

Bureau of Industry and Security 2022 Agenda

Recommendation #2:

Within 90 days of starting, the new BIS Director should publish Congress' required lists of emerging and foundational technologies.

The Department of Commerce's Bureau of Industry and Security (BIS) is probably the most important U.S. government agency most have never heard of. Charged with ensuring export control, treaty compliance, and strategic technology leadership, BIS plays a critical role in U.S.-China policy. Without its due diligence, American-made, sensitive and strategic technologies could end up in the hands of the Chinese military and threaten America's national security.

President Biden has nominated Alan Estevez and Thea Kendler to serve as BIS Director and Assistant Secretary for Export Administration in the U.S. Department of Commerce, respectively. The nominees bring national security experience to BIS at one of the most critical junctures in the agency's history. This series of policy recommendations will provide ideas for BIS and its leadership to pursue an aggressive agenda and use the agency's full range of tools to protect America's security and prosperity.

SUMMARY

The globalized world enables a relative free movement of goods and services, but this also allows the proliferation of weapons and items to be used for hostile purposes. Countries adopt export controls to manage the distribution of sensitive items to help ensure that people live in a secure environment.¹ The Bureau of Industry and Security (BIS) at the U.S. Department of Commerce regulates U.S. exports of "dual use" technologies, which have commercial and military applications, and ensures that innovative products and services are not weaponized by adversaries against Americans. This BIS recommendation series explores the Future of BIS and recommendations to help achieve its objectives.

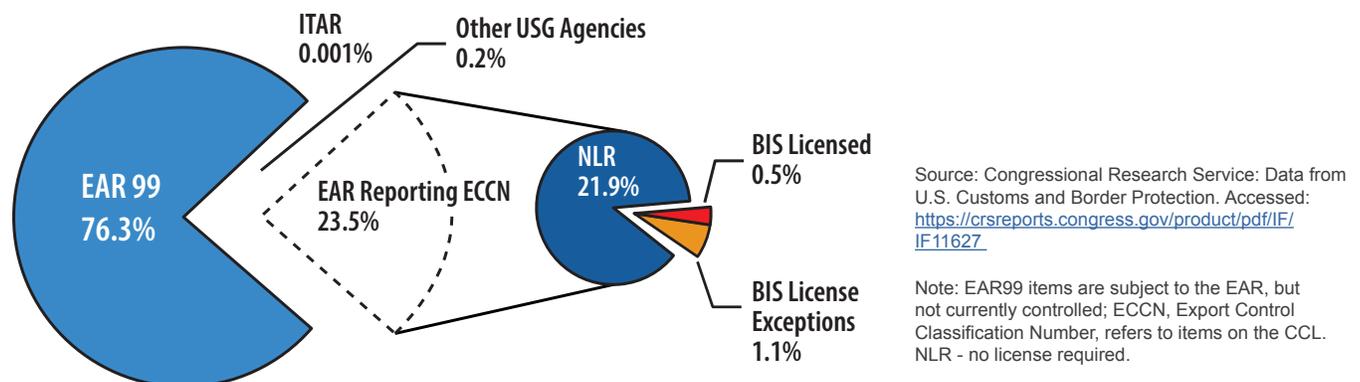
This second installment in the series explores a key policy issue for BIS: the process and efficacy to control new and innovative dual use technologies. Major Congressional reforms adopted in 2018 require BIS to take leadership in an interagency process to identify and report on emerging and foundational technologies in foreign countries, to assess what effect export controls imposed on these technologies may have on their development in the United States, and to judge the effectiveness of export controls on limiting the proliferation of emerging and foundational technologies to foreign countries.

BIS' performance of these tasks has become a matter of controversy and debate, even prompting some observers to suggest that BIS should be moved out of Commerce because it either can't or won't fulfill the tasks. Others have argued that the task is difficult because BIS

lacks a workable definition of national security and the view that the relevant technologies are already widely available. The acting BIS Director states that the relevant technologies are already controlled and that it's impractical to publish such lists. Ultimately, this paper's examination leads to the second recommendation for BIS: Within 90 days of assuming office, the new undersecretary should publish Congress' required lists of restricted emerging and foundational technologies--which at the very least could include updates to their Export Control Classification Numbers (ECCN), if they are already controlled--and maintain publication thereafter to Congress' required schedule.

