SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

Nominations Hearing
Tuesday, February 25, 2025 at 10:00 A.M.

REPUBLICAN QUESTIONS FOR THE RECORD

COVER PAGE
Mr. Kratsios

SENATOR JOHN THUNE (R-SD)

1. Advanced artificial intelligence (A.I.) is a revolutionary technology that has the potential to improve health care, agriculture, logistics, supply chains, and countless other industries. How would you approach A.I. regulation to protect consumers, harness major advancement, and limit government intervention?

I share your view that artificial intelligence holds immense promise for innovation across sectors. If confirmed, I would work with stakeholders in government, industry, and academia to ensure we take a balanced approach: protecting consumers and national interests while maintaining an environment where innovation can thrive.

2. Will you commit to working with this committee on a light-touch, pro-innovation legislative framework for A.I.?

Yes. If confirmed, I look forward to working with this committee to forward a legislative framework for AI that will ensure continued American leadership in AI and public trust in the development and use of AI systems.

3. Coordination across federal agencies is essential to ensuring the economic benefits of licensed and unlicensed spectrum do not compromise national security efforts. Can you commit to working with your counterparts across the administration and members of this committee to expand access to licensed and unlicensed spectrum without compromising national security?

Yes. I believe effective interagency coordination can help ensure that expanded access to spectrum provides economic benefits to the American people without compromising our national security.

4. As a member of Secretary Burgum's National Energy Dominance Council, will you commit to helping the President's administration achieve an all-of-the-above energy strategy that will help the U.S. achieve global energy dominance?

Yes. American energy dominance is critical to our plans to lead the world in the development and deployment of emerging technologies such as artificial intelligence and quantum information science. If confirmed, I look forward to supporting the work of the Council.

SENATOR JERRY MORAN (R-KS)

1. Mr. Kratsios, during Congress's development of the CHIPS and Science Act, I advocated for increased funding to states that have historically received a very small fraction of the federal research and development resources. Efforts to increase such funding in the CHIPS and Science Act include provisions raising the percentage of NSF research funding to EPSCoR states like Kansas from 13 percent to 20 percent. I believe engaging researchers across the country is critical for US competitiveness in key technology areas, including advanced manufacturing and biotechnology.

- If confirmed, how do you plan to support policies that increase scientific and technological development in states like Kansas?

  I recognize the importance of broadening our national research base so that every region can contribute to—and benefit from—U.S. innovation. If confirmed, I would work with Federal departments and agencies and Congress on programs like EPSCoR, in an effort to continue expanding research opportunities, foster partnerships with local universities and businesses, and strengthen our nation's overall scientific capacity.

2. Congress is concerned about intellectual property theft and the transfer of sensitive technologies to China through US universities.

- Mr. Kratsios, what steps would you take as OSTP Director to mitigate these risks without stifling academic research?

  I recognize the importance of protecting sensitive technologies while maintaining an open, collaborative research environment. If confirmed, I would work with federal agencies, universities, and industry to ensure research and innovation thrives while safeguarding our national interests.

- Mr. Kratsios, how would you address participation by U.S. academics in Chinese talent recruitment programs, such as the Thousand Talents Program?

  Chinese talent recruitment programs may pose serious risks to national security and may violate conflict-of-interest policies at educational institutions receiving Federal funding. If confirmed, I would work with relevant Federal agencies, universities, and industry to ensure there is transparency, as provided by relevant statutory and regulatory requirements.

- Mr. Kratsios, what specific policies or guidelines would you propose to universities to ensure transparency regarding foreign funding, particularly from Chinese sources, without imposing overly restrictive regulations?

  I believe in a balanced approach that enhances visibility into foreign contributions without creating excessive burdens on legitimate research. If confirmed, I am happy to work with Congress on proposals that may bring more transparency.

- Mr. Kratsios, given your experience with emerging technologies, how would you leverage OSTP's authority to strengthen U.S. academic resilience against Chinese influence in fields like AI, quantum computing, and 5G?

  If confirmed, I would encourage coordinated interagency strategies—partnering with institutions on best practices to protect sensitive research and facilitate safe, productive international partnerships where appropriate.

