The Commerce Department’s Bureau of Industry and Security (BIS) strategically uses export controls to protect technologies that present clear national security or human rights concerns and are restrictive only to the extent necessary to protect U.S. national security or foreign policy interests.

BIS has long maintained controls on the People’s Republic of China (PRC) for military, spacecraft, and multilaterally-controlled dual-use items, as well as certain predominantly commercial items if used by military end-users or in military end-uses. As advanced dual-use technology has grown increasingly central to national security, and in recognition of the civil-military fusion strategy adopted by the PRC, BIS has adopted aggressive, innovative export controls. Some of these controls target crucial advanced technology and apply to a broad class of users. Others target specific users’ access to a broad spectrum of technology, giving the U.S. government control over these users’ access to items with BIS’s jurisdiction.

For example, in October 2022, BIS implemented strategic, country-wide controls on certain force-multiplying technologies that could fuel advancements in military or WMD capabilities, as well as enable human rights violations. Specifically, BIS instituted country-wide controls on advanced computing chips needed to power military AI and supercomputing applications, as well as semiconductor manufacturing equipment essential to producing advanced chips. These actions profoundly re-shaped the PRC’s access to and development of key technologies for military or WMD applications.

Conversely, BIS has used the Entity List to backstop the country-wide controls by imposing license requirements on lower-level technologies to specific entities within the PRC. Over the last six years, BIS has more than tripled the number of PRC entities on the Entity List, moving from 218 in 2018 to 787 by the end of 2023. BIS has not hesitated to add large PRC businesses with global operations—like Huawei, SMIC, and their affiliates—to the Entity List. It even applied a Foreign Direct Product Rule (FDPR) to Huawei, extending license requirements to items produced in foreign countries using certain U.S. technology, software, or equipment. This meant that, for instance, if a U.S. company had knowledge that their test equipment would be used in the production of a foreign customer’s products that would then be provided to Huawei or incorporated into Huawei products, that U.S. company would need to submit a license, even if none of the items listed in the license application would be provided to Huawei.

These changes exponentially increased licensing applications and decisions for PRC entities on the Entity List, giving the U.S. government unprecedented control over and insight into these entities’ access to U.S. technology and foreign-produced items controlled through the FDPR. For example, in 2021, BIS adjudicated nearly $560 billion in license applications that involved a PRC entity on the Entity List, denying, revoking, or returning without action more than $337 billion in licenses, and
approving $222 billion based on an interagency determination of what outcome advanced U.S. national security and foreign policy. Without Entity List requirements, the U.S. government would not have had the opportunity to review and control many of these proposed exports.

Exercising this expanded control strategically requires a deep understanding of specific technologies and their potential for use or misuse. This is further complicated by the growing use of commercial technology for national security purposes. Historically, governments conducted most R&D for key military technologies, making it easier to control dissemination. Today, the same technologies that fuel commercial trade allow nations to modernize their militaries, surveil their citizens, and solidify oppression. The PRC in particular blurs the lines between military and commercial institutions.

In assessing the risks of exporting dual-use technology, BIS also assesses the national security risk of undermining domestic innovation or eroding the U.S. industrial base. Our national security advantage stems from a foundation of private sector innovation, and continued U.S. military pre-eminence requires continued innovation in private industry. Export controls are not export bans; rather, they allow the U.S. government to impose a license requirement that gives the us the opportunity to control what items flow to a destination or end user. This approach recognizes that U.S. interests are sometimes better advanced by allowing an export than by barring it. For example, since 1969, Congress has required the government to consider whether a good is available from foreign sources before deciding whether to restrict its export from the United States. Where a comparable good is available abroad, unilaterally restricting its export from the United States may have little strategic value and risks eroding the U.S. industrial base and private sector innovation.

Over the last six years, BIS policies have subjected an increased volume of trade to the PRC to licensing requirements, and BIS has applied strategic reviews to these applications, including with Entity Listed entities. BIS’s increasing focus on country-wide controls is important because BIS is identifying strategic sectors and items and setting clear lines based on technological capabilities. This is a more durable and effective approach than focusing solely on particular entities and case-by-case license reviews.

