Information filtration under the Export Administration Regulations

Information provides the cornerstone to the modern economy. It flows across information technology networks like water flowing down our mountains, into our streams and rivers, and out to the oceans. Within organisations, however, it may need to be dammed to restrict access and the release of export-controlled information. Jeffrey Richardson examines the benefits of 'information filtration'.

The complex process of applying the Export Administration Regulations ('EAR)' to classify export-controlled information has long frustrated trade compliance professionals. Information filtration is a novel methodology to better manage this process by filtering a broad set of information possibly subject to the EAR and providing a clear indicator from the outset of whether such information is initially caught by exceptions and exclusions of the EAR.[1]

The simplification resulting from information filtration occurs because often it is easier to apply individual information filters broadly across an organisation than to collect and analyse the detailed technical information required to compare the attributes against classification parameters within each candidate export control classification number ('ECCN').[2] Information filtration serves to remove the detailed classification process from the initial determination of whether information is possibly subject to common exceptions and exclusions of the EAR, while distilling down remaining information that merits a more detailed classification analysis.

The information filtration structure filters information by first applying broad filters, and then naturally trickling the remaining information through narrower filters. In brief, the filters function to collect information subject to common exceptions and exclusions the EAR of as follows:

1. Filter 1 – Jurisdiction: this filter collects information subject to the exclusive jurisdiction of a US government agency other than Bureau of Industry and Security ('BIS');
2. Filter 2 – Publicly Available: this filter collects information released publicly as defined under the EAR;
3. Filter 3 – Sales: this filter collects information commonly used to support an organisation's sales process;
4. Filter 4 – Operations: this filter collects information minimally required to operate a properly exported item;
5. Filter 5 – Technology: this filter collects information that does not qualify for the definition of technology under the EAR; and,
6. Filter 6 – Required Technology: this filter collects information that does not qualify as 'required' under the General Technology Note.

The information filters[3] may be visualised as shown in the diagram below.

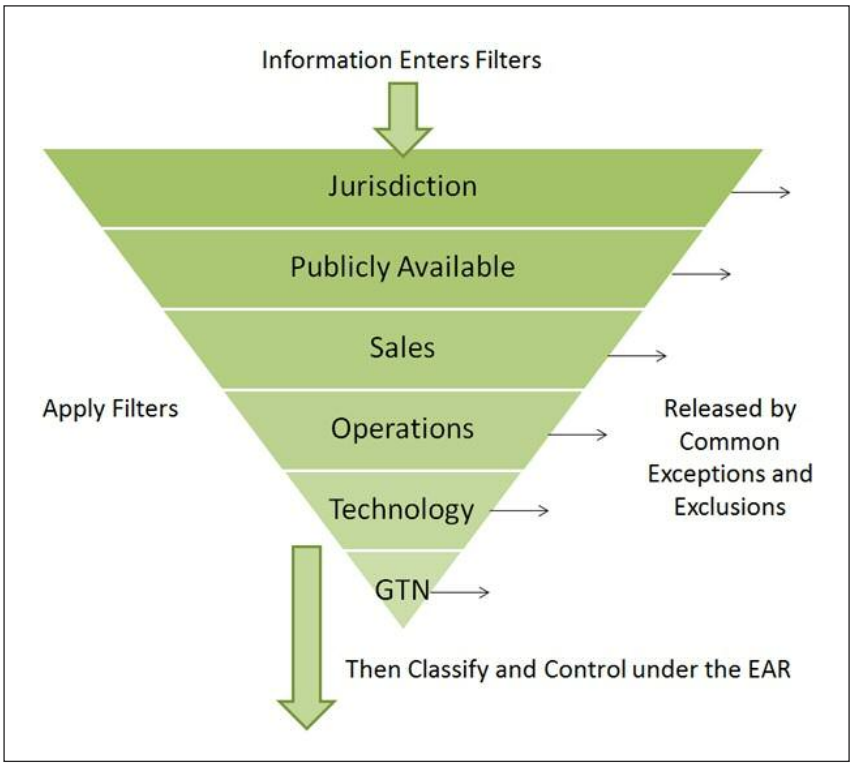
Thus, the information filtration methodology releases from detailed classification analysis information subject to exceptions and exclusions of the EAR, and thereby avoids burdening an organisation with having to analyse complicated ECCNs for a broad set of information.

