously its actions and intentions are sometimes at odds with U.S., allied and international defense and security objectives.

Naturally, our main concern stems from China's support and sponsorship of regimes that are hostile to the U.S. or are a party to the proliferation of weapons of mass destruction and the means to deliver them. Thus, our concern is manifest in the potential of U.S. or Western technologies that could migrate to these regimes via Chinese entities. This poses one of our most significant policy challenges with respect to China.

With regard to this, we believe that China will continue to press the European Union to lift its embargo on the sale of arms to China. As you are well aware, such a decision by the EU to lift this embargo – established in response to the Tiananmen crackdown in 1989 – would eliminate the symbolic statement and moral obligations on EU member states to refrain from such sales that could potentially lead to greater Chinese access to advanced technologies that the embargo precludes.

In addition, we note that along with Russia, Israel has been a key supplier of advanced military technology to China. Though in 2005, Israel began to improve governmental oversight of exports to China, particularly in the areas of military and dual-use items. These improvements will require legislation by the Knesset, re-organization within the Ministry of Defense and enhanced roles for the Ministry of Foreign Affairs and Ministry of Industry, Trade, and Labor.

It is an exceedingly difficult challenge to strike a balance between national security and trade – specifically, the need to protect technology in defense of our national security interests, and our desire for U.S. industry to compete internationally in China. China is well aware of our difficulties and actively seeks to leverage its position to exploit potential differences between U.S. allies, partners, and other nations. Yet, we are realistic in understanding that this is not a zero-sum game. We can strike such a balance with these issues as long as China is willing to abide by international standards and established regulatory rules of engagement. Therefore, it is critical for the U.S. to pursue

our commercial interests and defense relationship with China in the context of adherence to appropriate international practices of transparency, fairness, and reciprocity.

Our policies and practices must strive to minimize transfers of technologies that could contribute to potentially destabilizing or threatening military modernization efforts. Constant vigilance in our export licensing process must remain one of our top priorities while ensuring U.S. competitiveness, as we make our decisions in consideration of foreign availability, level of technology, and a clear understanding that - at the end of the day – the export of a technology is truly in the best interests of U.S. national defense.

Conclusion

Our export control process is a model for how well U.S. government departments and agencies work collectively and collaboratively toward a successful national security strategy in protecting our defense technology interests.

As we work toward the correct balance between free markets and national security, we must approach export issues with China deliberately and carefully, while engaging other nations – notably, our European, Asian, and Middle Eastern partners - to ensure that we do not compromise security interests with respect to exports to China in the rush to do business there. Until we know the magnitude and intention of China's military modernization and increasing power in the region, we must be mindful of our shared international security interests and the U.S. intent to guarantee international peace and stability that directly contributes to economic prosperity for all – including China.

Mr. Chairman and members of the Commission, as we address the challenges posed by China, I appreciate and continue to draw upon the insightful counsel of this Commission. Thank you for the opportunity to appear before you today, and I welcome your questions and discussion.