**Export Licensing Data: 2018-2023**

BIS first published the Entity List in February 1997 to inform the public of entities that have engaged in activities that could result in an increased risk of the diversion of items to weapons of mass destruction programs. Placing a foreign company, institution, or person on the Entity List subjects them to individual licensing requirements and policies. Since its initial publication, the grounds for inclusion on the Entity List have expanded. It now includes foreign persons for which BIS has reasonable cause to believe are involved in activities contrary to U.S. national security or foreign policy.

In response to a request from House Foreign Affairs Committee, BIS provided data on license applications processed from January 2018 through December 2023 for entities on the Entity List that are located in the PRC. In light of Congressional and public interest in this topic, BIS is providing additional information and context for this data in accordance with the confidentiality requirements of Section 1761(h) of the Export Control Reform Act of 2018.

As described above, the Entity List backstops countrywide controls that already apply to sensitive technologies. In the case of the PRC, BIS already applies countrywide controls for military items, spacecraft items, multilaterally controlled dual-use items, and predominantly commercial items for military end users/end uses or military-intelligence end users/end uses. These countrywide controls were enhanced in October 2022 and October 2023 when BIS imposed new restrictions for advanced
computing chips critical to sensitive AI applications and semiconductor manufacturing equipment essential to produce advanced chips.

The Entity List is not an embargo – there are transparent licensing policies for each entity on the Entity List that guide when applications may be approved. Some entities are subject to case-by-case review for exports of certain items, while other entities are subject to presumptions of denial for all items. All applications are reviewed by Commerce and the Departments of Defense, State, and Energy, with support from the Intelligence Community.

Many of the license approvals reflect the licensing policies set in 2019-2020 for Huawei and/or SMIC entities. Unlike most Entity Listed parties, which have a presumption of denial licensing policy, both Huawei and SMIC have more complex licensing policies that are reviewed by the interagency on a case-by-case basis, as was the policy set in 2019-2020. BIS and interagency colleagues followed these policies when reviewing applications involving entities on the Entity List, as demonstrated by the following examples:

- Due to the application of the FDPR to Huawei in August 2020, applications related to Huawei now often involve foreign-produced items that BIS did not previously assert jurisdiction over before 2020. Approved applications related to Huawei included items such as exercise equipment and office furniture and low-technology components for consumer mass-market items, such as touchpad and touchscreen sensors for tablets, which are widely available to PRC entities from Chinese and other foreign sources.

- Applications involving SMIC and its affiliates are currently reviewed in accordance with stringent PRC-wide restrictions on the production of advanced chips (e.g., logic integrated circuits using a non-planar transistor architecture or with a production technology node of 16/14 nanometers or less).

- BIS has received a number of applications involving Sichuan University, which is subject to a licensing policy of case-by-case review for all items. Items that were approved included components used in biotherapy treatments for tumors and infectious diseases such as hepatitis, HIV, cardiovascular diseases, autoimmune diseases, and genetic diseases in the university’s West China Hospital Campus.

As today’s threat environment continues to evolve and technologies rapidly advance, BIS will continue to use countrywide controls, as well as more targeted Entity List controls, to address national security and foreign policy concerns.

**Background on Licensing Data and Process for Licensing Data Extraction**

The policy for reviewing license applications for each party is public and determined by the Departments of Commerce, Defense, State, and Energy based on national security and foreign policy considerations. All of the license applications covered by this report from January 2018 through December 2023 were evaluated by those agencies and approved, denied, or returned without action.
(RWA) through the interagency review process pursuant to the relevant policies applicable to the transaction.¹

BIS outlines the licensing policies to the public when placing entities on the Entity List, providing prospective exporters with guidance on the types of transactions that are likely to be approved or denied. Thus, exporters generally submit applications with a higher likelihood of approval, which is reflected in the data below.

