SUPPORTING STATEMENT U.S. Department of Commerce Bureau of Industry and Security

Defense Industrial Base Assessment: Frontier AI Assessment Artificial Intelligence OMB Control No. 0694-0119

A. Justification

1. Explain the circumstances that make the collection of information necessary

Section 4.2(a) of Executive Order 14110 requires that the Secretary of Commerce assess the capabilities of companies in the United States who are developing or intending to develop potential frontier artificial intelligence (AI) models. This assessment must be completed by March 25, 2024. In support of this executive action, the U.S. Department of Commerce's Bureau of Industry and Security (BIS), Office of Technology Evaluation (OTE) is conducting an assessment of the developers of frontier AI models as well as organizations that possess large-scale computing clusters that are used to train these models.

The resulting data will be used to inform federal policy that ensures the availability of safe, reliable, and effective AI, to include addressing the national security risks associated with the development of such technologies. In particular, this assessment will provide the Administration with actionable information about:

- Frontier AI model training activities, including physical and cybersecurity actions taken to ensure the integrity of the training process
- The ownership and possession of frontier AI models' weights and the physical and cybersecurity measures taken to protect those weights
- The results of red-team testing
- The acquisition, development, or possession of a frontier-scale computing cluster

During the design and development of the proposed assessment, OTE gathered input from the interdepartmental, interagency, and industry subject matter experts. These engagements included contacts with all potential assessment recipients, subject matter experts in the U.S. Department of Commerce's CHIPS office, and AI researchers at industry-affiliated research non-profits among others.

OTE has authority under Section 705 of the Defense Production Act of 1950, as amended to conduct assessments and collect information in support of the U.S. industrial base. These industrial base assessments are normally undertaken in partnership with the U.S. Department of Defense and other agencies and typically focus on manufacturing, workforce, resiliency, and financial and economic issues affecting key industrial sectors or critical technologies.

Pursuant to the abovementioned executive order and relevant delegations thereunder, OTE remains the focal point for national security industry assessments among civilian federal agencies. This includes mandatory data collection authority to carry out these responsibilities.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines

OTE intends to assess 50 companies representing the leading edge of U.S. AI developers and computing providers.

This assessment is a one-time collection. Both quantitative and qualitative information obtained from the instrument will be held in a database for analysis by OTE analysts. The qualitative questions, specifically, are used to complement the statistical data. By anonymizing the data and sharing insights to other parts of the United States government, OTE will provide the U.S. government with a globally unprecedented insight into safety and reliability data about the leading-edge of AI development and computing. This information will assist the U.S. government in assessing the risk profiles associated with AI development. By obtaining information from all leading developers and computing providers, this assessment will also assist the U.S. government as it considering setting standards and guidelines for this emerging sector. There is no plan for public dissemination of this information at this time due to the sensitivity of the material being collected.

BIS utilizes the Defense Production Act of 1950 (DPA), as amended, to both collect and protect the business proprietary information submitted by the assessed respondents. Additionally, Executive Orders 12656 and 13603 delegate to the Department of Commerce the authority to assess the capabilities of the U.S. industrial base to support the national security and critical program needs and develop policy recommendations to improve the international competitiveness of specific domestic industries.

By virtue of the above-mentioned statute and executive orders, OTE is the focal point for industrial base and critical technology analyses among civilian federal agencies, which includes mandatory data collection authority to carry out these assessment responsibilities. OTE has conducted nearly 60 surveys and assessments of this kind in the past 27 years. These studies review in detail those industries with challenges relating to employment/STEM, international competition and trade, financial performance, production, supply chain, investment, foreign sourcing and dependencies, and other factors influencing industry's ability to support end-users across commercial, defense, and other national security programs. This assessment is designed to collect information that facilitates such in-depth analysis.

Through its analysis of the assessment results, OTE will better inform the Department of Commerce and the Executive Office of the President on the capabilities and safety of leading-edge U.S. artificial intelligence developers and computing providers.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology

To lessen the burden on respondents, OTE is encouraging firms to provide electronic responses in Excel format. Each respondent will receive a personalized distribution letter signed by BIS management and a project overview fact sheet which outlines the scope of information required. The letter will contain directions on how to access the assessment. This approach was used successfully for the 2020 U.S. Air Force Sustainment Center (Supply Chain), 2022 U.S. Microelectronics Industrial Base Assessment, 2023 Civil Space Industrial Base Assessment, 2023 Influenza Vaccine Industrial Base Assessment, and 2023 Legacy Chips Assessment. All five surveys were approved by OMB.

