HYPERION RESEARCH

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New US Export Control Plan Highlights Value of Global QC Expertise

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RECENT DEVELOPMENT

On September 5th, the U.S. Commerce Department's Bureau of Industry and Security (BIS) released an interim final rule (IFR) that calls for implementing export controls on critical and emerging technologies including quantum computing (QC). The IFR specifically addresses controls on QCs, related equipment, components, materials, software, and technology that can be used in the development and maintenance of QCs to a number of countries with national security concerns. However, language within the IFR includes a strong recognition that U.S. QC technology leadership is based on the ability of U.S. companies to benefit from the expertise of foreign QC experts, and that major QC innovation is occurring in academic labs, small companies, large companies, and national laboratories throughout the world. As such, the IFR calls for the creation of a new deemed export license exception process to permit key foreign nationals to participate in U.S. QC activities under an annual BIS review process that ensures that such foreign access is consistent with U.S. national security and foreign policy interests.

ANALYST COMMENT

Deemed export control regulations, which control foreign participation in critical U.S. technology activities, seek to balance protecting leading-edge U.S. technology capabilities against limiting U.S. research capabilities only to domestic or trusted nations experts. This IFR emphatically acknowledges that U.S. QC developers must have access to the broadest possible base of foreign QC expertise, even from nationals otherwise considered a risk to U.S. national security interests such as those from China or Russia. Global competition for elite QC experts is already intense as many advanced nations are actively developing QC capabilities for both commercial and national security end uses, often backed by strong government motivations to develop indigenous QC capabilities. This IFR takes a necessary step in ensuring that U.S. QC developments have one less impediment to maintaining a world-class QC R&D ecosystem. The IFR, which includes a 60-day interval to gather public comments to ensure that the final provisions reflect broad industry and public input, stands a good chance of becoming a permanent and much needed policy option for key U.S. technology QC developers. Other like-minded nations may soon follow suit.