

Frequently Asked Questions (FAQs) for
“Export Controls on Semiconductor Manufacturing Items” (SME IFR)
and
“Implementation of Additional Export Controls: Certain Advanced
Computing Items; Supercomputer and Semiconductor End Use;
Updates and Corrections” (AC/S IFR)

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These Interim Final Rules (IFRs) address comments received in response to the “Implementation of Additional Export Controls: Certain Advanced Computing and Semiconductor Manufacturing Items; Supercomputer and Semiconductor End Use” (October 7 IFR)(87 Fed. Reg. 62186, October 13, 2022) and amend the Export Administration Regulations (EAR) to implement export controls on semiconductor manufacturing equipment (SME), advanced computing items, and supercomputers more effectively and to address ongoing national security concerns that items in these rules can be used for military modernization and other applications such as the development and production of weapons of mass destruction (WMD).

I. General

I.Q1. *A commenter requested that BIS should consider the impact on potential public benefits derived from advanced technologies developed through cross-border cooperation, especially in the realm of global health and environmental issues.*

I.A1. BIS has considered this impact and notes that existing licensing policies are designed to be flexible, enabling authorization of certain types of collaboration when warranted, such as to maintain supply chains, assuming the risks of diversion to prohibited end uses are sufficiently mitigated. In addition, BIS has adjusted the scope of certain controls, e.g., SME end use control in § 744.23(a)(4), expanded license exception eligibility, and added exclusions to the controls in both §§ 744.6 and 744.23.

I.Q2. *The BIS press release states “Expanding license requirements for semiconductor manufacturing equipment to apply to additional countries beyond the PRC and Macau, to 21 other countries for which the U.S. maintains an arms embargo.” However, supplement no. 1 to part 740, Country Group D:5 has 23 countries listed and minus China that makes 22 countries. Why did the press release state 21 other countries instead of 22?*

I.A2. While BIS has not yet removed Cyprus from Country Group D:5, it is effectively removed because it has been removed from 22 C.F.R. 126.1 of the State Department’s

International Traffic in Arms Regulations (ITAR). Currently Country Group D:5 has 23 countries but subtracting China and Cyprus results in 21 countries.¹

I.Q3. *Do worldwide controls include exports to the United States?*

I.A3. No, because the definitions for “export” and “reexport” in § 734.13 and § 734.14 do not include shipments or transmissions into the United States. See excerpts from definitions below.

§ 734.13(a)(1): An actual shipment or transmission out of the United States, including the sending or taking of an item out of the United States, in any manner

§ 734.14(a)(1): An actual shipment or transmission of an item subject to the EAR from one foreign country to another foreign country, including the sending or taking of an item to or from such countries in any manner

II. AC/S IFR Revised Parameters

Performance density: 3A090.a.2 and b.

Technical Note 4 of Export Control Classification Number (ECCN) 3A090: *‘Performance density’ is ‘TPP’ divided by ‘applicable die area’. For purposes of 3A090, ‘applicable die area’ is measured in millimeters squared and includes all die area of logic dies manufactured with a process node that uses a non-planar transistor architecture.*

II.Q1. *How should we measure the die size? Physical die area that we can find on the product specification announced by the chip makers could be different from the die area defined in the rule. The current rule uses the area of ‘logic die’ that uses non-planar architecture.*

II.Q1.a. *Does the ‘logic die’ mean that we exclude area for Static random-access memory (SRAM), or the whole (nonseparable) die that has logic functions?*

II.A1.a. Count the area of the whole nonseparable logic die – SRAM on the logic die should not be excluded from the area calculation.

II.Q1.b. *If only certain parts of chips use non-planar architecture, should we still consider the whole die area?*

II.A1.b. BIS is not aware of instances where a single logic die uses multiple transistor architectures. BIS can respond to concrete examples. For ‘chiplets’ you should count only the

¹ Footnote 1 to Country Group D:5 in supplement no. 1 to part 740 states that “The list of arms embargoed destinations in this table is drawn from 22 CFR 126.1 and State Department Federal Register notices related to arms embargoes (compiled at www.pmddtc.state.gov/embargoed_countries/index.html) and will be amended when the State Department publishes subsequent notices. If there are any discrepancies between the list of countries in this table and the countries identified by the State Department as subject to a U.S. arms embargo (in the Federal Register), the State Department's list of countries subject to U.S. arms embargoes shall be controlling.” Currently, 22 C.F.R. 126.1(r)(2) states “From October 1, 2023, through September 30, 2024, the policy of denial and the status of Cyprus as a proscribed destination is suspended.”

area of each logic chiplet within the package using a non-planar architecture – the area of chiplets with a planar transistor architecture should be excluded from the calculation.

