

Article Information

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The United States, artificial intelligence and export controls

In the last days of the Biden Administration, the United States imposed new, complex, export control restrictions on artificial intelligence (AI) technology, intended to ensure that AI development "runs on American rails". As part of this initiative, the US released the "Interim Final Rule on Framework for Artificial Intelligence Diffusion" (Interim Final Rule)[1], which adds new controls over the sale of AI chips.

The United States is presently the world's largest developer of AI technology, investing over US\$328 billion into the emerging technology over the past five years alone. It is obvious that AI is a technology of the future with sizeable commercial and military opportunities.

As Australia continues to invest in its AI capabilities—whether through AUKUS or general commercial initiatives—Australian businesses planning to engage with American technology and AI companies must be aware of these regulations and plan accordingly.

Restrictions on Exports of AI Chips

The new restrictions establish a tiered licensing framework for the export of advanced AI chips from the United States. The clear intent of this framework is to foster AI development in countries aligned with U.S. technology, principles and interests, while restricting access to nations who are not.

The Interim Final Rule imposes the requirement for authorisations for the exports, re-exports and transfers (in-country) for advanced AI computing chips. The Interim Final Rule:

- tightens existing controls on advanced computing integrated circuits (IC), computing equipment, and related technology;
- introduces new export controls on closed AI model weights;
- requires export licensing for most countries; and
- establishes a tiered security framework for securing authorization to receive the most advanced United States' AI technology.

The framework divides the world into three "tiers" of countries:

- The **first** tier (**Tier One**) concerns low-risk destinations, which are countries which the government has implemented measures to prevent diversion of advanced technologies. This group will effectively see unrestricted access to American AI chips;
- These countries include **Australia**, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, South Korea, Spain, Sweden, Taiwan, the United Kingdom and the United States;
- Entities which meet high security standards and are headquartered in close allies (such as Australia) can obtain *"Universal Verified End User"* (**UVEU**) status. This provides US and allied partner country entities the opportunity to obtain a single authorisation without need to obtain additional authorisations, except in countries identified in Country Group D:5[1] in the EAR;
- All UVEUs will be subject to limitations on where they can geographically allocate their AI computing power,



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measured by the aggregate TPP of chips that meet or exceed the scope of those covered by ECCN 3A090.a.[2] For example, a UVEU that is headquartered in a country listed in a Tier One country cannot transfer or install more than 25% of its total AI computing power to or in locations outside of Tier One countries and cannot transfer more than 7% of its total AI computing power to or in any single country outside of those listed as a Tier One country. Additionally, a UVEU headquartered in the United States cannot transfer or install more than 50% of its total AI computing power outside of the United States;

- The **second** tier (**Tier Two**) contains the vast majority of other countries which are not found in the first tier (lowrisk) or the third tier (embargoed). Entities within these countries will be able to access a "*National Verified End User*" authorisation which will permit the entity to build data centres in specified locations without additional authorisations (except in China, Maca or other US arms-embargoed Country Group D:5 jurisdictions);
- The **third** tier (**Tier Three**) concerns countries such as China, and other US arms-embargoed jurisdictions which are identified in Country Group D:5. These operate under a presumption of denial for applications.

The new rule is effective from 13 January 2025, but has a grace period until 15 May 2025.

The imposition of these new export controls is consistent with the Biden Administration's approach to safeguarding the United States' interests in and access to vital future technologies, such as centralising the manufacture of semiconductors and other advanced computing technology within the United States by way of the CHIPS Act.[3] These measures indicate the United States' intention to encourage economic development of these technologies within the United States and/or its close partners.

Australian organisations can take some comfort in Australia's status as a "Tier One" partner within these new rules, which is consistent with the amendments to other US export regulations (such as ITAR) in the wake of AUKUS.[4] Of course if a business intends to deal with the United States with respect to AI, it pays to be across the finer details of these export controls and other regulations which may be applicable.

Similarly, Australia has undertaken its own broader export controls reform, specifically the overhaul of the *Defence Trade Controls Act 2012* (Cth), associated *Defence and Strategic Goods List* and the imposition of new offences for the unauthorised supply or export of controlled goods (including dual-use), technology and services.[5]

Criticism

These new controls have drawn criticism from several organisations, such as by the major chip manufacturer NVIDIA, who have warned that the restrictions will "derail innovation and economic growth worldwide" by imposing "bureaucratic control over how America's leading semiconductors, computers, systems and even software are designed and marketed globally."[6]

The European Union has also criticised the Interim Final Rule, given that Tier One only encompasses 10 of its 27 members. EU members such as Austria, Poland and Greece are excluded from Tier One, and are instead found in Tier Two. Rather than face administrative hurdles, the concern is that this will cause excluded countries to instead deal with the United States' rivals, rather than following the "American rails" that is intended.

China has expressed its own opposition to the new rails, suggesting the United States has extended its "*extraterritorial jurisdiction*" and creating obstacles for third parties engaged in "*normal trade*" with China. It is unclear whether China will impose its own respective export restrictions.

Conclusion

It remains to be seen the impact that the Interim Final Rule will have on global AI development, particularly given that much of the world's AI advancements have originated in the United States. We watch with interest.

Either way, is now more important than ever to understand the potential impact of these regulations on your business, particularly if you intend to engage with the United States in respect of controlled technology. A practical understanding of US export controls such as EAR and ITAR will become more critical for Australian companies looking to take advantage of new digital technologies in the years ahead, particularly with AUKUS ramping up.

[1] E.g. China, Afghanistan, Belarus, Burma, Cambodia, the Central African Republic, Democratic Republic of Congo, Cuba,



Eritrea, Haiti, Iran, Iraq, North Korea, Lebanon, Libya, Nicaragua, Russia, Somalia, South Sudan, Sudan, Syria, Venezuela and Zimbabwe.

[2] Commerce Control List - Category 3: Electronics (ECCN 3A090.a) Export Administration Regulations (US), 15 CFR § 774, Supp. No. 1 (2024).

[3] Creating Helpful Incentives to Produce Semiconductors for America Act, Pub L No 116-283, div A, title XCIX, 134 Stat 3388 (2021)

[4] Department of Defence "US, UK and Australia further boost defence trade cooperation", 20 April 2024, <u>https://www.defence.gov.au/news-events/releases/2024-04-20/us-uk-and-australia-further-boost-defence-trade-cooperation</u>.

[5] E.g. Defence Trade Controls Act 2012 (Cth) ss 10A-10C.

[6] Reuters "Nvidia faces revenue threat from new U.S. AI chip export curbs" 14 January 2025, https://www.reuters.com/technology/artificial-intelligence/nvidia-says-new-rule-will-weaken-us-leadership-ai-2025-01-13/.