

118TH CONGRESS
1ST SESSION

S. _____

To improve the requirement for the Director of the National Institute of Standards and Technology to establish testbeds to support the development and testing of trustworthy artificial intelligence systems and to improve interagency coordination in development of such testbeds, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. LUJÁN (for himself, Mr. DURBIN, Mr. THUNE, Mrs. BLACKBURN, and Mr. RISCH) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To improve the requirement for the Director of the National Institute of Standards and Technology to establish testbeds to support the development and testing of trustworthy artificial intelligence systems and to improve interagency coordination in development of such testbeds, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Testing and Evalua-
3 tion Systems for Trusted Artificial Intelligence Act of
4 2023” or the “TEST AI Act of 2023”.

5 **SEC. 2. INTERAGENCY COORDINATION TO FACILITATE**
6 **TESTBEDS.**

7 Subsection (g) of section 22A of the National Insti-
8 tute of Standards and Technology Act (15 U.S.C. 278h-
9 1) is amended to read as follows:

10 “(g) TESTBEDS.—

11 “(1) DEFINITION OF ARTIFICIAL INTEL-
12 LIGENCE.—In this subsection, the term ‘artificial in-
13 telligence’ has the meaning given such term in sec-
14 tion 5002 of the National Artificial Intelligence Act
15 of 2020 (15 U.S.C. 9401).

16 “(2) IN GENERAL.— The Director shall, in co-
17 ordination with the Secretary of Energy, the head of
18 the interagency committee established under section
19 5103(a) of the National Artificial Intelligence Initia-
20 tive Act of 2020 (15 U.S.C. 9413(a)), and such
21 heads of such Federal agencies, private sector enti-
22 ties, and institutions of higher education as the head
23 of such interagency committee considers appropriate,
24 establish testbeds, including virtual and experimental
25 environments, to support the development and test-
26 ing of trustworthy artificial intelligence systems, in-

1 including testbeds that support development of artificial
2 intelligence guardrails, examine risks of misuse
3 of such systems, and evaluate the vulnerabilities and
4 conditions that may lead to failure in, malfunction
5 of, or attacks on such systems.

6 “(3) MEMORANDUM OF UNDERSTANDING.—

7 “(A) IN GENERAL.—The Secretary of
8 Commerce and the Secretary of Energy shall
9 enter into a memorandum of understanding to
10 implement the coordination between the Sec-
11 retary of Energy and the Director required by
12 paragraph (2).

13 “(B) REQUIREMENTS.—The memorandum
14 shall be sufficient to ensure the Institute and
15 other Federal agencies have access as may be
16 necessary to the resources, personnel, and facili-
17 ties at the Department of Energy, including the
18 cross-cutting research and development pro-
19 grams—

20 “(i) to advance artificial intelligence
21 tools, systems, facilities, capabilities, and
22 workforce needs;

23 “(ii) to improve the reliability and
24 trustworthiness of artificial intelligence
25 methods and solutions relevant to the mis-

1 sion of the Federal agencies conducting de-
2 velopment or testing of artificial intel-
3 ligence systems for use by the agency, or
4 in conducting Federal oversight of com-
5 mercial uses of artificial intelligence sys-
6 tems; and

7 “(iii) to establish testbeds, including a
8 classified testbed as necessary, to support
9 safeguards and systems to prevent the mis-
10 use of artificial intelligence systems, par-
11 ticularly in but not limited to weapons of
12 mass destruction proliferation, undertake
13 annual risk assessments of artificial intel-
14 ligence misuse, formulate evaluation strate-
15 gies, and employ testing and evaluation re-
16 sources to support Federal oversight of ar-
17 tificial intelligence systems.”.