***Note:** A chiplet is a tiny integrated circuit that contains a well-defined subset of functionality. It is designed to be combined with other chiplets on an interposer in a single package*

II.Q1.c. *For chips with vertical structure, should we count areas for all levels (floors) of die or just the maximum of all levels of such die?*

II.A1.c. For ‘High Bandwidth Memory’ (HBM), all this area should be excluded as HBM is memory, not logic. For 3D packaging of logic on logic, the area of all levels should be counted. BIS welcomes specific examples.

***Note:** High Bandwidth Memory (HBM) is a computer memory interface for 3D-stacked synchronous dynamic random-access memory (SDRAM)*

III. License Exception NAC (Notified Advanced Computing)

III.Q1. *Sometimes License Exception Notified Advanced Computing (NAC) requires a notification to BIS. What circumstances require notification under NAC?*

III.A1. Exports and reexports authorized under License Exception NAC to Macau or a destination specified in Country Group D:5 (in supplement no. 1 to part 740 of the EAR), or to an entity headquartered in, or with an ultimate parent headquartered in, Macau or a destination specified in Country Group D:5, wherever located, must meet the notification requirements under § 740.8(a)(2) of the EAR and identified by License Type C67 – (NAC) Notified Advanced Computing in the Automated Export System (AES). The NAC notification requirement does not apply to exports or reexports to any destination specified in Country Groups D:1 or D:4 (other than Macau or destinations also specified in Country Group D:5) nor does it apply to transfers (in-country) to any destination.

III.Q2. *Do the requirements in License Exception NAC for the export, reexport, or transfer (in-country) of computers, “electronic assemblies,” and “components” containing integrated circuits, any of which meets or exceeds the limits in Export Control Classification Number (ECCN) 3A090.b, apply to any ECCN 4A090 items not enumerated in ECCN 4A090.a? Paragraph .b in ECCN 4A090 (computers, “electronic assemblies,” and “components” containing integrated circuits, any of which meets or exceeds the limits in 3A090.b) is reserved but the NAC eligibility paragraph for ECCN 4A090 makes computers, “electronic assemblies,” and “components” containing integrated circuits, any of which meets or exceeds the limits in 3A090.b, eligible for NAC. Will BIS revise ECCN 4A090.b or the NAC eligibility paragraph for 4A090 to clarify this issue?*

III.A2. Yes. Exporters should assess all computers, “electronic assemblies,” and “components” containing integrated circuits, any of which meets or exceeds the limits in 3A090.b, against the requirements of License Exception NAC notwithstanding ECCN 4A090.b currently being reserved. BIS will revise ECCN 4A090.b to clarify this issue.

III.Q3. *What do I need to include with my NAC notification submission via SNAP-R?*

III.A3. The NAC notification application in SNAP-R must include certain information to allow for BIS to determine if the item in question otherwise meets the criteria for an item eligible for License Exception NAC. Required information to include in the NAC submission is as follows:

- a. Name of the exporter
- b. Point of Contact and contact information
- c. Item description, including model name/number
- d. Total Processing Performance of the item, as defined in 3A090
- e. Performance density of the item, as defined in 3A090; and
- f. Data sheet or other documentation showing how the item is designed and marketed (in particular, whether it is designed or marketed for datacenter or consumer use)
- g. Parties to the transaction (Ultimate and intermediate consignees, end user and purchaser)
- h. Volume and value
- i. Expected end use of the items

III.Q4. *What if I am not the designer/manufacturer of the chip and do not have access to the performance density?*

III.A4. When submitting your NAC notification via SNAP-R, provide authorization to allow BIS to contact the designer/manufacturer on your behalf to obtain this parameter. In most cases this will not be necessary as BIS will probably have this information.

