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Director, Office of Defense Trade Policy
Directorate of Defense Trade Controls
U.S. Department of State
Washington, D.C.

Hillary Hess
Director, Regulatory Policy Division
Office of Exporter Services
Bureau of Industry & Security
U.S. Department of Commerce
Washington, D.C.

Regulation IDs: RIN 1400-AD70 and RIN 0694-AG32

Subject: **Comments on Proposed Revisions to Definitions in the International Traffic in Arms Regulations and the Export Administration Regulations**

Dear Mr. Peartree and Ms. Hess:

General Electric Company (GE) submits the following comments in response to the Department of State, Directorate of Defense Trade Controls' (DDTC's) and the Department of Commerce, Bureau of Industry & Security's (BIS's) June 3, 2015 Proposed Rules on Revisions to Definitions in the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations (EAR), (80 Fed. Reg. 31, 525 and 80 Fed. Reg. 31, 505) (Proposed Rules). GE welcomes the opportunity to comment on the Proposed Rules.

COMMENTS PERTAINING TO THE PROPOSED DEFINITIONS OF "EXPORT"

Comments related to the revised definition of the term "Export" in ITAR §120.17 and EAR §734.13 and Activities that are Not Exports, Reexports, Releases, Retransfers, or Transfers in ITAR §120.52 and EAR §734.18

GE supports the proposed exclusions from the definitions of export for data that is secured by encryption as described in the Proposed Rules. This mechanism will provide some additional

flexibility for exporters who operate in multinational IT environments without compromising the security of the controlled data. In addition, the ability to store data outside of the U.S. will result in the ability to use lower-cost cloud options than U.S.-only cloud storage solutions. The ability to host the data closer to the customer will also improve access times globally. These benefits are substantial and the proposals represent a significant step for the U.S. Government to recognize that national borders are not the most important consideration for data security.

However, GE does have several concerns about the proposals as currently drafted. First, the requirement to use end-to-end encryption will be costly, difficult to implement and will reduce application functionality in systems that have reporting or analytic sub systems. In practice, the end-to-end encryption requirement will limit the utility of the proposal for storage of data and possibly bilateral exchange of data and will not allow the proposal to be used for other data uses. Today GE uses end-to-end encryption only in specific use cases because of the complexity involved in having the employee encrypt the data with a private key. We typically utilize environments that have strong external data security protections but do not normally require the use of end-to-end encryption. There are many other ways to protect data without the use of end-to-end encryption. If the final rules broadened this requirement to require the use of secure encryption to protect the data at all times without a specific requirement for end-to-end encryption, it would have far more utility.

Second, GE is concerned that the proposed definition of "end-to-end encryption" requires the means to access the data/keys not be given to any party other than the intended recipient. In this respect, the definition goes well beyond what is required to ensure that the data is not released to a non-U.S. person. It would be far preferable to limit the requirement not to share the data/keys with non-U.S. persons; sharing with a U.S. person IT professional inside the U.S. should not void the ability to use the provision.

Third, GE utilizes SSL Inspection Tools that decrypt data in transit, scan it for malicious code, and then re-encrypt the data with a dummy token that allows it to be passed on to the intended recipient. Without this decryption process, the malicious code inspection could not occur, potentially creating data security risks. While we have the ability to prevent data from going through one of the SSL inspection tools, our ability to prevent the data from going through another party's inspection tools is uncertain.

Fourth, with regard to the encryption standard that is authorized, GE prefers the proposed formulation in the EAR versus the ITAR in that it allows, in addition to cryptographic modules compliant with FIPS 140-2 and supplemented by procedures/controls in accordance with NIST publications, "other similarly effective cryptographic means." This standard will allow exporters to utilize a broader range of tools that will provide strong protection to controlled data. In fact, it is quite possible to be more secure than FIPS 140-2 or to be FIPS 140-2-equivalent without being FIPS certified. The NIST certification is sometimes constrained by time, and some vendors also do not wish to incur the cost. It can take six to nine months and several hundred thousand dollars to be FIPS 140-2 certified. Some software vendors, while clearly meeting the standard in practice, do not spend the time and money on such a certification. GE therefore urges the agencies to harmonize around the EAR formulation since companies that work with both ITAR and EAR data will be driven to the most restrictive standard.