The statistical data requested in the assessment adheres closely to categories of questions and assessment nomenclature common to the artificial intelligence sector. The relevance of these fields also has been verified through remote field-testing with stakeholders from academia, the U.S. government, and U.S. industry. Nearly all respondents will have the requested data stored on computer systems or within internal resources, allowing retrieval of the information to populate the assessment response.

BIS has conducted numerous industry and technology assessment in the past 30 years and actively pursues the refinement and updates of its assessment techniques and information technology to minimize the burden on the respondents.

4. Describe efforts to identify duplication

In partnering with other agencies, including the Census Bureau and private organizations involved with a particular industry or technology, OTE will avoid duplication of information being gathered. Most information that OTE collects from each industry or technology is not obtainable elsewhere. Some of the basic corporate data, such as address location, stock symbol and leadership profiles, is submitted by companies to the U.S. Census Bureau. However, the Census Bureau is precluded by law from releasing information on specific companies.

5. If the collection of information involves small businesses or small entities, describe the methods used to minimize burden

Participants in this collection are primarily developers of frontier AI models and providers of frontier-scale computing power. The assessment is intentionally designed to minimize burden on all respondents. Based on previous data collections, OTE expects the vast majority of companies to respond electronically.

Moreover, prior to submission to OMB, BIS makes every effort to minimize the information collection burden that an assessment imposes on the public. For example, BIS circulates a draft assessment to industry and government experts, as well as representatives of companies within the target industry or sector as a "field test." Comments received are factored into the assessment

form. Additional inputs obtained from outside research are also added to the assessment. The assessment form, typically in Excel format, is constructed for clarity and ease of completion. Drop down and check-the-box answers are used throughout the assessment form, when possible, thus reducing the overall burden on industry, especially small businesses.

Additionally, to minimize the time needed to complete the assessment form, questions are clearly labeled and grouped by subject. Some sections of the assessment have an opt-out option if the requested information is not applicable to the respondent's business type. If, for any reason, the respondent cannot complete the assessment in Excel format, OTE will work closely with the respondent to facilitate an alternate form of submission. Based on previous data collections, OTE expects most companies to respond electronically.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently

This collection is being carried out to meet the mandate of Executive Order 14110, Section 4.2.a, which instructs the Secretary of Commerce to collect information from AI developers and compute providers in accordance with the Defense Production Act as amended, 50 U.S.C. 4501 *et seq.* If this collection is not conducted, the Secretary of Commerce will be unable to fulfill the requirements of this Order. Moreover, the United States government would not be able to have access to information about potential risks to national security posed by advanced artificial intelligence models, hampering its ability to craft informed and effective regulations or standards that would promote innovation and safety.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines

There are no special circumstances that will result in the collection of information in a manner inconsistent with the guidelines of 5 CFR 1320.6. Survey responses will contain business confidential information, all of which will be protected by the Bureau of Industry and Security (BIS) consistent with OMB guidelines and 5 USC 4555.

8. Provide information of the PRA Federal Register notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported

The Federal Register notice is not applicable to this collection because it falls within the scope of the BIS generic authority entitled, "National Security and Critical Technology Assessments of the U.S. Industrial Base," approved under OMB Control No. 0694-0119. This authority is renewed every three years (last renewal was Aug 31, 2022) to support BIS industrial base assessment needs.

OTE staff developed the U.S. artificial intelligence industry assessment in consultation with government and industry experts over a period of several months. The following is a list of individuals and companies who participated in the process:

U.S. Department of Commerce

- Anita Balachandra, CHIPS, anita.balachandra@chips.gov
- BIS OTE Emerging Technology Technical Advisory Committee, Dr. Samuel Graham, Chair, samuelg@umd.edu
- Caleb Archie, IITA, Caleb.Archie@trade.gov
- Celia Paulsen, CHIPS, celia.paulsen@chips.gov
- Ida Mix, BIS, <u>ida.mix@bis.doc.gov</u>
- Karen Swasey, BIS, <u>karen.swasey@bis.doc.gov</u>
- Tina Highfill, BEA, tina.highfill@bea.gov
- Travis Hall, NTIA, <u>THall@ntia.gov</u>

Non-Profit Research

- Chris Painter, Alignment Research Group, chris@evals.alignment.org
- Nicholas Brown, RAND Corporation, obrown@rand.org

Industry

• Various AI industry experts.