Below, we examine the application of each filter of the information filtration methodology.

Filter 1: Jurisdiction

The following information is not subject to the EAR: Information[4] 'exclusively controlled for export or reexport by the following departments and agencies of the US Government which regulate exports or reexports for national security or foreign policy purposes'.[5]

To apply Filter 1, one must assess whether exclusive jurisdiction over the information lies with the following



other departments and agencies (rather than the BIS): (i) Department of State, (ii) Treasury Department, Office of Foreign Assets Control ('OFAC'), (iii) US Nuclear Regulatory Commission ('NRC'), (iv) Department of Energy ('DOE'), (v) Patent and Trademark Office ('PTO'), and (vi) Department of Defense ('DoD')[6] and Department of State Foreign Military Sales ('FMS') Program.[7] If exclusive jurisdiction over the information lies with these departments and agencies rather than the BIS, then the EAR requires that the information must be analysed under the export control regulations of that department or agency, rather than analysing whether the information is subject to the EAR and the jurisdiction of the BIS.[8]

By way of example, information pertaining to munitions is traditionally subject to the exclusive jurisdiction of the Department of State,[9] under the International Traffic in Arms Regulations ('ITAR'),[10] administered by the Directorate of Defense Trade Controls, and listed on the United States Munitions List ('USML')[11] because such information pertains to defence articles and defence services.

Correspondingly, OFAC generally maintains primary jurisdiction for the export of information to countries subject to US economic sanctions.[12] However, in certain cases, OFAC jurisdiction must be coordinated with BIS and is not exclusive to OFAC,[13] so the EAR may provide additional guidance setting forth the role of OFAC and providing details for coordination between OFAC and BIS within EAR §746 detailing Embargoes and Other Special Controls.[14] As a final example, information subject to the NRC regulations that control the export of information related to nuclear reactor vessels are not subject to the EAR.[16]

To sum up, information under the exclusive jurisdiction of an agency other than the BIS caught by Filter 1 is not subject to the EAR.

Filter 2: Publicly Available Information

Filter 2 assesses whether information is publicly available, and therefore, not subject to the EAR. Filter 2 includes information (i) which is published; (ii) which arises during, or results from, fundamental research; (iii) which is released by instruction in a catalogue course or associated teaching laboratory of an academic institution; (iv) which appears in patents or open (published) patent applications available from or at any patent office; and, (v) which are non-proprietary system descriptions.[17]

Published information

Published information designated within EAR §734.7 is not subject to the EAR, when the information is available to the public without further restrictions upon dissemination.[18] Examples of published information include information available by subscription, available from a library or accessible through a public collection, distributed at a conference or trade show, posted to internet sites available to the public, or submitted to a publisher with intent that the information be made publicly available.[19]

Correspondingly, the physical embodiment of the information as made available through traditional media outlets are also not subject to the EAR. The EAR cites the following examples of the physical embodiment of the information not subject to the EAR:

- Prerecorded phonograph records reproducing in whole or in part, the content of printed books, pamphlets, and miscellaneous publications, including newspapers and periodicals;
- Printed books, pamphlets, and miscellaneous publications, including bound newspapers and periodicals;
- Children's picture and painting books;
- Newspaper and periodicals, unbound, excluding waste;
- Music books;
- Sheet music;
- Calendars and calendar blocks, paper;
- Maps, hydrographical charts, atlases, gazetteers, globe covers, and globes (terrestrial and celestial);
- Exposed and developed microfilm reproducing, in whole or in part, the content of any of the above;
- Exposed and developed motion picture film and soundtrack; and,
- Advertising printed matter exclusively related thereto.[20]

The foregoing list applies literally to the physical embodiments, while the information correspondingly contained within those physical embodiments is not subject to the EAR when those physical embodiments are published.[21]

Fundamental research

Information arising from fundamental research is not subject to the EAR. Fundamental research means 'research in science, engineering, or mathematics, the results of which ordinarily are published and shared broadly within the research community, and for which the researchers have not accepted restrictions for proprietary or national security reasons'.[22]