INTRODUCTION

China is America's chief adversary, and has a comprehensive plan to win preeminence for China in strategic industries in advanced manufacturing, aerospace, artificial intelligence, information technology, new materials, robotics, and semiconductors. This strategy is dependent in large part on U.S. technology acquisition. U.S. policymakers have sought to regulate these transactions, though in reality only a small fraction of all trade is addressed. Most trade to China does not require an export license. U.S. firms may or may not realize that certain exports to China unwittingly strengthens America's leading adversary.



In response to voter concern about China's increasing militarism, the U.S. government has made important reforms in legislation, regulation, and technology licensing to strengthen strategic trade control culminating the Export Control and Reform Act of 2018 (ECRA).² The chief concern of the Act is to prevent the weaponization of dual use technologies against Americans.

While the bill passed by a wide bipartisan margin³, there is an ongoing debate about whether these measures are necessary, sufficient, or implemented effectively. Notably many corporate actors see China as a key market and believe that regulation hinders their enterprise. Semiconductor toolmakers Applied Materials (AMAT), KLA Corporation (KLAC), and LAM Research (LRCX) have generated significant revenues by selling semiconductor manufacturing equipment (SME) to Chinese entities. These executives seemed confident that tougher export controls would have little bearing on their earnings, even insisting that China's demand "has to be satisfied by somebody."⁴ Others, including corporations, have expressed concern about China's predatory practices and the need for U.S. action, whether to enforce existing rules or to expand them.

An additional point for policymakers is Congressional oversight. In some four years since the Act, it appears that a key requirement of identifying of emerging and foundational technology remains unresolved at BIS. ECRA represents an important update to existing US Export Administration Regulations (EAR). These regulation are administered by BIS, which assigns an Export Control Classification Number to each technology, which determines the specific restrictions that apply to it.

Reports from the non-partisan Congressional Research Service (CRS), as recently as December 2021, attest to this situation and the challenge it creates for Congress and the Committee for Foreign Investment (CFIUS) in the U.S.⁵

As related matter, BIS has not had confirmed leadership for an extended period. A Senate-confirmed BIS director would ideally drive the organization to fulfill its Congressional mandate.

Congress asked BIS to create two categories of technologies: emerging and foundational.⁶ The first set of controls targets “emerging technologies” that China has stated a desire to develop and was meant take effect in 2020, but has not been issued. The second, controls on “foundational technologies” was designed to come later, and is also yet to be realized.

BIS launched a process in late 2018 to develop these categories but has had limited progress.⁷ U.S. industry expressed concern about the amount of information they must contribute to the process and that the statutory definitions are too vague. Others claim that level of control is insufficient to counter the China threat, and indeed that threat is so serious that entire segments like semiconductors should be off-limits through technological decoupling.

CRS notes the following issues related to the new technology identification including:

- Failure to fulfill national security goals associated with the implementation of ECRA
- Reduced effectiveness of the Committee on Foreign Investment in the United States (CFIUS) to review Chinese and other foreign investments in critical and emerging technologies below a traditional threshold of foreign control. (CFIUS can only act against non-controlling foreign investments if the technologies involved in the transaction are controlled.)
- Failure to meet the requirement that BIS coordinate with Director of National Intelligence (currently Avril Haines) to assess risks, and the requirement that BIS coordinate with DOD on commodity classifications, which determine when a license is required.
- Failure to implement the ECRA-mandated interagency dispute resolution process, which some have criticized as allowing BIS to determine the outcome of appeals for licensing decisions on China.
- Critique that BIS use its expanded licensing authority only lightly. It is supposed to consider the effects of a particular license on the U.S. industrial base, arguably broadening national security considerations in licensing decisions.

COMPETING PERSPECTIVES

The following section describes the different explanations and rationales for BIS' performance. One view holds that BIS, in its current home within the Department of Commerce, cannot effectively exercise export control, and thus, the office must be removed to another agency like Defense or State where it would ostensibly be insulated from compromise. Another suggests it's a problem of leadership, and bringing a security-minded person to the job is the solution. The other side argues that until there is a clear and understood definition of "national security", it is very difficult to identify and control "emerging" and "foundational" technologies. BIS itself maintains that it is doing the required work.

Perspective 1



Derek Scissors: **BIS is On The Clock**

Who: AEI Fellow and USCC Commissioner

Position: BIS rejects and ignores direction from Congress.

