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Organization: NCTA - The Internet & Television Association

General Comment

Comments of NCTA - The Internet & Television Association are attached.

Thank you.

Attachments

052925 NSF 2025 OGC 0001 NCTA Comments on Request for Info re Development of 2025 National AI R and D Strategic Plan

**Before the
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
THE WHITE HOUSE
Washington, D.C. 20502**

Request for Information on the Development)	
of a 2025 National Artificial Intelligence (AI))	NSF-2025-OGC-0001
Research and Development (R&D) Strategic)	
Plan)	

COMMENTS OF NCTA – THE INTERNET & TELEVISION ASSOCIATION

Rikin Thakker, Ph.D.
Chief Technology Officer and
Senior Vice President, Technology
NCTA – The Internet & Television
Association

Loretta Polk
Traci Biswese
NCTA – The Internet & Television
Association
25 Massachusetts Avenue, NW
Suite 100
Washington, DC 20001-1431
(202) 222-2445

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I. INTRODUCTION

NCTA – The Internet & Television Association (NCTA), representing America’s leading providers of high-speed internet, video services, and diverse programming content, appreciates the opportunity to comment on the development of the 2025 National Artificial Intelligence Research and Development (R&D) Strategic Plan (Strategic Plan).¹ Our industry has invested billions of dollars to provide the advanced infrastructure and engaging content that support the nation’s digital economy. As AI technologies evolve and become increasingly pervasive across all public and private sectors, our industry remains committed to fostering AI development that is secure, reliable, and beneficial to all Americans.

As outlined in NCTA’s prior comments on the Administration’s AI Action Plan Request for Information earlier this year, we support the adoption of a national framework that embraces risk-based, non-prescriptive principles, promotes innovation, and ensures the security and trustworthiness of AI deployment.² The emerging patchwork of inconsistent state regulations threatens to hamper innovation and saddle the industry with burdensome regulations. The Strategic Plan represents a timely and necessary opportunity to further shape a pro-innovation ecosystem that accelerates long-term research while addressing vital societal and economic needs.

¹ Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan, Docket ID No. NSF-2025-OGC-0001 (Apr. 24, 2025), <https://www.federalregister.gov/documents/2025/04/29/2025-07332/request-for-information-on-the-development-of-a-2025-national-artificial-intelligence-ai-research>.

² See NCTA – The Internet & Television Association, Comment on the White House Office of Science and Technology Policy Request for Information on the Development of an Artificial Intelligence (AI) Action Plan, OSTP-TECH-2025-02305 (March 14, 2025); Request for Information on the Development of an Artificial Intelligence (AI) Action Plan, 90 Fed. Reg. 9088 (Feb. 6, 2025), *available at* <https://www.federalregister.gov/documents/2025/02/06/2025-02305/request-for-information-on-the-development-of-an-artificial-intelligence-ai-action-plan>.

We commend the Office of Science and Technology Policy (OSTP), the National Science Foundation (NSF), and the Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO) for leading this strategic initiative and recognize their ongoing efforts to ensure that Federal AI R&D investments serve the public interest, including critical national security interests. In his first term, President Trump established a pro-innovation, light-touch regulatory environment for AI. The President has renewed and extended his vision by committing to fostering innovation and “ensuring that all Americans benefit from the technology and its transformational potential.”³ NCTA supports the development of an R&D Strategic Plan to ensure the safety and security of Americans by prioritizing the protection of national security interests.

NCTA supports continued expansion of the nation’s broadband infrastructure to enable widespread and accelerated access to AI, alongside sustained investment in advanced technologies and workforce development to ensure Americans can fully harness the benefits of AI. Officials should also continue to work with academia, business, non-profit workforce development and community-based organizations, and state and local governments to ensure that America’s job training programs are well-suited to handle the robust needs of the AI-powered future. The United States must work collaboratively with global allies to preserve its strategic advantage and safeguard national security.

Informed by the experience of our members—including broadband providers and leading content programmers—NCTA submits these comments to help ensure the Strategic Plan advances long-term, high-impact AI research, fosters innovation in content creation and delivery,

³ James David Vance, Vice President of the United States, Keynote Address at the Paris AI Summit, YouTube, at 5:11 (Feb. 11, 2025), available at <https://www.youtube.com/watch?v=64E9O1Gv99o>.

protects intellectual property rights, and strengthens the nation's leadership in secure and trustworthy AI development.