The Proposed Rules restrict the countries in which controlled data can be stored, prohibiting storage of controlled data in EAR Country Group D:5 and Russia and ITAR 126.1 countries. GE requests clarification on whether data that is sufficiently encrypted to meet the requirements outlined in this Proposed Rule and that is "routed through", rather than "stored in", an EAR Country Group D:5 country, Russia, or an ITAR §126.1 country similarly would not be released from control under EAR §734.18 or ITAR §120.52.

Comments on definition of "Export of Technical Data" in ITAR §120.17(a)(6)

This section states:
§120.17 Export

> 120.17 (a)(6) - "Releasing or otherwise transferring information such as decryption keys, network access codes, passwords, or software, or providing physical access, that would allow access to other technical data in clear text or software to a foreign person regardless of whether such data has been or will be transferred . . ."

We recommend that the underlined language be revised to align the ITAR definition with the EAR definition, by incorporating concepts of "knowledge" and "actual transfer" into the definition. We suggest the following rewrite:

> 120.17(a)(6) - "Releasing or otherwise transferring decryption keys, network access codes, passwords, software or other information with knowledge that such provision will result in the transfer of other technical data in clear text (*i.e.*, in unencrypted form) or software (*i.e.*, in source code format) to a foreign person."

COMMENTS PERTAINING TO THE PROPOSED DEFINITIONS OF "TECHNICAL DATA" AND "REQUIRED"

Comments on ITAR Proposed Rule related to use of the term "technical data" in defining "required" in §120.46

GE believes that ITAR §120.46(a) may be confusing to many users because it indirectly uses the term "technical data" to define the term "technical data." In §120.10(a)(1), "technical data" is defined in terms of information required for certain defined activities. But in §120.46(a), "required" is proposed to be defined as technical data peculiarly responsible for certain controlled parameters. Since the term "required" is used in the context of identifying which information will be controlled as technical data under the ITAR, GE believes the definition would be clearer if it were modified as follows. (underscored to show changes):

> "As applied to technical data, the term required refers to only that portion of information that is peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions. Such required information may be shared by different products."

Conforming changes should also be made in each of Notes 1, 2 and 3 to paragraph (a).

Comments on ITAR Proposed Rule related to use of clarifying example in defining "required" in §120.46

In the EAR, the definition of "required" includes an example to help clarify that certain technology, although used in a controlled item, is not intended to be controlled because its use relates to the achievement of characteristics that are common to other commodities that are not controlled. GE believes that the ITAR should include a similar example so that information that may be useful in the development of a defense article but which has broader civil and commercial applications is not controlled. We propose that an example such as the following be included in §120.46(a):

> "... performance levels, characteristics, or functions. Such "required" information may be shared by different products. For example, assume product "X" is controlled if it is capable of operating for sustained 30 second inverted flight, and is not controlled if is merely designed to sustain an emergency flight inversion for a few seconds. If the information used in development includes technologies "A", "B", and "C" which allow inverted flight as an emergency measure but not for more than 10 seconds, then technologies "A", "B", and "C" are not "required" to develop the controlled product "X." If technologies "A", "B", "C", "D", and "E" are used together, a manufacturer can develop a product "X" that is capable of operating for sustained 30 second inverted flight. In this example, technologies "D" and "E" are "required" to make the controlled product."

Comments related to use of the term "peculiar to" in defining "required"

GE believes that using the phrase "peculiar to" in the notes to the definition of "required" (Note 1 to paragraph (a) in the ITAR, and Note 1 to the definition of "required" in the EAR) is confusing because of its similarity to the defined term "peculiarly responsible." If it is intended to mean the same thing, then GE suggests replacing the phrase "peculiar to" with "peculiarly responsible for." If the intended meaning is different than the specialized "peculiarly responsible for" term, we would alternatively recommend replacing "peculiar to" with "unique and specific to," in order to avoid confusion.

