FinReg
Davis Polk Insights on Financial Regulation

First Step Toward Defining "Emerging Technology" Under Export Control Reform Act

By John B. Reynolds, Jeanine P. McGuinness, Will Schisa, Joseph Kniaz & Britt Mosman on November 28, 2018

POSTED IN ANTI-MONEY LAUNDERING, CFIUS, ECONOMIC SANCTIONS, M&A

On November 19, 2018, the Commerce Department's Bureau of Industry and Security ("BIS") issued an advance notice of proposed rulemaking ("**ANPRM**") seeking public comment on "criteria for identifying emerging technologies that are essential to U.S. national security."[1] The ANPRM was issued pursuant to the Export Control Reform Act of 2018 ("ECRA"), a law enacted in August 2018 that authorizes the Commerce Department (in coordination with other federal agencies) to issue regulations that will identify "emerging and foundational technologies"[2] and establish controls on the export, reexport or transfer (within a foreign country) of such technologies. The ANPRM marks the first formal step by BIS in this process.

Although the ANPRM accomplishes little on its own, and does not provide clarity on the final form of the regulations, it does offer at least a preview of the potential breadth of the covered technologies and other challenges that the new regulations may present. In particular, the ANPRM identifies 14 "representative technology categories" as candidates for designation as emerging technologies to be controlled under ECRA. Once finalized, the BIS regulations are likely to have significant consequences for potential investors and U.S. technology firms (broadly defined). In particular, as discussed further below, these regulations will be significant both for reviews of inbound foreign investments by the Committee on Foreign Investment in the United States ("CFIUS") and as a window into U.S. businesses' overseas transactions involving the contribution of U.S.-origin goods, services or technology.

CFIUS Backdrop

As we previously discussed in a **client alert**, the Foreign Investment Risk Review Modernization Act of 2018 ("FIRRMA"), which was enacted in August 2018, overhauled the foreign investment review process for CFIUS. Among other changes, FIRRMA expanded CFIUS's jurisdiction to cover certain non-controlling investments by a foreign person in a U.S. business that involves one or more "critical technologies." FIRRMA's provisions expanding the Committee's jurisdiction over non-controlling investments were not self-implementing and thus had no immediate impact. Last month, however, the Treasury Department issued temporary regulations establishing a pilot program that brought some of these provisions into effect. In particular, under the pilot program, CFIUS exercises jurisdiction over certain non-controlling investments by a foreign person in any U.S. business that produces, designs, tests, manufactures, fabricates, or develops a critical technology that is (a) used by the U.S. business in one of 27 identified industries[3] or (b) designed by the U.S. business specifically for use in one or more such industries. In addition, the pilot program provides that "declarations"—a form of abbreviated filing—are mandatory for such transactions, enforced by civil penalties for failure to file. We discussed the pilot program in greater depth in **a prior client alert**.

The definition and scope of critical technology has significant and immediate consequences for foreign investors and U.S. targets because FIRRMA and the pilot program tie CFIUS's expanded jurisdiction to "critical technology," and because failure to file a mandatory declaration in a transaction involving critical technology can result in substantial penalties for the parties involved. Although most forms of "critical technology" are defined by reference to pre-existing export control programs (for example, the International Traffic in Arms Regulations), FIRRMA also established one wholly new category for such technology: "emerging and foundational technologies" controlled pursuant to ECRA, which was enacted on the same day as FIRRMA. ECRA generally defines these "emerging and foundational technologies" as those that are essential to U.S. national security but not otherwise sufficiently controlled under an existing legal regime. As noted, the ANPRM is BIS's initial step in defining and beginning to control this new category of critical technology.

Observations on the ANPRM

The ANPRM only sets out the broad objectives of the regulatory process and lists a number of "representative" categories of technology on which it seeks comment. Because this first step does not implement any new policy yet, rather than providing a comprehensive summary of the ANPRM, we have instead listed below a number of high-level observations for further consideration as the process unfolds:

- Although the ANPRM clearly signals future additions to the Commerce Control List, it also describes a few potential limitations on the scope of the final regulations. It states that, at least for purposes of the ANPRM, BIS "does not seek to alter existing controls on technology already specifically described in the [Commerce Control List]." In addition, it states that BIS "does not seek to expand jurisdiction over technologies that are not currently subject to the EAR, such as 'fundamental research.'" As a result, at least for now, academic work will generally be excluded from the scope of "emerging technologies." There is growing pressure, however, to remove this limitation and impose controls over academic research when it may be deemed essential to U.S. national security interests.
- Several of the representative categories in the ANPRM are potentially quite expansive, raising the possibility of broad application to technologies intended for commercial uses. One such category, for example is "machine learning technology, such as…planning (e.g., scheduling, game playing)." Another such category is "position, navigation, and timing (PNT) technology." It will be important that BIS substantially refine these categories when it develops the final regulations, as is expected, to ensure that controls are not imposed on products like video games as a "game playing" technology.
- There is no discussion in the ANPRM of the process by which technology is *removed* from the controlled set of emerging technologies. Historically, many technologies that were highly sensitive when developed became commonplace over time; for example, GPS navigation was initially an exclusively military technology, but, at least for the Standard Positioning Service component, is now freely available and deployed in virtually every smartphone. Given the potentially broad scope of the final regulations, and the understanding that the technologies identified will have dual-use applications, an orderly process for removing technologies from the control list (or at least

reducing the restrictions on their exportation) will be important to achieving BIS's stated objective of ensuring that ECRA does not "negatively impact[] U.S. leadership in the science, technology, engineering, and manufacturing sectors."

- At this early stage, the ANPRM does not fully account for existing availability of emerging or foundational technologies in foreign jurisdictions, although one of BIS's mandates is to consider both the "development of emerging and foundational technologies in foreign countries" and "the effectiveness of export controls on limiting the proliferation of emerging and foundational technologies in foreign countries."

We will monitor the implementation of ECRA and the elaboration of the rule-making process.

---

[1] Comments on the ANPRM are due on or before December 19, 2018.

[2] "Foundational technologies," which are not defined in the ANPRM, will be the subject of a separate ANPRM and, presumably, subsequent rule-making process.

[3] These industries, and their corresponding NAICS codes, are listed in the appendix to our **October 16, 2018 client alert** on the pilot program.