II. NCTA MEMBERS SUPPORT FEDERAL LEADERSHIP IN FOUNDATIONAL AND STRATEGIC AI R&D

NCTA strongly supports the recognition in this RFI that the Federal government plays a unique and indispensable role in foundational AI research. As reinforced in Executive Order 14179, which directs the development of a national AI Action Plan, the Federal government has a unique responsibility to invest in foundational research that safeguards U.S. innovation and national security while promoting economic prosperity.⁴ Indeed, Federal investment is vital to ensuring that long-term, high-impact research continues even in areas where commercial returns are uncertain or slow to materialize. Such investments provide the bedrock for sustained U.S. leadership in artificial intelligence, enabling discoveries that drive competitiveness, improve public services, and enhance national security.⁵

We urge continued Federal support for AI R&D that strengthens the reliability, transparency, and trustworthiness of AI systems, especially those deployed in consumer and public-sector contexts. Federal AI R&D should also focus on areas such as broadband infrastructure resiliency, national cybersecurity, and technical standards and interoperability. These objectives reflect national priorities where industry, government, non-profit research organizations, and academia must collaborate.

⁴ Executive Order No. 14179, 90 Fed. Reg. 8741 (Jan. 23, 2025), *available at* <https://www.federalregister.gov/documents/2025/01/31/2025-02172/removing-barriers-to-american-leadership-in-artificial-intelligence>.

⁵ *Id.*

III. IDENTIFYING PRIORITY RESEARCH AREAS AND CHALLENGES IS KEY TO MAXIMIZING THE STRATEGIC DEVELOPMENT OF AI IN THE U.S.

AI for Network Optimization and Resilience. NCTA encourages Federal investment in AI models that improve the performance, reliability, and resilience of broadband networks. Research should focus on tools that enable dynamic spectrum sharing and use, real-time fault detection, predictive maintenance, and adaptive network management. Such capabilities are essential to support high-bandwidth, latency-sensitive applications including telehealth, virtual reality, and remote education.

Cybersecurity and Trustworthy AI Systems. Robust cybersecurity is essential to the safe and effective deployment of AI systems. NCTA supports research that enhances the ability of AI systems to detect and mitigate adversarial threats, defend against manipulation and spoofing, and maintain reliability in high-stakes or adversarial environments. This includes advancing AI's capabilities in proactively identifying and neutralizing fraudulent activities that target individuals, businesses, and the communications infrastructure itself. R&D that promotes model robustness and real-time anomaly detection is especially valuable to critical communications infrastructure providers.⁶

AI Standards, Interoperability, and Safety Frameworks. NCTA supports the development of standardized frameworks for AI safety, reliability, and interoperability that reflect U.S. democratic values and encourage responsible innovation. These frameworks should be developed collaboratively across government, industry, non-profit research and development

⁶ NIST AI Risk Management Framework, National Institute of Standards and Technology, U.S. Department of Commerce (Jan. 2023), available at <https://www.nist.gov/itl/ai-risk-management-framework> (AI RMF 1.0). We support this NIST framework.

organizations, and academia. Voluntary, consensus-based safety benchmarks can help drive global trust in AI systems and avoid fragmented regulatory landscapes.⁷

AI-Enabled Workforce and Skills Development. To ensure that the benefits of AI are widely shared, it is essential to invest in workforce development programs that upskill and reskill American workers.⁸ Public-private partnerships can deliver effective training tailored to real-world industry needs. NCTA encourages the Federal government to support curricula development, industry apprenticeships, and community-based digital skills programs that prepare workers for the AI-driven economy. Federal funding should be easily accessible by a variety of stakeholders, including non-profit workforce development organizations and academia to meet the Administration's goals.

Public-Private-Academic Collaboration Models. NCTA supports the creation of testbeds, innovation hubs, and long-term R&D partnerships that bring together industry R&D expertise, academic insight, and Federal support. These models reduce the risk of early-stage exploration and accelerate deployment of scalable AI solutions. Research collaboration mechanisms should reflect shared priorities and provide industry stakeholders with clear pathways for contributing to national research goals.

AI and Intellectual Property. As the capabilities of generative AI models advance, there is a growing need for research into how these systems interact with existing intellectual property laws and frameworks. AI systems that generate text, imagery, music, and audiovisual content may inadvertently replicate protected works or blur the line between inspiration and duplication. NCTA recommends that the Strategic Plan include a specific focus on the intersection of AI and

⁷ *Id.*

⁸ See Exec. Order No. 14277, 90 Fed. Reg. 17519, § 2 (Apr. 23, 2025), *available at* <https://www.federalregister.gov/documents/2025/04/28/2025-07368/advancing-artificial-intelligence-education-for-american-youth>.