Comments related to the definition of "peculiarly responsible"

GE believes that the catch and release approach taken to define "peculiarly responsible" is one which industry will find familiar and helpful. However, we are concerned that strictly following the model used in the definition of "specially designed" results in over-regulation of information used in applications that are not military in nature. We are particularly concerned with information that has no relationship to the parameters (e.g., performance levels, characteristics, functions or other essence such as being a bomber) that cause the item to be controlled. To align this catch and release mechanism with the concept expressed in the example to the EAR definition of "required" (i.e., A, B, C, D and E), GE proposes the following 2 changes:

1) Change the "catch" paragraph of the definition as follows: "... is "peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions" if it is used in or for use in the development ... or refurbishing of the controlled parameters or portions of the item that incorporate the controlled parameters of a [defense article/item subject to the EAR] unless ..."

2) Add the following wording as release paragraph no. 2: "It is directly related to an item that is a part, component, accessory, attachment or software used in or with the defense article or item subject to the EAR that is the object of the first paragraph of this [Note/Definition];"

In addition, under the strict limitations of release paragraph no. 3, which require information to be both identical and used specifically in production items as conditions for release, a simple dimension difference between a bracket having no military functionality that is used on a military item and another bracket used on a commercial item (non-production) will be controlled even though all information and data used to design the dimensional differences themselves are commonly used in civil, non-military designs. Thus a license might be required to have this simple bracket made. GE proposes incorporating the "or equivalent" concept from the "specially designed" definition by modifying release paragraph no. 3 and adding a new Note as follows: "Is identical or equivalent in form and fit to information used in or with a commodity or software that . . ."; "Note 1 to release paragraph no. 3: With respect to information, "equivalent" means its differences relate solely to the form and fit of the commodities it is used with."

Comments related to Potential Conflict between Notes 2 and 3 to paragraph (a) of §120.46

GE believes there is a potential conflict between Notes 2 and 3 to ITAR §120.46.a. If a component subject to the EAR and under development (not in production) is incorporated or installed in a Defense Article, Note 2 indicates that the jurisdictional status of technical data directly related to development of that component is the same as the component and is not controlled under the USML. But under the catch and release mechanism of Note 3, the same technical data would be "peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics, or functions" because it is used in or for use in the development of the defense article into which the component is incorporated and there is no applicable release paragraph. As GE believes the U.S. Government's intent is to exclude technical data unless it is directly related to the controlled defense article, and not merely used in the article, GE suggests that the following words be inserted in the beginning of Note 3: "<u>Except as described in Note 2 to paragraph (a)</u>, technical data is "peculiarly . . .."

***Comments on ITAR Proposed Rule related to definition of the term* "knowledge"**

In Note 3 to paragraph (a) of §120.46(a), the term "knowledge" is used as an element for releasing technical data under release paragraphs 4 and 5. The use of this term for such release purposes is similar to its use in §120.41 ("specially designed") where Note 2 to Paragraphs (b)(4) and (5) defines knowledge. But that definition of "knowledge" is expressly limited to §120.41. GE recommends duplicating that definition as a new Note to Note 3 to paragraph (a) of §120.46(a). GE does not believe, however, that "knowledge" should be a separate Part 120 definition, as "knowledge" has a number of other uses in the ITAR, such as in Part 127, that have come to be understood for other specialized purposes.

Comments related to placement of the definition of "peculiarly responsible"

Comments were requested on the placement of the definition of "peculiarly responsible" in a Note to the definition of "required" versus as a stand-alone definition. GE agrees with DDTC's choice to limit its applicability to the concepts contained in §120.46. The definition of "peculiarly responsible" was

obviously given a lot of thought and written for the description of controlled technical data. The other place where the concept of "peculiarly responsible" is used is in the definition of "specially designed." The "specially designed" definition uses the term to describe properties of commodities or software to determine whether items having those properties are "specially designed." If a common definition were created, in one place it would describe an item (technical data) and in the other a non-item (properties). We are concerned that this will cause confusion for several reasons. First, there would be two distinct catch and release mechanisms operating within the "specially designed" definition, which is already complex and difficult to understand (one to determine if an item is caught under the "specially designed" part (a)(1) catch test, and the other for the "specially designed" part (b) release test). Second, use of the definition in "specially designed" would result in the anomaly of having some of the releases currently operating under part (b) of "specially designed" and adopted for the "peculiarly responsible" releases, applying to end items and materials, where those part (b) "specially designed" releases were originally intended to not apply to end items or materials.

