

REVIEW OF CONTROLS FOR CERTAIN EMERGING TECHNOLOGIES Docket No. 180712626-8840-01 US-China Business Council January 10, 2019

The US-China Business Council (USCBC) is pleased to provide comments on the Department of Commerce's Advance Notice of Proposed Rulemaking (ANPRM) on Review of Controls for Certain Emerging Technologies. USCBC represents over 200 American companies who operate in a diverse range of industries and employ millions of Americans.

We appreciate the notice's emphasis on avoiding "negatively impacting US leadership in the science, technology, engineering, and manufacturing sectors" in identifying emerging technologies that should be subject to new export controls. We agree it is critical that updates to US export controls be implemented "without impairing national security or hampering the ability of the US commercial sector to keep pace with international advances in emerging fields." Keeping this goal in mind, USCBC recommends that the list of technologies covered by any new rules be narrowly tailored to address US national security interests, with the support of multilateral regimes, and without stifling US businesses.

In addition to specific industry comments, which can help set the proper scope for the final controls, USCBC encourages relevant US government agencies to consider the broader commercial implications of listing certain products as "emerging and foundational technologies" subject to new export controls.

USCBC is pleased to provide feedback on the specific areas raised in the notice.

Criteria used to determine whether there are specific technologies within the 14 categories that are important to national security should be narrowly defined

While some emerging technologies have both commercial and military applications, export control regulations should be narrowly tailored and limited to technologies that are truly essential to US national security: primarily, technologies where controls are needed to sustain US defense and military advantages. To that end, BIS should adhere to the key areas of technologies identified by the Department of Defense (DOD) and Director of National Intelligence (DNI) in their annual reports, as mandated by the National Defense Authorization Act (NDAA). BIS should also consider the risk-based principles that a joint US government task force has already established to determine which technologies are most critical to national security.

To create a narrow definition of technologies essential to national security, BIS should focus its assessment on the components and subcomponents in each category of technology with a direct impact on national security. Each of the 14 categories of technologies in the ANPRM covers devices and systems with thousands of subcomponents, most of which are already

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available outside the United States and do not affect national security. It is thus important that BIS evaluate export controls on specific subcomponents of technologies versus on just the general categories of technologies. BIS should also avoid putting controls on completed products that are developed using technologies covered in the ANPRM.

Setting up a formal technology screening process would be most effective at creating a narrow scope of technologies subject to export controls. This process should evaluate subcomponents in each technology category on a case-by-case basis using factors such as commercial availability, impact on economic growth, efficacy of export controls, and impact on industry. BIS should also consult with industry and multiple agencies in this process to understand the economic, market, and competitive implications of any decision on control of technology. To ensure that the proposed controls do not affect US companies' ability to develop technologies commercially or to roll out new technologies globally, the process should establish a communication channel that allows US industries to query whether proposed controls would encompass technologies US manufacturers are considering exploring.

If the final export controls are not properly scoped, the changes would likely have the opposite effect than was intended. Overly-expansive and onerous controls that restrict the exchange of technologies primarily useful in commercial or civilian applications will inhibit US companies from pursuing investments and research that they would otherwise undertake. These concerns are already affecting company decisions in anticipation of the possible controls. If the final export controls deter US companies from pursuing research growth and development opportunities, there will be severe implications for US national security.

Restricting technologies that are readily available in foreign countries will harm US competitiveness

Many products in the listed categories are readily available in foreign countries, making unilateral export controls ineffective at limiting access to those technologies. Foreign availability of specific technologies as a consequence should be a critical part of the interagency process used to identify which technologies within a category should be subject to export controls. Unless technologies are available exclusively within the United States, or similar controls are placed on the same technologies by multilateral regimes, new export controls will not be effective at limiting the release to or development of covered technologies in foreign countries. It is unclear whether BIS has already set up such a process to assess foreign availability, or if it has the resources to implement one. BIS should clearly and transparently articulate its plan to do so.