IP, including R&D to explore attribution techniques, watermarking tools, content provenance tracking, and legal frameworks that protect creative rights without stifling innovation.

This research will be essential to helping regulators, courts, developers, and creators navigate evolving questions around AI-generated content. A well-supported federal research agenda can help ensure that AI augments, rather than undermines, American creative industries.

IV. STRATEGIC IMPLEMENTATION OF AI R&D STAKEHOLDER RECOMMENDATIONS IN THE U.S. WILL REQUIRE CONCERTED EFFORT TO ENSURE SUCCESS AND INCREASE INTERNATIONAL COOPERATION

The Strategic Plan's success will depend not only on bold goals but also on clear and practical implementation. We echo the National Artificial Intelligence Advisory Committee's recommendation to invest in scalable public-private research initiatives and workforce education as critical enablers of responsible AI deployment.⁹ To that end, NCTA recommends several priority actions to translate vision into impact.

AI Infrastructure Should Be Treated as a Strategic Public Good. To enable equitable access to AI technologies across the United States, the Federal government must treat broadband infrastructure as a foundational layer of the AI ecosystem. Reliable, energy-efficient, and scalable broadband is essential for supporting cloud services, distributed learning, and latency-sensitive AI applications. Strategic R&D investments should explicitly recognize broadband as a public good and ensure that rural and underserved communities are not left behind in the AI era.

Responsible Data Sharing Must Be Paired with Privacy Safeguards. Unlocking the full potential of AI requires responsible governance of and access to high-quality, integrity-assured data, without compromising privacy. Privacy by design and interoperable frameworks

⁹ National Artificial Intelligence Advisory Committee (NAIAC), Draft Recommendations for the Administration of President Donald J. Trump (Jan. 27, 2025), *available at* <https://insideaipolicy.com/sites/insideaipolicy.com/files/documents/2025/jan/ai01272025.pdf>.

that enable privacy-preserving data collaboration are critical to fostering innovation and sustaining public trust. This principle is reflected in Executive Order 14179, which affirms the federal government’s role in sustaining U.S. AI leadership while promoting human flourishing, national security, and public confidence in AI technologies.¹⁰

Multi-Stakeholder Governance Is Essential. Given their leadership in deploying edge AI, operating critical infrastructure, and delivering content at scale, which are integral to the deployment of AI services, NCTA members are well-positioned to inform the development of AI safety, standards, and governance. The federal government should ensure that broadband and cable providers, along with non-profit R&D organizations and standards and specifications organizations, are meaningfully included in advisory councils, pilot projects, and standards development efforts tied to the Strategic Plan.

Inclusive, Transparent Governance and Global Collaboration Will Be Key to Long-Term Success. Given their leadership in deploying edge AI, managing large-scale infrastructure, and delivering innovative content services, NCTA members are well-positioned to contribute meaningfully to AI governance. The federal government should ensure that broadband and cable providers, along with non-profit R&D organizations and standards and specifications organizations, are included in advisory bodies, pilot programs, and standards-setting efforts tied to the Strategic Plan. To support effective and accountable implementation, the Plan should incorporate mechanisms for public reporting and periodic review, allowing stakeholders to assess progress and adapt priorities as technologies evolve. Moreover, sustained U.S. leadership will require active international engagement to promote interoperable safety norms, facilitate cross-

¹⁰ Exec. Order No. 14179, 90 Fed. Reg. 8433 (Jan. 23, 2025), *available at* <https://www.presidency.ucsb.edu/documents/executive-order-14179-removing-barriers-american-leadership-artificial-intelligence>.

border research partnerships, and align AI development with democratic values and national security objectives.

V. CONCLUSION

NCTA and its member companies are committed to advancing the United States' global leadership in artificial intelligence. As stewards of broadband infrastructure and creators of widely used digital content, we bring a unique perspective to the challenges and opportunities posed by AI innovation. We support a national strategy that combines foundational research, public-private partnerships, and policy leadership to foster safe and pro-innovation AI development. We encourage OSTP, NSF, and NITRD to maintain an open, collaborative dialogue as the 2025 AI R&D Strategic Plan takes shape and we look forward to contributing to its development.

Respectfully submitted,

Rikin Thakker, Ph.D.
Chief Technology Officer and
Senior Vice President, Technology
NCTA – The Internet & Television
Association

Loretta Polk
Traci Biswese
NCTA – The Internet & Television
Association
25 Massachusetts Avenue, NW, Suite 100
Washington, D.C. 20001-1431

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