AGENCY: OFFICE OF MANAGEMENT AND BUDGET

ACTION: Request for information: Advancing the Domestic Manufacturing of Semiconductors in Commercial Information Technology

SUMMARY: This request for information (RFI) seeks input on ways the Federal Government can build the resilience of domestic semiconductor manufacturing and maintain this essential capability through the procurement of commercial IT end products that include semiconductors fabricated in the United States. Specific feedback is sought on potential procurement approaches to minimize supply chain disruption and increase fabrication of semiconductors in the United States.

DATES: Responses to this request for information will be accepted for consideration until [INSERT DATE THAT IS 60 DAYS AFTER DATE OF PUBLICATION IN *FEDERAL REGISTER*].

ADDRESSES: Responses must be submitted electronically through *regulations.gov*. Mailed paper submissions will not be accepted, and electronic submissions received after the deadline may not be considered.

Instructions: Federal eRulemaking Portal: Go to <u>www.regulations.gov</u> to submit your comments electronically. Information on how to use *Regulations.gov*, including instructions for accessing agency documents, submitting comments, and viewing the docket, is available on the site under "FAQ" (<u>https://www.regulations.gov/faq</u>).

Privacy Act Statement: OMB is issuing this request for information (RFI) pursuant to its authorities under the Office of Federal Procurement Policy Act, 41 U.S.C. § 1101 *et seq.*, and consistent with Executive Order (E.O.) 14005 and Sec. 70933(1) of the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117-58, which aim for every executive agency to maximize the

use of goods, products, and materials produced in, and services offered in, the United States. Your response to this RFI and submission of comments is voluntary. OMB will use your feedback to inform sound decision-making on topics related to this RFI regarding potential government-wide actions to revitalize the domestic manufacturing base, create new opportunities for U.S. firms and workers, and position U.S. businesses to compete and lead globally in strategic industries. Please note that submissions received in response to this notice may be posted in the Federal eRulemaking Portal at <u>www.regulations.gov</u> or otherwise released in their entirety, including any personal and business confidential information provided. Do not include in your submissions any information of a confidential nature, such as personal or proprietary information, or any information you would not like to be made publicly available. The OMB Public Input System of Records, OMB/INPUT/01at <u>88 FR 20913</u>

(*https://www.federalregister.gov/documents/2023/04/07/2023-07452/privacy-act-of-1974system-of-records*) includes a list of routine uses associated with the collection of this information.

Comments containing references, studies, research, and other empirical data that are not widely published should include electronic links to the referenced materials, if they are available online. Please note that the U.S. Government will not pay for response preparation, or for the use of any information contained in the response. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

FOR FURTHER INFORMATION CONTACT: Please direct questions regarding this Notice to the Made in America Office at MadeInAmerica@omb.eop.gov with "Commercial IT Procurement RFI" in the subject line.

SUPPLEMENTARY INFORMATION:

The bipartisan CHIPS and Science Act of 2022, Pub. L. No. 117-167, made historic investments in American semiconductor manufacturing to strengthen U.S. supply chains and help address vulnerabilities identified in the Information and Communications Technology (ICT) review of critical sectors conducted pursuant to E.O. 14017, *America's Supply Chains*.

This RFI is part of a series of government-wide actions the Administration is taking to build an essential domestic manufacturing capability for semiconductors. This RFI complements related efforts to minimize risk to U.S. economic and national security, which includes potential rulemaking by the Federal Acquisition Regulatory Council to prohibit Federal agencies from procuring or obtaining semiconductors manufactured in certain countries.

OMB's Made in America Office (MIAO) and Office of Federal Procurement Policy (OFPP) seek to understand how the Federal acquisition system can best leverage domestic sources for semiconductors to ensure a safe and secure supply chain for U.S. government procured commercial IT products and services (hereafter referred to as "commercial IT"). Market segments of interest include:

- Telecommunication infrastructure and services
- Cloud / data center infrastructure and services
- ICT devices (e.g., mobile phones, laptops)
- Transportation / vehicles

MIAO and OFPP are especially interested in obtaining your views regarding the impact of using contract requirements for dual sourcing, potential agency reliance on the industrial mobilization exception to full and open competition, or other contracting methods to create and preserve this essential capability, mitigate the risk posed by undue dependence on foreign manufacturing and help reduce costs currently associated with domestic fabrication, assembly, test, and packaging (hereafter referred to as "manufacturing").

Dual sourcing. Dual sourcing refers to the supply chain management practice of requiring contractors to utilize at least two suppliers to provide a specific component, material, or product for the purpose of helping to build alternative sources of supply and reducing supply chain disruption risks associated with relying on a single source.

Industrial mobilization. Procurement law and regulations have long recognized exceptions to full and open competition for a period of time, including when an agency can demonstrate that an exception is necessary to award the contract to particular sources in order to (a) maintain a facility, producer, manufacturer, or other supplier available for furnishing supplies or services in case of a national emergency or to achieve industrial mobilization; or (b) establish or maintain an essential engineering, research, or development capability to be provided by an educational or other nonprofit institution or a Federally funded research and development center. 10 U.S.C. 2304(c)(3), 41 U.S.C. 3304(a)(3); FAR 6.302-3. Limiting competition to domestic sources for a period of time to create or maintain the required domestic capability for production of critical supplies has long been identified in the FAR as a recognized application of the industrial mobilization exception to full and competition and can help to address the cost differences between domestic and foreign production by building the competitiveness of the domestic market over time. For additional information on industrial mobilization, see OFPP & MIAO, *Strengthening Domestic Sourcing for Critical Items* (Mar. 13, 2024).¹

¹ https://www.whitehouse.gov/wp-content/uploads/2024/03/Strengthening-Domestic-Sourcing-for-Critical-Items.pdf.