GE also recommends that the definition of "peculiarly responsible" be removed from Part 772.1 of the EAR, and placed as Note 3 to the definition of "required."

COMMENTS PERTAINING TO THE PROPOSED DEFINITION OF "DEFENSE SERVICES"

While GE supports the clarifications and changes proposed by DDTC to the definition of "defense services" as major improvements to the earlier proposed definition, we believe that additional clarifications are necessary before a final rule is implemented.

Comments on ITAR Proposed Rule related to §120.9(a)

Use of knowledge of technical data to determine whether a defense service has been provided. GE is deeply concerned about the attempt to define defense services based on the "knowledge" of relevant technical data by the U.S. person. It is highly problematic to establish this standard based on what an engineering resource may have contained in his/her brain. This could set up truly difficult enforcement cases that do not hinge on what was actually provided to the non-U.S. entity that received the service but the knowledge of the engineer or service technician involved in providing the service. GE submits the knowledge of the individual involved should not be dispositive in determining whether a "defense service" has been provided, but rather the rules must focus on what benefits the non-U.S. entity received related to the defense article(s).

ITAR Proposed Rule Use of the term "participate." If the DDTC does not remove the knowledge requirement from the definition as suggested above, GE has additional concerns about the proposed approach. Specifically, pursuant to Note 1 to paragraph (a)(1) a person is deemed to have "knowledge of U.S.-origin technical data" directly related to a defense article if the person participated in the development of a defense article. GE believes that using participation as the threshold for determining whether a person has knowledge that rises to the level needing control as a defense service would result in the regulation of a broader set of persons than is necessary. A plain dictionary meaning of the word "participate" is "to take part in an activity." Under this definition, "participation" can include remote and indirect involvement insignificant to the actual development activities, including medical, logistical, translation, financial, legal, scheduling, and administrative services. GE proposes that the scope of deemed knowledge be narrowed to those activities that are directly related to the development activities. One way to narrow this scope would be to modify the

second sentence of Note 1 to paragraph (a)(1) to state: "... However, a person is deemed to have knowledge of U.S.-origin technical data directly related to a defense article if the person engaged in activities directly related to the development of a defense article ..."

ITAR Proposed Rule Reference to Defense Articles in the same USML paragraph. Note 1 to paragraph (a)(1) would deem a person to have "knowledge of U.S.-origin technical data" if their prior activities related to development of any defense article described in the same USML paragraph as the article that is subject of the assistance. GE believes this is also too broad because it would include involvement in the development of prior items that may have no relevance to the present assistance. For example, a person may have been involved in development of a gas turbine engine design 30 years ago (such as the J79) involving technologies that have been superseded by several generations of new engine designs. That involvement would provide little to no applicability to an advanced engine such as the F135. In addition, given the length of time, the burden on both the company and the individual to consider "participation" that is so remote in both time and relevance to the current assistance (and may require research into the actual activity for which records and memories may be scant) exceeds any benefit that U.S. Government might obtain in regulating that assistance. GE proposes narrowing the scope of the defense articles used for comparison under this provision to those that have direct relevance to the activity. One way to narrow this scope would be to further modify the second sentence of Note 1 to paragraph (a)(1) to state: "... However, a person is deemed to have knowledge of U.S.-origin technical data directly related to a defense article if the person engaged in activities directly related to the development of portions or properties of a defense article that has the same properties, and is described in the same USML paragraph as, ... the defense article that is subject of the assistance ..."

Comments on ITAR Proposed Rule related to clarification regarding the exclusions in Note to paragraph (a)

Note to paragraph (a), item no. 2 adds little guidance and may cause confusion. This item no. 2 states that performance of services by a U.S. person in the employment of a foreign person is not a defense service "except as provided in this paragraph [i.e., 120.9(a)]". Essentially, paragraph (a) provides a detailed description of what activities are defense services, and this item no. 2 states the obvious that if an activity is not described in paragraph (a) it is not a defense service. GE recommends that DDTC include examples or make a clearer statement of parameters that would be outside the scope of the description in paragraph (a). One approach could be to modify item no. 2 to state: "Performance of services by a U.S. person in the employment of a foreign person related to the production of a defense article without having the requisite knowledge described in Note 1 or Note 2 to paragraph (a)(1)."