Overly-broad and unilateral controls on emerging technologies would weaken US technological leadership

Industry could better assess the impact of emerging technology controls on US technological leadership with more specific and detailed guidance. In particular, it is difficult for companies to assess the impact given the broad categories proposed by the ANPRM. Once it has identified the specific types of technologies that put US national security most at risk,

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and before implementing an interim or final rule, BIS should provide additional opportunity for industry to comment. BIS should also provide details regarding the agency's proposed reasons for control and applicable licensing policies for such technologies. Further, given the potential breadth of controls suggested by the ANPRM, any rule will likely touch industries that are not currently subject to export controls and thus may not be sufficiently aware of or educated on export control reform. For this reason, BIS should provide ample time for public comment and should engage in industry outreach.

Since the majority of research on and consumption of emerging technologies occurs in the private sector, BIS should pay particular attention to the potential impact of export controls on the commercial development of early-stage technologies. Overly-broad export controls are likely to affect funding, commercial markets, and data that have helped the research and development of emerging technologies thrive in the United States. Even if it is not the intended purpose of export controls, limiting these resources and commercial opportunities would only create advantages for foreign competitors.

To minimize the negative impact on US technological leadership, BIS should allow US exporters to maintain the efficiencies of their existing operations and supply chains and give US companies sufficient time to adjust to new export controls. The obligations related to new export controls that will fall on affected US industries could impact the time to market and cost decisions crucial to staying ahead of competitors in other countries. New export controls could also disrupt ongoing technology development and investment if there is insufficient time to adjust company supply chains and business processes to meet the requirements of the new export controls. Taking into account these factors will be important to maintaining US technological leadership.

Unilateral controls could also have the unintended consequence of encouraging faster development of controlled technology outside of the United States, harming US technological leadership. Multilateral controls are more effective than unilateral controls, as stated in the Export Controls Reform Act (ECRA). However, ECRA requires the Secretary of State to simply propose the addition of the emerging and foundational technologies identified for US controls to multilateral controls lists. BIS should make clear in its final rule that the United States will actively work with like-minded countries, including those in the Wassenaar Agreement, to address concerns about the national security implications of technology. In addition, any final rule establishing unilateral export controls should not be implemented until the relevant multilateral regime has approved the controls.

Other approaches to identifying emerging technologies warranting controls

As directed in ECRA's statement of policy, BIS should set up a process to regularly review and update covered technologies to ensure that controls accurately capture the cutting-edge technologies essential to US national security which are constantly evolving at a rapid pace. Likewise, that process should also take into account the need to remove controls on emerging and foundational technologies that no longer pose a national security risk. Such a process should allow US companies to petition for removal of specific controlled items. Creating a feedback loop in which US companies can provide their input on amendments to definitions US-China Business Council Comments January 10, 2019 Page 4

should also be a part of this process. Funding should be allocated to a regular review of US export controls to ensure that the controls remain up-to-date. For this process to be effective, academic experts and other relevant parties in addition to US industry should be involved in providing input on the process.

Other comments

BIS should also consider the implications of an overly-broad definition of emerging technology in relation to ECRA's provisions on deemed exports. Given the high concentration of high-tech talent in the United States, the United States serves as a research and development hub both for US companies operating globally and for global companies with a significant presence in the United States. However, by their very nature, the industries implicated in the ANPRM are engaged in a highly competitive race for the world's best talent; and talent knows no national bounds.

Significantly expanding the scope of export controls will in turn increase the deemed export licensing burden on US companies, as well as on BIS, and will delay and discourage companies from undertaking research and development activities in the United States. Many American companies hire foreign nationals, particularly engineers, to develop emerging technologies in research laboratories in the United States. Employing workers from a wide range of foreign countries has helped American companies be competitive. Overly-broad export controls would instead encourage foreign nationals to work for US companies' foreign competitors who do not face similar hiring restrictions. As a consequence, companies in China, the European Union, India, and Japan would particularly benefit.