Generally, fundamental research remains exempt based upon the 'intent to publish' whether or not that publication is subject to a prepublication review designed to ensure that publication (i) does not compromise potential patent rights, (ii) does not inadvertently divulge the proprietary information of a research sponsor, or (iii) if the information is subject to a review by a federal agency system designed to control the release of information arising from research performed by scientists and engineers of such federal agency.[23] Finally, if a decision is made to restrict information

Information subject to the NRC regulations that control the export of information related to nuclear reactor vessels are not subject to the EAR.

arising from fundamental research as proprietary, then the information may again be subject to the EAR.[24]

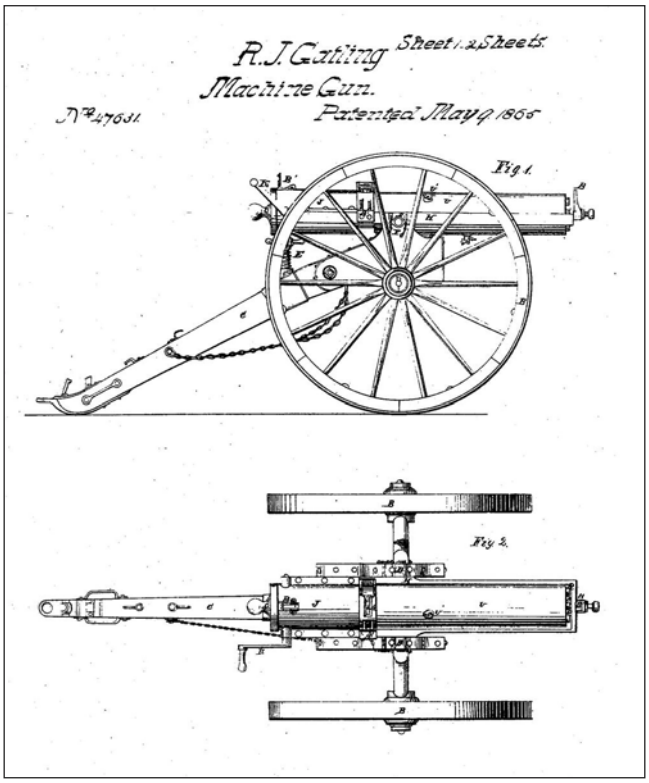
Instruction
Information released as part of the curriculum to provide instruction for a course or an associated teaching laboratory of an academic institution is not subject to the EAR.[25]

Patents
Information appearing in patents or open patent applications available at any patent office is not subject to the EAR. Additionally, certain detailed exclusions arise for patents involving foreign inventors and foreign filings including the following: (i) a 'patent application is being sent to the foreign inventor to be executed and returned to the United States for subsequent filing in the US Patent and Trademark Office'; [26] (ii) a 'patent application, or an amendment, modification, supplement or division of an application, authorized for filing in a foreign country'; [27] and, (iii) a 'patent application when sent to a foreign country before or within six months after the filing of a United States patent application for the purpose of obtaining the signature of an inventor who was in the United States when the invention was made or who is a co-inventor with a person residing in the United States'.[28]

Information appearing in patents or open patent applications covered by an invention secrecy order is not eligible for this exclusion and remains subject to the EAR.

Non-proprietary system description
Information comprising a non-proprietary description of a system is not subject to the EAR.[29] Non-proprietary means system information that is not privately owned or controlled, so if a non-proprietary description is not privately owned or controlled, then, essentially, the non-proprietary system information may be made publicly available.[30]

Under the EAR, a system means end items, equipment, parts, components, accessories, attachments, firmware, or software that operate together to perform a function.[31] Further, the EAR refers to the industrial standards established by INCOSE and NASA that provide examples of when commodities and software operate together to perform a function as a system. [32] Specifically, NASA describes a system as follows: 'A "system" is a construct or collection of different elements that together produce results not obtainable by the elements alone. The elements, or parts, can include people, hardware, software, facilities, policies, and documents; that is, all things required to produce system-level results. The results include system-level qualities, properties, characteristics, functions, behavior, and performance. The value added by the system as a whole, beyond that contributed independently by the parts, is primarily created by the relationship among the parts; that is, how they are interconnected. It is a way of looking at the "big picture" when making technical decisions. It is a way of achieving stakeholder functional, physical, and operational performance requirements in the intended use environment over the planned life of the systems. In other words, systems engineering is a logical way of thinking'.[33]



Information appearing in patents or open patent applications available at any patent office is not subject to the EAR.