COMMENTS PERTAINING TO THE PROPOSED DEFINITIONS OF "PUBLIC DOMAIN"

Comments on ITAR Proposed Rule related to definition of "public domain" in ITAR §120.11

GE believes that the requirement in ITAR §120.11(b) that the U.S. Government authorize all technical data or software that may be subject to the ITAR prior to release into the public domain may impose a prior restraint on the publication of privately generated unclassified information and violate the First Amendment of the U.S. Constitution. GE recommends that §120.11(b) be revised to apply only to specific types of information, such as government-funded or classified information.

Separate from the First Amendment concerns, GE questions the practicality of the proposed ITAR §120.11(b) requirement:

1. How will the Directorate of Defense Trade Controls, Office of Security Review or other relevant U.S. Government entity ensure authorization requests are processed promptly?
2. What factors will the U.S. Government rely on to determine whether authorization will be given for the release of technical data or software into the public domain?
3. How do exporters know which U.S. Government entities have the authority to issue the requisite approval for release of which technical data or software into the public domain under §§120.11(b)(3) or 120.11(b)(4)?

If DDTC proceeds with this proposed requirement notwithstanding the significant Constitutional and practical concerns, GE requests further clarity on the potential scope of §120.11(b)'s requirement. Note 1 to §120.11 states that §127.1(a)(6) prohibits the unauthorized export, reexport, retransfer or pubic release of technical data or software with knowledge that the technical data or software was made publicly available without the approval required in §120.11(b), but it does not address how technical data or information placed in the public domain without authorization prior to the effective date of this rule will be handled. It is simply unrealistic to require all technical data or software currently in the public domain without express U.S. Government authorization to receive U.S. Government authorization prior to further release, export, or rexport. GE recommends, at a minimum, the inclusion of a grandfathering clause to exempt technical data or software in the public domain prior to the effective data of the rule from §120.11(b) requirement and §127.1(a)(6).

Finally, GE requests a 6-month transition period to implement the required changes if the proposed change is finalized given the widespread effects of such a requirement.

COMMENTS PERTAINING TO THE PROPOSED DEFINITIONS OF "PERMANENT AND REGULAR EMPLOYEE"

Comments EAR Proposed Rule related to definition and use of "permanent and regular employee" in EAR §§734.20 and 750.7

GE disagrees with the proposed definition and use of the phrase "permanent and regular employee" in §§734.20 and 750.7(a) to require employment for one year or longer. In practice, the term "permanent and regular employee" generally is applied to contract or contingent workers in foreign facilities. Mandating a period of one year or longer for the relationship significantly compromises the ability of a non-U.S. defense company to take advantage of the provisions that use this phrase. Many companies do not employ contract workers for periods of a year or longer because doing so can create a risk under labor and employment law that the contract worker would take legal action to acquire the benefits and other rights of employees.

The five specific criteria enumerated under §734.20(d)(2) are adequate to ensure appropriate control of EAR data in that the worker must: (i) work at the company's facilities; (ii) work under the company's direction and control; (iii) work full time and exclusively for the company; (iv) execute nondisclosure

certifications for the company and (v) not be taking direction from the staffing company. Why is it necessary for the relationship to be "long term" if those criteria are satisfied? The company engaging the contract employee will be responsible for the conduct of the worker regardless. The company can decide the length of relationship that would be appropriate given these competing considerations.

Moreover, the timing requirement does not necessarily apply or make sense in other contexts. What if a company hires an individual for permanent employment and the employee quits after 30 days? There ultimately would be no "long term" relationship under those circumstances either, yet it is not clear in the proposed definition and use of the phrase whether the employee would fall under the "permanent and regular" definition after being hired.

GE also requests further clarification on how the proposed use of the phrase "permanent and regular employee" in §750.7 may impact existing licenses. BIS typically limits employees authorized to receive controlled data through the inclusion of conditions with the license but does not put a restriction on the amount of time an employee must be working at a facility. If the proposed changes to §750.7(a) are finalized, what happens to employees under existing licenses that do not meet the specified "permanent and regular employee" definition but were not explicitly limited in the license conditions?

