

## U.S. SENATOR MARIA CANTWELL

## Washington

WASHINGTON. D.C. – This week, U.S. Senator Maria Cantwell (D-WA), chair of the Senate Committee on Commerce, Science, and Transportation, introduced the bipartisan National Quantum Initiative Reauthorization Act. The legislation would authorize \$2.7 billion over the next five years for the National Quantum Initiative (NQI) and direct the NQI to focus on practical applications within other federal agencies. Below is a breakdown of the legislation:

## The National Quantum Initiative Reauthorization Act: BILL TEXT

- Authorizes \$2.7 billion for FY2025 FY2029 for NIST, NSF and NASA quantum R&D.
- Extends the program by five years from the original 2029 deadline to December 2034.
- Shifts the focus of the National Quantum Initiative from basic research to developing practical quantum applications.
- Establishes up to three new NIST quantum centers to advance research in quantum sensing, measurement and engineering.
- Creates five new NSF Multidisciplinary Centers for Quantum Research and Education, a quantum workforce coordination hub and quantum testbeds at the NSF's Technology, Innovations, and Partnerships Directorate.
- Authorizes NASA quantum R&D activities, including quantum satellite communications and quantum sensing research initiatives.
- Creates prize challenges to accelerate the development of quantum applications and algorithms through public-private collaboration.
- Requires the White House Office of Science and Technology Policy (OSTP) to develop an
  international quantum cooperation strategy to coordinate R&D activities with allies of the
  United States.
- Adds the NIH, State Department and SBA to the National Quantum Initiative to expand interagency collaboration and expertise.
- Directs the Secretary of Commerce to submit a plan to strengthen quantum supply chain resilience.
- Requires each agency to develop metrics for monitoring and evaluating advancements in quantum information science and progress toward practical quantum applications and report to Congress.
- Directs the Government Accountability Office (GAO) to conduct a study on reducing red tape and paperwork burden related to private sector and academic participation in National Quantum Initiative activities and centers.

The following quotes were provided in support of Sen. Cantwell's bipartisan National Quantum Initiative Reauthorization Act:

"The Quantum Industry Coalition is committed to advancing U.S. quantum leadership. We welcome the reauthorization and expansion of the National Quantum Initiative, which will help expand the U.S. quantum industry through near-term application development and foundational research. The reauthorization enhances engagement with the innovative U.S. quantum industry, supports economic competitiveness, and promotes national security. We thank Chair Cantwell and Senators Young, Durbin, and Daines for their work on this important legislation," said Paul Stimers, Executive Director of the Quantum Industry Coalition.

"QED-C wholeheartedly supports the bipartisan NQI Reauthorization Act being introduced in the Senate by the Committee on Commerce, Science and Transportation. The Act will ensure US leadership by supporting a broad portfolio of basic research, promoting engagement with industry and international partners, and building a quantum-ready workforce," said Celia Merzbacher, Executive Director of the Quantum Economic Development Consortium.

"IonQ applauds Senator Maria Cantwell in her efforts to reauthorize the National Quantum Initiative Act (NQI). The NQI is instrumental in driving the U.S. national quantum strategy and demonstrates how policy can support technology leadership. Now is the time for the U.S. government to employ quantum computing and networking technologies to help address many of society's complex challenges in areas such as security, finance, manufacturing and life sciences. We encourage a swift passage of this necessary legislation," said Peter Chapman, President and CEO of IonQ.

"Microsoft supports the National Quantum Initiative Reauthorization Act as a vital step in maintaining U.S. leadership in quantum information science. This legislation plays a crucial role in driving innovation, cultivating a skilled quantum workforce, and fostering public-private partnerships. As quantum technologies advance, they offer transformative potential to address critical global challenges, from combating climate change to enhancing supply chain efficiency. Microsoft is proud to contribute to the progress of quantum science and technology and advocates for the swift passage of this essential legislation to secure the United States' position at the forefront of the quantum revolution," said Fred Humphries, Corporate VP U.S. Government Affairs for Microsoft.

"The National Quantum Initiative Reauthorization Act is vital for advancing quantum science and technology and ensuring the United States remains a global leader in this field. At the University of Washington, this investment empowers us to train the next generation of quantum researchers, and strengthens our ability to innovate in quantum computing, communication, and materials," said Dr. Kai-Mei Fu, Professor of Physics, Electrical Engineering at the University of Washington.