To understand the potential impact of these or other strategies, OMB seeks feedback on the following questions. OMB is especially interested in feedback as it pertains to data centers, telecom, and other IT infrastructure and services, mobile devices, laptops, servers, and workstations, as well as automobiles and other vehicles, but welcomes feedback on any commercial IT that uses semiconductors.

For purposes of this RFI, the terms *semiconductor* and *semiconductor manufacturing* have the same meanings as set forth in National Institute of Standards and Technology regulations at 15 C.F.R. 231.115 and 231.116. Examples of semiconductors include memory chips, logic chips such as microprocessors and microcontrollers, complex systems-on-a-chip, and discrete, analog, and optoelectronic chips. The RFI encompasses in its scope leading-edge, current-generation, and mature-node semiconductors as defined in CHIPS Program Office Notice of Funding Opportunities for commercial fabrication facilities, Feb 28 2023]. For instance, leading-edge logic semiconductors are those requiring extreme ultraviolet (EUV) lithography tools for production (and equivalent performance spec for memory chips); current-generation semiconductors are those that are not leading-edge, up to 28 nanometer process technologies, and include logic, analog, radio frequency, and mixed-signal devices; mature-node semiconductors include sensors, optoelectronics, discrete devices, and logic and analog chips not based on FinFET, post-FinFET, or any other sub-28 nanometer transistor architectures. Ouestions

1. If sufficient economic incentives existed, how quickly could you begin to use domestically manufactured semiconductors? In responding, please identify your market segment or

segments (e.g., cloud services, cloud infrastructure, telecom services, telecom infrastructure, user devices, automobiles) and the type of chips you use most frequently.

- 2. Once you have determined that there is sufficient domestic manufacturing of semiconductors, what factors, including economic incentives, would affect your willingness to take advantage of this supply? In responding, please identify your market segment.
- How much production is needed to constitute a sufficient domestic supply of semiconductors? In responding, please identify both your market segment and the any information regarding semiconductors that would be helpful to better understand your market segment needs.
- 4. Last year, the Federal Government purchased approximately \$10 billion on IT hardware, including approximately 1.5 million mobile devices and 1.3 million laptops, around \$14 billion of cloud computing, including data centers, and \$5.43 billion of telecom services.
 - a. What steps might agencies take that could effectively incentivize you to use domestically manufactured semiconductors in meeting this demand (e.g., agency competitions limited to offerors who use only domestically manufactured semiconductors; requirements that awardees must use two different sources for semiconductors and at least one source must provide domestically manufactured semiconductors; agency forecasts published well in advance of solicitation that inform interested sources of these competitions)? Please identify your market segment.

- b. Would you be willing to compete for an IT data center contract or a telecom contract that requires the service provider to use equipment with domestically manufactured semiconductors in the performance of the required service? If not, why not? Would your answer change if the statement of work required offerors to agree to use at least two different sources for semiconductors?
- c. What opportunities or challenges do you see for your market segment if you were to use only domestically manufactured semiconductors? Are there steps that could make the requirement more manageable, such as with a phase-in (e.g., requiring a certain percentage of semi-conductors to be domestically manufactured)?
- d. Many state and local governments adopt Federal standards with respect to their own procurement regulations. Would your responses change to any of the above questions, if State and local governments adopted, through their own authorities, complementary actions?
- e. What percentage of your current offerings rely on domestically manufactured semiconductors? Please identify your market segment.
- f. Are there particular categories of semiconductors that would be easier to source domestically or ones that would be more difficult?
- g. Are there particular categories of semiconductors that would constitute a larger portion of your purchased components and would be better sourced domestically?

- 5. How far in advance of manufacturing must a purchase order be secured from a semiconductor fabricator to support production, or infrastructure build-out?
- 6. What, if any, significant domestic supply chain vulnerabilities surrounding semiconductors are you aware of and what could be done to reduce or eliminate those vulnerabilities? Are there other vulnerabilities of which we should be aware?
- 7. To meet Federal sustainability purchasing requirements, should domestically-produced commercial IT products with domestic semiconductors include specifications, standards, or ecolabels recommended by the Environmental Protection Agency (EPA) for Federal purchasing or be capable of meeting EPA's Framework for the Assessment of Environmental Performance Standards and Ecolabels for Federal Purchasing for future inclusion?

Questions for domestic manufacturers of semiconductors

- 8. What is the anticipated timeline for domestic production and anticipated capacity of various types of semiconductors, including but not limited to memory chips, logic chips such as microprocessors and microcontrollers, complex systems-on-a-chip, and discrete, analog, and optoelectronic chips?
- 9. How much time do you need from the placement of an order from an IT hardware manufacturer to deliver the semiconductors?
- 10. What is the anticipated timeline for domestic production and capacity of associated components, including, but not limited to, packaging of chips, mother boards, etc.?

- 11. What raw materials used in semiconductor manufacturing are in limited or constrained supply and could prevent scale up of your domestic manufacturing operations?
- 12. What manufacturing equipment do you use that are in limited or constrained supply and could prevent scale up of your domestic semiconductor manufacturing and operations?
- 13. What, if any, factors (for example, workforce, permitting, access to high quality power/water, etc.) are causing significant delays in bringing domestic manufacturing facilities online?
- 14. What types of innovations can help make the manufacturing market more efficient?

Additional questions for interested stakeholders

15. What actions should the Federal Government take to enable strong small business participation by resellers offering commercial IT with domestically fabricated semiconductors?

OMB intends to hold industry listening sessions in the coming months to discuss industry feedback. Listening sessions will be noticed through the Federal Register.