

Biden Administration Adopts Rules to Guide A.I.'s Global Spread

New rules aim to keep advanced technology out of China and to ensure that cutting-edge artificial intelligence is developed by the United States and its allies.

**By Ana Swanson
New York Times**

The Biden administration issued sweeping rules on Monday governing how A.I. chips and models can be shared with foreign countries, in an attempt to set up a global framework that will guide how artificial intelligence spreads around the world in the years to come.

With the power of A.I. rapidly growing, the Biden administration said the rules were necessary to keep a transformational technology under the control of the United States and its allies, and out of the hands of adversaries that could use it to augment their militaries, carry out cyberattacks and otherwise threaten the United States.

The rules put various limitations on the number of A.I. chips that companies can send to different countries, essentially dividing the world into three categories. The United States and 18 of its closest partners — including Britain, Canada, Germany, Japan, South Korea and Taiwan — are exempted from any restrictions and can buy A.I. chips freely.

Countries that are already subject to U.S. arms embargoes, like China and Russia, will continue to face a previously existing ban on A.I. chip purchases.

All other nations — most of the world — will be subject to caps restricting the number of A.I. chips that can be imported, though countries and companies are able to increase that number by entering into special agreements with the U.S. government.

The rules are aimed at stopping China from obtaining from other countries the technology it needs to produce artificial intelligence, after the United States [banned such sales to China](#) in recent years.

But the regulations also have broader goals: having allied countries be the location of choice for companies to build the world's biggest data centers, in an effort to keep the most advanced A.I. models within the borders of the United States and its partners.

Governments around the world, particularly in the Middle East, have been pumping money into attracting and building enormous new data centers, in a bid to become the next center for A.I. development.

Jake Sullivan, President Biden's national security adviser, told reporters on Sunday that the rule would ensure that the infrastructure for training the most advanced artificial intelligence would be in the United States or in the jurisdiction of close allies, and "that capacity does not get offshored like chips and batteries and other industries that we've had to invest hundreds of billion dollars to bring back onshore."

"The rule both provides greater clarity to our international partners and to industry, and counters the serious circumvention and related national security risks posed by countries of concern and malicious actors who may seek to use the advanced American technologies against us," Mr. Sullivan said.

It will be up to the Trump administration to decide whether to keep the new rules or how to enforce them. In a call with reporters on Sunday, Biden administration officials said they had been in consultations with the incoming administration about the rules.

Though companies in China have begun to develop their own A.I. chips, the global market for such semiconductors is dominated by U.S. companies, particularly Nvidia. That dominance has given the U.S. government the ability to regulate the flow of A.I. technology worldwide, by restricting U.S. company exports.

[Companies have protested those limitations](#), saying the restrictions could hamper innocuous or even beneficial types of computing, anger U.S. allies and ultimately push global buyers into buying non-American products, like those made by China.

In a statement, Ned Finkle, Nvidia's vice president for government affairs, called the rule "unprecedented and misguided" and said it "threatens to derail innovation and economic growth worldwide."

"Rather than mitigate any threat, the new Biden rules would only weaken America's global competitiveness, undermining the innovation that has kept the U.S. ahead," he said.

Brad Smith, the president of Microsoft, said in a statement that the company was confident it could "comply fully with this rule's high security standards and meet the technology needs of countries and customers around the world that rely on us."

The rules, which run more than 200 pages, also set up a system in which companies that operate data centers, like Microsoft and Google, can apply for special government accreditations.

In return for following certain security standards, these companies can then trade in A.I. chips more freely around the globe. The companies will still have to agree to keep 75 percent of their total A.I. computing power within the United States or allied countries, and to locate no more than 7 percent of their computing power in any single other nation.

The rules also set up the first controls on weights for A.I. models, the parameters unique to each model that determine how artificial intelligence makes its predictions. Companies setting up data centers abroad will be required to adopt security standards to protect this intellectual property and prevent adversaries from gaining access to them.

Artificial intelligence is quickly transforming how scientists carry out research, how companies allocate tasks between their employees and how militaries operate. While A.I. has many beneficial uses, U.S. officials have grown more concerned that it could enable the development of new weapons, help countries surveil dissidents and otherwise upend the global balance of power.

Jimmy Goodrich, a senior adviser for technology analysis at the RAND Corporation, said the rules would create a framework for protecting U.S. security interests while still allowing firms to compete abroad. “They are also forward-looking, trying to preserve U.S. and allied-led supply chains before they are offshored to the highest subsidy bidder,” he said.