3. Mr. Kratsios, how do you see the commercialization of space exploration shaping the future of U.S. leadership in space, and what role should OSTP play in advancing this agenda?

- Mr. Kratsios, during your time as U.S. Chief Technology Officer, you championed emerging technologies. How would you apply that experience to accelerate the growth of the commercial space sector?

  Commercial space exploration significantly shapes America's leadership. If confirmed, I would encourage a strong ecosystem that involves government, industry, and academia, ensuring we stay at the forefront of space innovation and economic growth.

- Mr. Kratsios, NASA has increasingly partnered with companies like SpaceX and Blue Origin. How would you strengthen public-private partnerships to ensure they benefit both U.S. taxpayers and the commercial space industry?

  During my time as U.S. CTO, I worked to prioritize emerging technologies and streamline regulations. If confirmed, I would build on these efforts, partnering with NASA, the FAA, and other agencies to create a supportive environment for commercial space ventures.

- Mr. Kratsios, what policies would you advocate for to encourage small and medium-sized enterprises to enter the commercial space market, beyond the dominance of major players?

  I believe a dynamic space sector requires diverse participants. If confirmed, I would advocate for simplified regulations and Federal opportunities that encourage smaller innovators to compete and thrive.

- Mr. Kratsios, how would OSTP under your leadership coordinate with agencies like NASA, the FAA, and the Department of Commerce to streamline regulations for commercial space activities?

  Interagency coordination is key to creating a predictable regulatory environment. If confirmed, I would champion collaborative efforts to align Federal policy, ensuring our space industry remains agile and competitive.

- Mr. Kratsios, how would you encourage private investment in high-risk, high-reward space technologies that may not yield immediate commercial returns?

  High-risk, high-reward research has the potential to generate significant technological breakthroughs. If confirmed, I would explore ways to ensure private capital is not deterred from supporting next-generation space capabilities.

4. Mr. Kratsios, you have been a strong advocate for American leadership in aviation innovation, especially under the first Trump Administration. Our global adversaries, particularly China, are investing in Advanced Air Mobility (AAM) and drones, and President Trump has spoken of the need to lead the world in AAM. What do you plan to do make certain the U.S. leads in this technology, and would you support an Executive Order to make AAM a national priority?

Advanced Air Mobility is poised to reshape aviation. If confirmed, I would collaborate with industry and agency partners to identify key research areas, workforce needs, and regulatory challenges facing the industry. As for an Executive Order, I would offer any insights requested by the President to prioritize AAM.

- How would you define 'aerospace dominance' in the context of U.S. national interests, and what role should OSTP play in securing it over the next decade?

  Aerospace dominance entails sustained leadership in technology, manufacturing, and operational capabilities across the aerospace sector. OSTP can help set research priorities, coordinate policy across agencies, and foster international partnerships that keep the U.S. at the forefront of aerospace innovation over the next decade.

- Given your experience as U.S. Chief Technology Officer, what do you see as the greatest threats to U.S. aerospace dominance today, and how would you address them?

  Factors include global competition, supply chain vulnerabilities, and talent shortages. If confirmed, I would work through the policy coordination process with relevant agencies to craft a coordinated Federal strategy to ensure U.S. aerospace dominance.

- How would you ensure that U.S. advancements in aerospace technology continue to set the global standard, particularly in the face of rising competition from China and Russia?

  I believe coordinated federal R&D efforts, strong private sector partnerships, and active international engagement help shape global norms. If confirmed, I would work with agencies and industry to maintain our competitive edge.

- What policies would you propose to bolster the U.S. aerospace supply chain, particularly in light of recent disruptions and dependencies on foreign components?

Recent disruptions highlight the need for resilient supply chains. If confirmed, I would consult with stakeholders and agencies on potential strategies—like diversifying suppliers and supporting domestic manufacturing—to reduce dependencies on foreign sources.

- Aerospace dominance relies on a skilled workforce. How would you work to strengthen STEM education and training programs to meet the demands of the aerospace industry?

