Simpson Thacher

Memorandum

BIS Announces Worldwide Export Controls on Advanced Chips and AI Models

January 15, 2025

On January 13, 2025, the U.S. Department of Commerce's Bureau of Industry and Security ("BIS") issued an <u>interim final rule</u> that significantly expands export controls around artificial intelligence ("AI") and advanced computing chips. Entitled "Framework for Artificial Intelligence Diffusion," these new rules restrict the export, reexport, or in-country transfer of sophisticated AI models by requiring a license to export the most advanced closed-weight AI models. Model weights, numerical values that represent the strength of the connections between variables in an AI model, will now be controlled by U.S. export controls even where those model weights are for an AI model that was: (1) trained entirely outside the United States, (2) by non-U.S. personnel, and (3) using cloud computing centers outside the U.S. Indeed, these new rules govern the export of *any* AI model trained above a certain level of computational operations using advanced integrated chips subject to U.S. export controls.

New Export Controls on AI Model Weights

For the first time ever, the U.S. has imposed export controls on certain AI models. Specifically, the new rule adds a new export control for model weights (classified under new ECCN 4E091) of AI models trained using computational power of 10²⁶ or more computational operations,¹ if trained using advanced integrated chips subject to U.S. export controls—as most sophisticated AI models are likely to be.

These new U.S. export controls apply not only to AI model weights developed in the United States, but also to AI model weights developed overseas so long as the AI model was trained using advanced chips subject to U.S. export controls. Except for export to end users in a limited number of U.S.-allied destinations, a license will be required to export, reexport, or transfer controlled AI model weights anywhere in the world, with a presumption of denial review policy. A Chinese company operating in China will, for example, be required to obtain a BIS license even for the transfer of an AI model it has already developed to another Chinese company within China, if such model was trained using advanced integrated chips subject to U.S. export controls.

It should be noted, however, that the new rule does not apply to "open-weight" models where the model weights are publicly available.

¹ The rule suggests that this threshold may be increased over time and indicates that BIS will rely on opinions from the U.S. AI Safety Institute and the Department of Energy to determine which AI models fall within ECCN 4E091.

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Further Expanded Export Controls on Advanced Integrated Chips

The new export control rules also create the first-ever worldwide license requirement for the export of advanced computing chips (ECCNs 3A090.a, 4A090.a and related .z items). Previously, these chips were controlled only in respect of exports to China and a limited number of U.S. arms-embargoed countries, as well as companies headquartered in (or whose ultimate parent company is headquartered in) China or other such countries.

These new export controls effectively establish a three-tier system based on destination:

- **Tier One (Favored):** Transactions involving end users in Australia, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Republic of Korea, Spain, Sweden, Taiwan, and the United Kingdom will, for the most part, retain unrestricted access to U.S. chips. There will be certification requirements under a newly created License Exception Artificial Intelligence Authorization. Individual companies headquartered in these jurisdictions may also obtain authorization to build data centers overseas in countries other than China and other U.S. arms-embargoed countries.
- **Tier Two (Most countries):** End users in the majority of countries will face a cap on the total computing power they can obtain from the U.S.-controlled chips. Individual data center companies headquartered in these countries can apply to BIS for authorization to exceed the applicable cap if they meet certain verifiable security requirements.
- **Tier Three (China and other U.S. arms-embargoed):** End users headquartered in, or whose ultimate parent company are headquartered, in China or other U.S. arms-embargoed countries (Afghanistan, Belarus, Burma, Cambodia, Central African Republic, China, Democratic Republic of the Congo, Cuba, Cyprus, Eritrea, Haiti, Iran, Iraq, North Korea, Libya, Lebanon, Russia, Somalia, Republic of South Sudan, Republic of the Sudan, Syria, Venezuela, and Zimbabwe) remain effectively barred from receiving controlled advanced chips.

Effective Date

The rule is effective immediately, but compliance is required only starting on May 15, 2025, and some parts do not take effect until January 15, 2026.

Implications and Trends

The new rule represents a comprehensive update to the existing controls on advanced computing chips and demonstrates how the United States is conceptualizing the future of these global supply chains vis-à-vis its network of allies and partners. The addition of a control on AI model weights builds on the trend of the U.S. government expanding its export control regime beyond its prior historical scope of application in an effort to capture the development of emerging technologies and related components and services.

The rule intends to further U.S. strategy around controlling proliferation of advanced AI models and the computing power used to train them, but has <u>generated opposition</u> from industry groups and advanced computing

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chip manufacturers. Multiple U.S. chip manufacturers and industry associations have urged the new administration to withdraw the rule, viewing the new requirements as overly broad and burdensome. Infrastructure-as-a-Service (IaaS) and cloud computing providers should also evaluate the need for compliance given the new controls on AI models. In the rule's red flag guidance, BIS warns that there is a substantial diversion risk when a U.S. IaaS provider trains and transfers the resulting model weights for advanced AI models to a customer that is a U.S. subsidiary of a foreign entity. In such circumstances, the IaaS provider could be viewed as aiding and abetting an export control violation.

The issuance of the new rule was shortly followed by the White House's release of a January 14 <u>Executive Order on</u> <u>Advancing United States Leadership in Artificial Intelligence Infrastructure</u> (the "Order"). The Order directs the Department of Defense and Department of Energy to identify federal land sites suitable for lease for the construction and operation of frontier AI data centers by February 28, 2025. This reflects the U.S. government's continued focus on securing the advanced computing supply chain while promoting domestic AI development.

For additional information, please refer to the White House's corresponding Fact Sheet.

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