



Testing and Evaluation Systems for Trusted Artificial Intelligence (TEST AI) Act

The proliferation of machine learning and artificial intelligence systems has reached every sector, from medicine to financial institutions and productivity applications, including many applications used by the U.S. government. This emerging technology provides innovative and operational support to institutions across the government and private sector. However, AI systems come with concerning vulnerabilities and risks, such as inaccurate or biased data and models, adversarial attacks by bad actors such as data poisoning or malicious use of AI systems, and extraction or leaking of sensitive or classified data. **There is a critical need for resources and government capacity to test and evaluate AI systems to guard against risk.**

Government testbeds will provide the ability to conduct rigorous evaluations and assessments by experts to ensure robust AI systems. The Testing and Evaluation Systems for Trusted Artificial Intelligence (TEST AI) Act directs the National Institute of Standards and Technology (NIST) and Department of Energy (DOE) to develop testbeds for testing and evaluation of AI systems to protect national security and ensure responsible AI guardrails. NIST has strong experience in AI risk management and will provide critical expertise in the responsible design and use of these testbeds. Of federal government agencies, the DOE, through the national labs, has the strongest technical expertise in AI, and is the only agency that has the computing and data resources necessary to build and test advanced AI systems. **Collaborative testbeds between NIST and DOE will build strong government capacity for testing, evaluation, and oversight of robust and trusted AI systems.** This legislation will:

- Direct NIST to coordinate, through a memorandum of understanding, with DOE to establish testbeds for testing and evaluation of trusted AI systems to:
 - Advance AI tools, capabilities, and workforce needs;
 - Improve reliability and trustworthiness of commercial and federal AI systems; and
 - Establish testbeds, included classified testbeds as necessary, to support safeguards and systems to test, evaluate, and prevent misuse of AI systems.

This bill is cosponsored by Senators Durbin, Thune, Risch, and Blackburn.

Please reach out to Aditi Gupta (aditi_gupta@lujan.senate.gov) with any questions.