  A robust pipeline for STEM and STEM-adjacent occupations is essential. If confirmed, I would advocate for collaborative programs among government, academia, and industry that expand access to aerospace-related fields at all education levels.

- What strategies would you pursue to retain top aerospace talent in the U.S. and prevent brain drain to competitor nations?

  If confirmed, I would support policies that promote aerospace innovation here in the United States, such as advanced research opportunities and competitive career prospects, encouraging top talent to build and work domestically.

- How would you streamline regulations to encourage innovation in the aerospace sector without compromising safety or security?

  If confirmed, I would engage industry experts to identify potential barriers to innovation, and would work with regulatory agencies to identify policies that remove those barriers where appropriate, while upholding aviation's high safety standards.

- What long-term investments in aerospace infrastructure—such as launch facilities or testing grounds—would you prioritize to keep the U.S. ahead?

  If confirmed, I would engage agencies and industry experts to identify policies that support strategic projects that strengthen America's aerospace foundation.

5. The development and use of emerging technology like artificial intelligence must continue to be promoted, rather than suppressed, by the U.S. intellectual property system. Existing U.S. IP law is capable of addressing issues related to artificial intelligence and serves to promote creative activity in AI technology. While unique issues might arise in the future that may require additional legislation or regulation, the technology-neutral nature of the U.S. Copyright Act is sufficient to address present issues regarding AI and copyright.

- Mr. Kratsios, in order for the United States to continue to lead on artificial intelligence, will you commit to promoting U.S. intellectual property law, including limitations and exceptions to U.S. copyright law like the fair use doctrine, abroad?

  U.S. laws around intellectual property protections and fair use are cornerstones of

American innovation. If confirmed, I would collaborate with diplomatic and trade partners to defend U.S. law internationally and ensure continued global U.S. leadership in AI.

- Can you speak to the importance of a risk-based, flexible, and technology-neutral regulatory approach when considering the intersection between emerging technology and copyright?

  Having regulatory approaches that are risk-based, flexible, and technology-neutral, including for copyright law, ensure that regulation can keep pace with technological innovation. If confirmed, I would work with relevant agencies to ensure that regulatory frameworks can handle new technological developments and provide clarity to innovators.

Under the previous Trump administration, you played a key role in advancing the first-ever OECD Principles on AI. Although the Biden Administration carried forth much of that work, the threat of regulatory fragmentation, driven by markets like the EU eager to embed their vision of prescriptive governance, is a growing threat.

- Mr. Kratsios, what is your vision for U.S. leadership on AI governance among like-minded states through forums such as the OECD and G7?

  Building upon prior initiatives, I believe that the United States should champion pro-innovation policies that uphold American values. If confirmed, I would work closely with allies and like-minded states to prevent regulatory fragmentation and defend American interests on the international stage.

- What specific principles can the U.S. advance to ensure that leading U.S. firms maintain consistent, fair access to foreign markets?

  If confirmed, I would work with relevant agencies to combat barriers that limit U.S. competitiveness, including advocating against forced technology transfer and harmful IP-related practices as a condition of entering a foreign market.

6. Mr. Kratsios, I am the chairman of the Commerce, Justice, and Science Appropriations Subcommittee that provides funding to OSTP and several science agencies, including NASA, NOAA, and NIST.

- If confirmed, how will you work with Congress to secure the funding necessary to support long-term research and development priorities?

  Collaboration between appropriators and federal agencies is key. Every fiscal year, the OSTP Director partners with the OMB Director to author a memorandum on the federal government's research and development priorities. If I am confirmed, I intend to work with OMB to set the Administration's R&D budget priorities and to work in partnership with Congress to fund those priorities to ensure American leadership in emerging technologies.

7. Mr. Kratsios, given your background is primarily in technology policy, how do you plan to address the scientific research components of the job?

If confirmed, I look forward to assembling a team of subject matter experts with varied technical expertise across Administration priorities on scientific research.