Key Point: "If BIS can't restrict certain foundational and emerging technologies within five years (say) of being instructed to do so, the bureau is harming the country. In that case, authority should be transferred to another agency that will at least try to take needed actions."⁸

Key Quotations:

- "Export controls may be the single most important aspect of American policy toward China...export controls can reduce the scope and intensity of Xi Jinping's surveillance state."⁹
- "The Department of Commerce has disregarded Congress in favor of implementing its own actions...Congress should take export control authority away from Commerce. It's the most logical agency for it, but it's been captured. The Department of Defense is a more reliable protector of technology that could strengthen the Chinese military. For that matter, so is the Department of State."¹⁰

Perspective 2



Senator Tom Cotton: Importance of Moving BIS and Consolidating Export Controls

Who: U.S. Senator from Arkansas (R)

Position: Export controls needs to be housed within a government agency whose mission is national security. Housing export controls within the Department of Commerce undermines the regulatory purpose of controls.

Remedy Recommendation: “The government should consolidate export control licensing authorities within the State Department. The federal government cannot continue to have critical national security authorities such as export control licensing dispersed and housed in larger organizations which oppose the decisive use of export controls.”¹¹

Key Quotations:

- “Some of these licensing entities, particularly BIS and OFAC, are buried within organizations that have been hostile to the aggressive use of export controls.”
- “The federal government cannot continue to have critical national security authorities such as export control licensing dispersed and housed in larger organizations which oppose the decisive use of export controls.”¹²

Perspective 3



Kevin Wolf: **ECRA Authorizes a Needed New Role for Export Controls, but Effective Implementation Will be Difficult**

Who: Former Assistant Secretary for Export Administration, BIS. Author of Export Control Classification Number 0Y521, a forerunner to the emerging and foundational lists concept.

Position: Congress or Administration need to provide a clear definition of “national security” in order for the export control agencies to more quickly identify the purely civil emerging and foundational technologies that warrant controls to address China-specific national security issues that are outside the traditional multilateral regime standards, which are limited to controlling WMD, conventional weapons, and the commodities, technology, and software necessary to develop, produce, or use them.

Key Point: “Until one knows the definition of “national security” in this context, one cannot know if BIS is moving too slow, too fast, or just right with respect to the identification of “emerging” and “foundational” technologies.”

Remedy Recommendation: After defining “national security” in this context, the “Administration should advocate and support with evidence and appeals to common interests the adoption of that definition by a smaller group of close allies in countries that produce the core technologies of concern to convince them to (a) expand their legal authorities to impose controls for reasons not related to traditional non-proliferation objectives and (b) align their China- and other country-specific licensing policies and enforcement priorities for already-controlled items.”¹³

Key Quotations:

- “Identifying precisely those core chokepoint components, software, and technologies that meet the ECRA standards for such items is massively harder and requires more resources and creativity than anything that has ever been done in the export control system.”¹⁴
- Because unilateral approaches are eventually counterproductive and the traditional multilateral regime approach is neither quick nor responsive, the medium- and long-term solution to addressing the issue ... [on China-specific national security issues] must be aggressive, well-supported efforts to work with smaller groups of close allies in the producer nations of the technologies of concern to convince them to (i) expand the scope of their domestic export control laws and (ii) align their licensing and enforcement policies based on new, common understandings of the purpose of export controls.”¹⁵

Perspective 4



Jeremy Pelter: **BIS is on Track, Trust Us**

Who: Acting BIS Undersecretary

Position: BIS is complying with Congress' list requirements

Key Point: “We believe changes in controls for foundational technologies should be carefully calibrated, which we have done in the past for specific mature technologies that could be used by military end users or in military end uses.”¹⁶

Key Quotations:

- “Thus, when there is clear foreign availability, we believe that imposing new controls on emerging technologies posing national security concerns is most effective when implemented through the multilateral process.”¹⁷
- “The work with our interagency colleagues has resulted in the identification of 37 emerging technologies, all of which were added to the CCL as a result of final rules published in the Federal Register on May 23, 2019; January 6, 2020; June 17, 2020; and October 5, 2020.”¹⁸
- “It is possible that the NSC working group will recommend identifying emerging technologies warranting control under the criteria described in Section 1758(a)(2)(B) 8 of ECRA. However, it is also possible that the working group will recommend that existing controls are currently sufficient for the relevant technology category or that emerging technologies in one category may overlap with those in another category.”¹⁹