III.Q5. *How many items can I submit for a NAC notification?*

III.A5. The NAC notification is limited to six items – same as commodity classification requests. BIS recommends limiting the notification to one model number per notification.

III.Q6. *How many ultimate consignees and end users may I submit on one NAC notification?*

III.A6. Only one ultimate consignee and one end user is allowed. NAC notifications which include more will be returned without action. A distributor may not be a party to the NAC notification.

III.Q7. *How will I know if my NAC is approved?*

III.A7. After the notification has been registered in SNAP-R and within twenty-five calendar days, BIS will inform you if a license is required. If BIS has not contacted you, then System for Tracking Export License Applications (STELA) (<https://snapr.bis.doc.gov/stela>) will, on the twenty-fifth calendar day following the date of registration, provide either confirmation that you can use License Exception NAC and a NAC confirmation number (Axxxxxx) to be submitted in AES or confirmation that you cannot use License Exception NAC and you must apply for a license to continue with the transaction.

III.Q8. *BIS currently has the license exception NAC (Notified Advanced Computing) to authorize exports of certain advanced computing chips. Can we safely assume that all products eligible for NAC will be authorized for exports and reexports to Macau and Country Group D:5, and the 25-day review period only exists to check if the products actually satisfy parameters to be eligible for the NAC?*

III.A8. No. BIS will review the NAC notifications for national security concerns and require a license application for any notifications that raise concerns. National security concerns could be based on many factors including the type of item, quantity, and the end user/end use.

III.Q9. *To make it less burdensome, does BIS plan to publish a list of advanced computing chips that are eligible for NAC?*

III.A9. No, BIS does not intend to publish a list of chips at this time because the review process also considers additional factors, such as end users, end uses, and volume.

III.Q10. *Would there be duplicative NAC notification requests for the same product from different exporters?*

III.A10. Yes. Approval of the NAC notification request is only valid for the exporter who submitted the application. Therefore, it seems likely that more than one exporter will file a NAC notification for the same product.

III.Q11. *How do I fill out the Electronic Export Information (EEI) Filing in the Automated Export System (AES) for License Exception NAC?*

III.A11. Use the code C67 for NAC. For the ECCN, input the ECCN number – not the .z. For example, for a 3A001.z item, input 3A001. If a notification is required, then input the NAC confirmation number (Axxxxxx) issued by BIS in the license number block.

In addition, in § 758.1 of the EAR, the AC/S IFR added a new paragraph (g)(5) (Exports of .z items that meet or exceed the performance parameters of ECCN 3A090 or 4A090) for any item classified in ECCNs 3A001.z, 4A003.z, 4A004.z, 4A005.z, 5A002.z, 5A004.z, 5A992.z, 5D002.z, or 5D992.z. Section 758.1(g)(5) imposes a requirement to input “.z” as the first text to appear in the Commodity description block in the EEI filing in AES.

III.Q12. *If I have a 5A002.z or 5A992.z item that is authorized under License Exception NAC, do I also need to comply with the requirements for license exception ENC?*

III.A.12 Yes. Items classified under the .z paragraphs may sometimes have to meet the requirements of more than one provision of the EAR to be authorized for export. For items in Category 5 Part 2, they must meet both the requirements of license exception NAC and of license exception ENC. Thus, some items could require a license exception ENC classification request in addition to a NAC notification to be authorized for export without a license.

IV. 744.23 “Supercomputer,” “Advanced-node Integrated Circuits,” and Semiconductor Manufacturing Equipment End Use Controls **IV.Q1. A**

commenter stated that § 744.23(a)(4) (former § 744.23(a)(2)(v)) does not include “incorporation” of EAR99 items into Category 3B items. This commenter notes that the wording in § 744.23(a)(4) prohibits the “development” or “production” of Category 3B items. This commenter believes that if BIS wanted to prohibit the incorporation of EAR99 items (e.g., screws and tubing) into Category 3B items, it should have prohibited the incorporation of any item that is subject to the EAR into a Category 3B item under § 744.23(a)(4), just as it did in § 744.23(a)(2).