8. Mr. Kratsios, in 2019 in your role as Chief Technology Officer of the United States, you helped lead the White House's Summit on America's Bioeconomy, where the importance of the bioeconomy as a national strategic research and development priority was discussed. During the summit you also highlighted the Administration's commitment to ensuring American leadership in emerging technologies, which includes investment in R&D, the workforce, and removing regulatory barriers to growth.

That commitment is more important than ever in helping encourage domestic biomanufacturing in states like Kansas. Corn and soy farmers in Kansas benefit from market demand created by the manufacture of biobased products. According to USDA's estimates, over 11,570 direct jobs and over 10,680 spillover jobs in Kansas are supported by the biobased chemicals, biorefining, enzyme, forest products, and biobased plastic sectors. These activities generate over $782 million in direct economic value and nearly $836 million in spillover economic value to Kansas's economy.

- Given the importance to our economic growth and the implications for national security, do you and the Trump Administration remain committed to growing the bioeconomy's talent, data, and infrastructure?

  I remain committed to ensuring continued American innovation in biotechnology and encouraging domestic biomanufacturing, recognizing the importance of the bioeconomy to our economy and national security. If confirmed, I look forward to working with relevant stakeholders and agencies to realize these goals.

SENATOR DAN SULLIVAN (R-AK)

1. With Huawei, we have a recent grave example of the CCP utilization of preferential policies and financing to enable the expansion of its telecommunications equipment globally, imbedding itself in networks capable of espionage or sabotage of U.S. and global networks.
In reaction, Congress and the Administration created restrictions on the use of Huawei equipment, funded the removal of the equipment from U.S. networks, and enacted restrictions on exports of U.S. tech to ensure that Huawei cannot benefit from U.S. innovations.
We have a new profound risk with AI, as we can anticipate that the CCP will take similar interest in exporting Chinese developed large language models around the world that can be the basis to provide citizen facing basic government services (taxes, healthcare, benefits).

- What can the U.S. government be doing to ensure U.S. tech companies are globally competitive against foreign rivals?

  If confirmed, I look forward to working with Congress and relevant agencies on a robust, two-pronged policy agenda to both promote and protect American innovation, ensuring that we develop the best technologies here at home and defend our technologies domestically and globally from malign influence.

- Are our global development agencies positioned to support the export of American technology and software?

  If confirmed, I look forward to working closely with our global development agencies to craft a coordinated strategy to support the export of strategically important American technology abroad.

2. As Director of OSTP, pursuant to the President's AI E.O. on January 23rd, you will be one of the chief architects charged with developing an AI policy "action plan" by July 22, 2025.
At OSTP, you have purview to advise the President on science and technology across all federal programs and activities.

- How do we ensure that our agencies across the federal government are spending research and development funds on the most important areas of AI? What do you see as the current priority?

  If confirmed, I look forward to evaluating existing national AI research and development strategic plans to identify research priorities, such as the measurement science which underpins large language model testing and evaluation. I will plan to work with research agencies to better understand their R&D priorities and facilitate interagency AI R&D coordination through the National Science and Technology Council.

3. During the Biden Administration, I was concerned that the Biden Executive Order on AI created uncertainty over regulating potential harms associated with generative AI that could stifle U.S. competitiveness and ability to innovate. For example, during the unveiling of the AI Safety Institute in London VP Harris made statements at the unveiling trying to redefine an existential

threat to include the "full spectrum" of threats, including bias, discrimination and the spread of disinformation. Some of the identified harms extend beyond scientific concerns and delve into social policy realms.

- How do we ensure that the U.S. is pursuing risk-based guidance to industry that ensures U.S. leadership and competitiveness?

  If confirmed, I look forward to working with agencies to coordinate a use-case and sector-specific, risk-based policy approach across sectors and ensure that the private sector can support continued U.S. AI leadership.

4. The CHIPS and Science Act directed the Office of Science and Technology Policy to establish and lead the interagency Subcommittee on Microelectronics Leadership. This group is intended to coordinate the national strategy on microelectronics research across the government's science investments to ensure U.S. leadership in this critical technology.

- How will the Office of Science and Technology Policy—under your leadership—ensure that the portfolio of research investments made by the U.S. outpaces other nations who are ramping their innovation programs to try to capture market leadership?