GE strongly urges BIS to change the proposed language as follows:

§734.20 Activities that are not "deemed reexports."

(b) Release to A:5 nationals...

(1) * * *5 nationals...

(2) The foreign national is a regular ~~and permanent~~ employee...

(c) Release to other than A:5 nationals... *R*

(1) * * **elease to other than A:5 nationals.*

(2) The foreign national is a regular ~~and permanent~~ employee...

(d) Definitions.*Definitions.*

(1) * * *

(2) "~~*Permanent and*~~ is an individual who:

(a) Is ~~permanently (i.e., for not less than a year) and~~ directly employed by an entity, or

(b) Is a contract employee who:

(i) Is in a ~~long-term~~ contractual relationship with the company...

§750.7(a) ... A BIS license authorizing the release of technology to an entity also authorizes the release of the same technology to the entity's foreign nationals who are ~~permanent and~~ regular employees (and who are not proscribed persons under U.S. law)...

COMMENTS PERTAINING TO THE PROPOSED DEFINITIONS OF "ACTIVITIES THAT ARE NOT DEEMED REEXPORTS"

Comments related to definition of "Activities that are not "deemed reexports" in EAR §734.20(c)

GE believes the requirement in §734.20(c)(5)(ii)(B) to screen for contacts in Country Group D:5 is too broad. Country Group D:5 includes countries such as China and Vietnam where, like many multinational companies, GE has major manufacturing operations and installation bases. As a result, many employees are likely to have "substantive contact" (as defined in §734.20(d)(1)) with these countries (e.g., "recent or continuing contact with agents, brokers, and nationals of such countries," "maintenance of business relationships with persons from such countries") as a normal course of business (not including technology or source code transfers). Implementation of the proposed requirement in §734.20(c)(5)(ii)(B) therefore would consume tremendous amounts of resources without yielding substantive screening results mitigating the targeted risks of diversion.

GE suggests that the requirement in §734.20(c)(5)(ii)(B) to screen for contacts in Country Group D:5 be revised to more specifically address the potential risk of diversion – e.g., change the requirement to screen for contacts in to Country Group E:1, or change the proposed language to:

§734.20 Activities that are not "deemed reexports."

(d) Definitions. (1) "Substantive contacts" includes ~~**regular travel to countries in Country Group D:5; recent or continuing contact with agents, brokers, and nationals of such countries**~~; continued demonstrated allegiance to such countries; ~~**maintenance of business relationships with persons from such countries**~~; maintenance of a residence in such countries; receiving salary or other continuing monetary compensation from such countries; or acts otherwise indicating a risk of diversion.

In addition, GE finds the requirement in §734.20(c)(5)(ii)(D) to maintain records for the longer of five years or the duration of individual's employment with the entity to be overly prescriptive and burdensome. GE suggests that BIS change the proposed language to:

§734.20 Activities that are not "deemed reexports."

(c) Release to other than A:5 nationals.

(5) * * *

(ii) * * *

(D) Maintains records of such screenings for ~~**the longer of five years or the duration of the individual's employment with the entity;**~~ <u>five years after the release of "technology" or "source code" takes place.</u>

It is also worth noting that the requirements of §734.20(c)(5)(ii)(B) and 734.20(c)(5)(ii)(D) seem more restrictive than the riders and conditions with licenses that would cover the same foreign national employees from Country Group D:5. If the foreign entity can demonstrate effective compliance to §§734.20(c)(3) and 734.20(c)(4), then §§734.20(c)(5)(ii)(B) and 734.20(c)(5)(ii)(D) have very little value

considering the extra burden beyond a typical license. Given the personal data privacy laws in Europe and Canada, compliance with §§734.20(c)(5)(ii)(B) and 734.20(c)(5)(ii)(D) is even more difficult.

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We appreciate the opportunity to provide comments on the Proposed Rules. If you have any questions or require additional information concerning this submission, please contact the undersigned at (202) 637-4206 or by email at: kathleen.palma@ge.com or George Pultz at (781) 594-3406 or by email at: george.pultz@ge.com.

Sincerely,

Kathleen Lockard Palma
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