IV.A1. BIS has narrowed the product scope in paragraph (a)(4) to items subject to the EAR and specified on the Commerce Control List (CCL), *i.e.*, paragraph (a)(4) no longer controls EAR99 items. Such incorporation of EAR99 items would be addressed under end-use controls in § 744.23(a)(2), which controls all items subject to the EAR “when you know the items will be used in the “development” or “production” of ICs destined to a “facility” located in Macau or a destination specified in Country Group D:5 where “production” of “advanced-node ICs” occurs” or “where “production” of integrated circuits occurs, but you do not know whether “production” of “advanced-node ICs” occurs at such “facility.” However, if the EAR99 part will be incorporated into a finished item, *e.g.*, for repair, then it does not meet the “production” or “development” criteria.

IV.Q2. *Is a license required under § 744.23(a)(2)(i) of the EAR to transfer or release EAR99 “technology” subject to the EAR, including technology for the operation, installation, maintenance, repair, overhaul, or refurbishing of any item, when the EAR99 “technology” is destined for use in the “development” or “production” of an integrated circuit at a “facility” where the “production” of “advanced-node integrated circuits” occurs (or any other end-use for which EAR99 items are controlled)?*

IV.A2. Yes, a license is required to transfer or release EAR99 “technology” subject to the EAR under § 744.23(a)(2)(i) of the EAR because the scope of the license requirement for § 744.23(a)(2)(i) is “any item subject to the EAR,” which includes EAR99.

IV.Q3. *Scenario: Company A is a company headquartered in the U.S. or a Country Group A:5 or A:6 country. Company A produces “front-end integrated circuit “production” equipment” specified in a Category 3B ECCN. Company B is an integrated circuit “production” company headquartered in a Country Group D:5 destination. Company B asks Company A to supply commodities, software, or technology subject to the EAR to upgrade Company A’s equipment installed in a “facility” in a D:5 country where the “production” of integrated circuits occurs, but not where “advanced-node integrated circuits” occurs. Does Company A require a license under § 744.23(a)(4) (assume no other license requirement applies)? If yes, is Company A’s upgrade transaction eligible for the Temporary General License in supplement no. 1 to part 736 paragraph (d)(1) of the EAR?*

IV.A3. The upgrade transaction would qualify as a “development” activity, and a license would be required under § 744.23(a)(4) of the EAR. However, in this situation, BIS would conclude that Company A is eligible for the TGL because the transaction does not reflect “indigenous

“development” or “production” of a Category 3B” tool. Instead, the scenario is identical, in substance, to one in which Company A “develops” or “produces” an upgraded version of the tool in a D:5 country and then sells the upgraded tool to Company B, which – under the hypothetical facts provided – would be eligible for the TGL 1 in supplement no. 1 to part 736 paragraph (d)(1) of the EAR.

Even though Company B made the request for the equipment to Company A, that does not change the fact that Company A is still “directing” the shipment of the equipment under the authority of the TGL. In fact, Company A could direct another manufacturer, Company C, who is not a company headquartered in the U.S. or a Country Group A:5 or A:6 country and who produces the equipment that is subject to the EAR, to export the equipment to Company B under the TGL authority.

IV.Q4. *Scenario: Company A, located in China but headquartered in the U.S. or a Country Group A:5 or A:6 country, needs to upgrade or repair their SME, so they direct Company B, who is a Chinese headquartered company also located in China, to produce 3B001 parts or equipment. Could Company B transfer (in-country) the equipment or parts, at the written direction of Company A under the Temporary General License in supplement no. 1 to part 736 paragraph (d)(1) of the EAR?*

IV.A4. Yes.

IV.Q5. *The SME IFR sections “10. Revisions to § 744.6 Activities of U.S. Persons,” and “11. Revisions of § 744.23 “Supercomputer,” “advanced-node integrated circuits,” and semiconductor manufacturing equipment end use controls” discuss examples of facilities covered under the end-use controls in §§ 744.6 and 744.23. Can BIS verify that “facility” includes the following?*

- 1) Facilities where “production” may occur beyond a fabrication facility (e.g., beyond the clean room or production floor);*
- 2) Facilities where important late-stage product engineering or early-stage manufacturing steps (among others) may occur; and*
- 3) “Development” and product engineering activities at R&D fabrication “facilities” that may not engage in volume manufacturing.*

VI.A5. “Facility” does include 1 through 3 above.