  If confirmed, I will work with the Subcommittee on Microelectronics Leadership and relevant agencies to align R&D priorities, avoid duplication of effort, and capitalize on the creativity of American industry and academia.

5. The formidable leaps in the capability of today's AI systems rests on many decades of academic research supported by federal science programs such as the DOE Office of Science and the National Science Foundation. And these offices continue to support development of AI algorithms and information processing science that will extend the capabilities of AI far beyond what is possible today.

- What actions will the Office of Science and Technology Policy—under your leadership— take to ensure that upstream research is fully supported in areas such as mathematics, materials science, chemistry, physics, etc. to secure AI leadership for the U.S.?

  Foundational research forms the bedrock of tomorrow's breakthroughs. If confirmed, I will champion support for fundamental science at agencies like NSF and DOE, as well as interagency initiatives that drive cross-agency collaboration. These efforts will be central to America's continued AI leadership.

6. In addition to incentivizing the construction of fabs in the U.S., the CHIPS Act also makes substantial investments in more applied research for piloting and prototyping in the semiconductor industry. Since passage of the CHIPS Act, companies have partnered with the Departments of Commerce and Defense to inform these R&D programs to ensure they meet the industry's needs.

- What role will OSTP play in maximizing continuity and efficiency of these programs to ensure the private sector can meet their R&D and innovation timelines and maintain U.S. leadership in microelectronics?

  A close, iterative dialogue between federal program managers and industry is vital. If confirmed, I look forward to learning more about how these programs are being facilitated and how OSTP can support the Departments of Commerce and Defense.

SENATOR TIM SHEEHY (R-MT)

1. Holmium Copper II (HoCu2) is required for every quantum computer, but its development is currently dominated by a Chinese company. The Critical Resources Summit (CRS3.0) in Bozeman, Montana, on April 8-9th will address this underexamined issue and other critical materials vulnerabilities. Will you attend CRS3.0 and engage on these issues?

I appreciate the importance of critical materials to our emerging technologies. While I cannot confirm my schedule at this point, I value these discussions and, if confirmed, will ensure OSTP representation engages with experts and stakeholders to address critical supply chain vulnerabilities.

2. Will you review the importance of the National Quantum Initiative Advisory Committee to ensure effective representation of expertise on the quantum supply chain?

Yes. If confirmed, I will review the Committee's composition to ensure it includes the necessary technical and industry expertise. This input is crucial to fortifying our quantum ecosystem and maintaining U.S. leadership in this field.

3. Should Congress give the Artificial Intelligence Safety Institute (AISI) an export promotion mandate, and make it an independent arbiter charged with conducting evaluations of American and foreign AI models to detect security threats, political bias, and censorship?

I look forward to working with the Commerce Department and interagency partners to better assess the AISI and help chart the best part forward for the institute to ensure continued American leadership in artificial intelligence.

4. What is your overall vision for AISI?

If confirmed, I look forward to working with the Department of Commerce and interagency partners to better assess the AISI and help chart the best path forward for the institute to ensure continued American leadership in artificial intelligence.

5. If federal support for science is frequently upstream of private sector innovation, how can Congress support the administration's efforts to reduce bureaucracy and ensure federal science dollars get more bang for their buck?

If confirmed, I look forward to working with Congress and agencies to further study existing administrative research burdens and address them directly. Federally funded scientists should be empowered to spend less time on administrative requirements and more time on scientific research.

6. How can Congress support the development of critical infrastructure, such as high-performance computing and secure data centers, to maintain the U.S.'s leadership in AI and ensure resilience against cyber threats?

Advanced computing infrastructure is essential to accelerate AI research and maintain our

competitive edge. If confirmed, I look forward to working with DOE, NSF, and other relevant agencies on their computing initiatives.

7. What can Congress do to help unlock the large, scientific datasets at DOE, HHS, NSF and elsewhere to enable open, AI-driven research platforms?

Federal datasets are a valuable national resource. If confirmed, I would work with agencies to encourage secure data sharing and standardized formats that can help unlock research breakthroughs across multiple disciplines.