9. Explain any decisions to provide payments or gifts to respondents, other than renumeration of contractors or grantees

This assessment will not involve any payment or gifts to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy

The assessment instrument, cover letter, and fact sheet all provide assurance to the respondents that the information collected through the assessment will be deemed business confidential and will be treated in accordance with Section 705 of the Defense Production Act of 1950, as amended (50 USC § 4555). This section prohibits the publication or disclosure of such information unless the President, Secretary of Commerce, or Undersecretary of Commerce for Industry and Security determines that its withholding is contrary to the national defense.

Information submitted will not be shared with any non-government entity, other than in aggregate form, and the Department will protect the confidentiality of such information pursuant to the appropriate exemptions from disclosure under the Freedom of Information Act (FOIA) if it is the subject of a FOIA request. BIS, Office of Technology Evaluation has a long and successful track record in protecting confidential business information collected pursuant to the Defense Production Act.

In addition, given serious concerns, including national security concerns, about the sensitivity of the assessment questions as well as the information being requested, the assessment itself is being treated as a document of high sensitivity and will not be published. Recipients of the assessment have been asked not to share the assessment or its questions beyond the individuals necessary to respond completely. They also have been asked not to share the assessment or its questions outside their respective organizations.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private

This assessment will not collect information that could be construed as being of a sensitive nature, such as information concerning sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered sensitive or private.

12. Provide an estimate in hours of the burden of the collection of information

OTE estimates that the total burden placed on respondents participating in the mandatory assessment will be 1,250 hours. This estimate is based on a sample of 50 respondents with an average completion time of 25 hours per assessment.

This burden estimate is subject to variations among respondents because of differences in product/service participation, record keeping, company size and type, and other variables.

This estimate is based on past OTE data collections, as well as feedback from organizations that have completed OTE surveys. OTE has conducted surveys of various industries and sectors, including NASA's rocket propulsion sector, underwater acoustic transducers, strategic materials, microelectronics, healthcare products, and others.

The estimated total cost to respondents of this particular information collection is \$77,500. This estimate was calculated by assuming a respondent average work rate of \$62 per hour (average hourly rate of artificial intelligence developers via ZipRecruiter) multiplied by the total burden hours of 1,250.

13. Provide an estimate of the total annual cost burden to the respondents or recordkeepers resulting from the collection (excluding the value of the burden hours in question 12 above)

Not applicable.

14. Provide estimates of annualized cost to the Federal Government

The estimated annual cost to the Federal government for the assessment is \$619,003. A significant portion of the cost relates to the assessment questionnaire which includes preparing, collecting, verifying, tabulating, and analyzing the data. Other costs are incurred in field testing the assessment, developing findings and recommendations, preparing reports, and report printing and distribution.

The direct employee costs are estimated by assuming one GS-12, Step 10 (\$62.00/hour per the January 2024 OPM schedule) and one GS-15 Step 10 (\$92.26/hour per the January 2024 OPM schedule) federal employees were assigned full-time to the assessment. The annual costs are calculated as follows: (\$62.00/hour x 40 hours/week x 52 weeks) + (\$92.26/hour x 40 hours/week x 52 weeks) = \$320,861.

Indirect or overhead costs associated with the project are calculated as 20 percent of the direct employee costs, or \$64,172. A review of OTE budgets from previous years indicates costs for building maintenance, telephone, computers, and space rental charges generally run about 20 percent of total employee costs.

Additionally, it is estimated that contractor support will be needed for the assessment to assist with compliance, data analysis and report preparation. The estimated annual cost of contractor support will be \$225,000.

The total estimated annual costs to the federal government is as follows:

Federal Employee Salaries (2 full-time employees)	\$320,861
Federal Government Overhead @ 20%	\$64,172
Contractor Support	\$225,000

Total: \$619,003

15. Explain the reasons for any program changes or adjustments

Because the scope of this collection of information falls within BIS's generic authority "DOC/BIS National Security and Critical Technology Assessments of the U.S. Industrial Base," (Control Number 0694-0119), there is no increase in burden hours being requested.

16. For collections whose results will be published, outline the plants for tabulation and publication

The data collected by OTE will be aggregated to protect the confidentiality of the respondent information. There is no plan to publish results from this collection.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate

Not applicable. OTE will display the expiration date of this information collection authority Control Number 0694-0119 on all assessment and instructional information the public receives.

18. Explain each exception to the certification statement

Not applicable.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.