The license requirement applies even if the listed party is only an intermediary in the transaction. In other words, requiring exporters to submit license applications for Entity Listed parties that are purchasers or intermediate consignees to the transaction gives BIS visibility into the transaction even if the Entity Listed parties will not ultimately use the items. This gives BIS additional information into transactions that it would not have otherwise been able to monitor. Licenses may also be approved in conjunction with the removal from the license of a party on the Entity List. For the purposes of this data request, BIS has only included licenses for which an Entity Listed party was represented in the final submission (i.e., not preemptively stricken from the license application).

Additionally, the total approved value includes foreign-made items that are not normally subject to a licensing requirement. When the Entity List FDP Rule was applied to Huawei in August 2020, that resulted in capturing foreign-made, mass-market consumer items over which BIS had not previously asserted jurisdiction. As a result, values associated with license applications increased exponentially, as demonstrated in Figure 1 below. Further, as noted above, the construct of the FDP Rule also resulted in requiring authorization for items that the Entity List party will not receive. For instance, the FDP Rule requires a license to export foreign-made items that will be used to produce another item that may be exported to the Entity List party.

¹ As stated in EAR §750.4, “If a license application is registered, but BIS is unable to correct deficiencies crucial to processing the license application, it will be returned without action,” (RWA).
Finally, the value of approved licenses below does not correspond to export value over the period of the data. BIS licenses are generally valid for four years, and exporters are required to submit good faith estimates of the quantity and value of the items that they seek to export over that period for each line item in the application. As a general matter, a substantial number of licenses are not fully utilized.

In the past, to collect licensing data, BIS used a heavily manual process involving an electronic system that was primarily designed in 2006. This process has occupied considerable resources and increased the risk of producing inconsistencies in the results, due to the manually intensive process and corresponding potential for human error. We have been working to improve our internal systems and processes to improve our internal analytical capabilities, which will also help BIS to respond to congressional data requests. However, the state of the foundational systems that were not designed to communicate seamlessly with one another, coupled with the need for human verification of the accuracy of the underlying data once extracted, have required a substantial commitment of staff time to execute in a manner that ensures an accurate product. BIS is committed to working with Congress to secure additional funding for critical investments in modernizing its central licensing system, given that regulatory changes and world events of the past two decades have significantly increased the volume of export license applications and the complexity of export licensing decisions.
Summary of Licensing Data

In total, from 2018-2023, the data analysis described above shows that BIS and its interagency partners reviewed 3,934 license applications that involved a PRC-based Entity Listed party. Of this total, 2,641 licenses totaling approximately $335 billion were approved, and 1,293 licenses valued at $545 billion were either denied, revoked, or RWA.

The number of applications involving Entity List parties in the PRC increased from 5 in 2018 to a high of 1,751 in 2021, accounting for approximately 28 percent of all license applications to the PRC. From 2018-2023, approximately 33 percent of license applications involving a PRC Entity Listed party were denied, revoked, or RWA. It is also important to acknowledge that, since the beginning of 2024, BIS has revoked eight additional licenses involving Huawei.

The increase in license applications was likely driven by a couple factors. First, from 2018-2023, the number of PRC entities on the Entity List (including Hong Kong) increased over 300 percent, from 218 to 787 as of December 31, 2023. Second, the additions of Huawei (2019) and SMIC (2020) to the Entity List drove a substantial increase in the total number of license applications. This is due to the size of these companies and their commercial activities, which resulted in a relatively significant volume of trade that became subject to a license requirement as a result of these Entity List actions.

The increase in license applications involving PRC entities on the Entity List also demonstrates that BIS has applied additional scrutiny overall to exports to the PRC as these applications are for predominantly commercial items that are less sensitive than items subject to countrywide controls for the PRC. In 2018, less than one percent of license applications for the PRC included a party on the Entity List. In 2023, 16 percent of license applications for the PRC involved a party on the Entity List.