ENDNOTES

- 1 Dai Tamada & Philippe Achilleas, Theory and Practice of Export Control: Balancing International Security and International Economic Relations. SpringerBriefs in Economics. 2017. Chapter 1. Accessed: <https://www.amazon.com/Theory-Practice-Export-Control-SpringerBriefs/dp/9811059594?asin=9811059594&revisionId=&format=4&depth=1>
- 2 H.R.5040 - Export Control Reform Act of 2018. Accessed: <https://www.congress.gov/bill/115th-congress/house-bill/5040>
- 3 H.R.5040 - Export Control Reform Act of 2018. Accessed: <https://www.congress.gov/bill/115th-congress/house-bill/5040>
- 4 Roslyn Layton, Semiconductor Tool Makers Make Record Profits In China Despite Security Risk To US. Forbes. November 2021. Accessed: <https://www.forbes.com/sites/roslynlayton/2021/11/15/semiconductor-tool-makers-make-record-profits-in-china-despite-security-risk-to-us/?sh=219550d82db5>
- 5 Congressional Research Service, China's Recent Trade Measures and Countermeasures: Issues for Congress. December 10, 2021. CSR Reports. Accessed: <https://crsreports.congress.gov/product/pdf/R/R46915>
- 6 U.S.-China Economic and Security Review Commission, Unfinished Business: Export Control and Foreign Investment Reforms. June 1, 2021. Accessed: https://www.uscc.gov/sites/default/files/2021-06/Unfinished_Business-Export_Control_and_Foreign_Investment_Reforms.pdf
- 7 Federal Register, Review of Controls for Certain Emerging Technologies. Bureau of Industry and Security, Commerce. November 19, 2018. Accessed: <https://www.federalregister.gov/documents/2018/11/19/2018-25221/review-of-controls-for-certain-emerging-technologies>
- 8 Derek Scissors, More empty talk on export controls. AEI. September 23, 2021. Accessed: <https://www.aei.org/foreign-and-defense-policy/more-empty-talk-on-export-controls/>
- 9 Derek Scissors, The Department of Commerce ignores Congress. AEI. August 27, 2020. Accessed: <https://www.aei.org/foreign-and-defense-policy/more-empty-talk-on-export-controls/>
- 10 Derek Scissors, More empty talk on export controls. AEI. September 23, 2021. Accessed: <https://www.aei.org/foreign-and-defense-policy/more-empty-talk-on-export-controls/>
- 11 Tom Cotton, "Beat China: Targeted Decoupling and the Economic Long War." Office of Senator Tom Cotton. February 2021. Accessed: https://www.cotton.senate.gov/imo/media/doc/210216_1700_China%20Report_FINAL.pdf
- 12 Ibid
- 13 Kevin Wolf, "Testimony before the U.S.-China Economic and Security Review Commission Hearing on "U.S.-China Relations in 2021: Emerging Risks" - Panel III: "Assessing Export Controls and Foreign Investment Review". USCC. September 8 2021. Accessed: https://www.uscc.gov/sites/default/files/2021-08/Kevin_Wolf_Testimony.pdf ** More specifically Wolf notes on p. 4 of this testimony, "The Administration should advocate and support with evidence and appeals to common interests the adoption of that definition by a smaller group of close allies in countries that produce the core technologies of concern to convince them to (a) expand their legal authorities to impose controls for reasons not related to traditional non-proliferation objectives and (b) align their China- and other country-specific licensing policies and enforcement priorities for already-controlled items. 3. At the same time and with the same degree of intensity, Congress and the Administration must provide clear direction, robust funding, and political support to the export control agencies to implement the objectives of ECRA's emerging and foundational technologies provision based on the (a) the standards and process set out in ECRA and (b) agreed-upon definition of "national security" to address threats outside the context of traditional non-proliferation related concerns."
- 14 Kevin Wolf, "Testimony before the U.S.-China Economic and Security Review Commission Hearing on "U.S.-China Relations in 2021: Emerging Risks" - Panel III: "Assessing Export Controls and Foreign Investment Review". USCC. September 8 2021. Accessed: https://www.uscc.gov/sites/default/files/2021-08/Kevin_Wolf_Testimony.pdf
- 15 Ibid
- 16 Jeremy Pelter, "Testimony before the U.S.-China Economic and Security Review Commission Hearing On "U.S.-China Relations in 2021: Emerging Risks" USCC. September 8, 2021. Accessed: https://www.uscc.gov/sites/default/files/2021-08/Jeremy_Pelter_Testimony.pdf
- 17 Ibid
- 18 Ibid
- 19 Ibid