V. “U.S. Persons” Activities Controls

V.Q1. *The exclusion in § 744.6(d)(4) applies to a natural U.S. person. Does that mean that a U.S. entity, which is included in the definition of U.S. Person, is not covered under this exclusion, but only the natural U.S. persons who are employed by or acting on behalf of the U.S. entity?*

V.A1. Correct, § 744.6(d)(4) only applies to a natural U.S. person and not to a U.S. entity.

V.Q2. *How can an entity that is a U.S. person engage in such covered activities other than through its employees or personnel working on its behalf? Is the purpose of excluding a U.S. entity to eliminate personal liability for the individual U.S. Person, but not for the U.S. entity that is a U.S. Person?*

V.A2. Yes, to eliminate discrimination against U.S. person employees of non-U.S. person entities headquartered in allied countries.

V.Q3. *Assuming § 744.6(c)(2)(iii) in addition to servicing also covers authorizing or conducting activities, are authorizing or conducting activities limited to facilities where production of advanced-node ICs occurs, similar to how servicing is limited to such facilities pursuant to § 744.6(d)(5)?*

V.A3. Yes, § 744.6(c)(2)(iii) applies to all three activities in § 744.6(c)(3)(i), not just servicing. The exclusion in § 744.6(d)(5) only applies to servicing (including installation) activities.

V.Q4. *Based on the exclusion in § 744.6(d)(5), does § 744.6(c)(2)(iii) only cover facilities where production of advanced-node ICs occurs, or does it also cover facilities where production of ICs occurs, but you do not know whether production of advanced-node ICs occurs?*

V.A4. Section 744.6(c)(2)(iii) states "regardless of end use or end user," therefore the type of facility is not relevant to the application of paragraph (c)(2)(iii).

V.Q5. *Regarding the scope of the end use control in § 744.23(a)(2), BIS stated in its comments that the term "where 'production' . . . occurs" captured "R&D fabrication 'facilities' that may not engage in volume manufacturing of integrated circuits." Our question involves clarity of this statement in relation to the EAR's definitions of "production" and "development." The EAR defines "development" as "all stages prior to serial production, such as . . . assembly and testing of prototypes [and] pilot production schemes." Accordingly, if an R&D facility is engaged only in the manufacture of prototypes that are not intended for sale, and the R&D facility is not capable of serial production, is the R&D facility still considered a "facility" where "production" occurs and, therefore, captured by the end use control in Section 744.23(a)(2)? Or is it excluded from this end use control as it is solely a "development" facility?*

V.A5. BIS encourages this commenter to submit additional details, such as through an Advisory Opinion request, to facilitate BIS's assessment of whether the activity would qualify as "development" versus "production."

VI. Regional Stability (RS) Controls and .z Export Control Classification Numbers (ECCNs)

VI.Q1. *We understand that the AES EEI filing is mandatory for the .z category items for all Countries. Does that also apply to transactions below the USD 2500 threshold?*

VI.A1. Yes.

VI.Q2. *Do we need to include the .z in front of the article/commodity descriptions for all .z category items in the AES EEI filing as stated in the below screenshot?*

For example, ECCN 3A001.z is described as:

“Any commodity described in 3A001 that meets or exceeds the performance parameters in 3A090.”

Do we need to modify this description to:

“.z Any commodity described in 3A001 that meets or exceeds the performance parameters in 3A090.”?

VI.A2. Yes.

VI.Q3. *Do the .z items require licenses to countries other than Country Groups D:1, D:4, and D:5?*

VI.A3. Yes. The .z entries are intended to control items that fall under 3A090/4A090 and another ECCN on the CCL. The .z paragraphs were created to retain both the original license requirements for that item plus the new RS-related license requirements from the October 17th AC/S IFR, as well as related license exceptions. For example, 4A003.z controls items that meet both 4A003.b and 4A090. It requires a license to the same destinations as 4A003.b items plus the additional restrictions on 4A090 items. Outside of Country Group D:1, D:4, and D:5 countries, it is eligible for the same license exceptions as a 4A003.b item.