Thus, non-proprietary information describing the interconnectedness of a system utilising end items, equipment, parts, components, accessories, attachments, firmware, or software is not subject to the EAR.

To sum up, the publicly available information caught by Filter 2 is not subject to the EAR.

Filter 3: Sales Information
Filter 3 captures sales information and includes data supporting a prospective or actual quotation, bid, or offer to sell, lease, or otherwise supply any item.[34]

Sales information may be exported provided that: (i) the sales information is customarily transmitted with a prospective or actual quotation, bid, or offer to sell, lease or supply an item in accordance with established business practice, and (ii) the sales information does not disclose the detailed design, production, manufacturing information, or the means of reconstruction, of either the quoted item or manufactured product.

As a result, to qualify for the comprehensive Technology and Software-Unrestricted ('TSU') licence exception, the export of sales information must prevent the disclosure of detailed information that would permit the recipient to reduce the exported sales information to production.[35]

To sum up, sales information caught and released by Filter 3 may be exported without a licence, although such sales information remains subject to the EAR. [36]

Filter 4: Operations Information
Filter 4 captures operations information and includes the 'minimum necessary' information for the 'installation, operation, maintenance (checking), or repair of those commodities or software that are lawfully exported whether under a license, license exception, or no license required'.[37]

The General Technology Note defines 'minimum necessary'

information to include 'use' information only to the extent 'required' to ensure the safe and efficient use of the product while excluding 'development' or 'production' information.[38]

The General Technology Note definition of 'minimum necessary' is consistent with the definition of 'use', further limiting 'minimum necessary' information to information for installation, operation, maintenance (checking), or repair which are each a defined attribute (or aspect) of 'use'.[39] The operations information that corresponds to lawfully exported commodities or software may be freely exported to the same location without an export licence under licence exception TSU.[40]

As an example of operations information, the EAR's Commerce Control List ('CCL') highlights that telemetry data is not subject to classification within Category 9, Product Group E of the EAR. Telemetry data is defined to include information 'transmitted to or from a satellite or "spacecraft," whether real or simulated, when limited to information about the health, operational status, or measurements or function of, or raw sensor output from, the "spacecraft," "spacecraft" payload(s), or its associated subsystems or components'.[41]

Conceptually, such telemetry data falls naturally within Filter 4, providing operations information focusing on the operational status of the satellite or spacecraft. More pointedly, this type of telemetry data is referred to as 'housekeeping data' and includes 'system, hardware, component configuration, and operation status information pertaining to temperatures, pressures, power, currents, voltages, and battery charges'.[42]

To sum up, operations information caught and released by Filter 4 may be exported without a licence, although such operations information remains subject to the EAR.

Filter 5: Technology

Filter Five focuses on determining: (i) whether information generally qualifies as technology defined under the EAR, and (ii) if the information is technology because the information generally qualifies as 'use' technology, then confirm that the information satisfies all six attributes of 'use'. Information that does not qualify as technology is not subject to the EAR.[43]

First, the EAR provides a broad description for the format requirements of information that may qualify as technology: '"Technology" may be in any tangible or intangible form, such as written or oral communications, blueprints, drawings, photographs, plans, diagrams, models, formulae, tables, engineering designs and specifications, computer-aided design files, manuals or documentation, electronic media or information revealed through visual inspection[.]'[44]

But the broad format description is limited by the type of information within those listed format requirements that qualify under the definition of technology: 'Technology means: Information necessary for the "development," "production," "use," operation, installation, maintenance, repair, overhaul, or refurbishing (or other terms specified in ECCNs on the CCL that control "technology") of an item.'[45] So the information must be necessary for the 'development,' 'production,' 'use,' operation, installation, maintenance, repair, overhaul, or refurbishing of an *item*' to come within the overall definition of technology.

The last word within the technology definition, 'item' means 'commodities, software, and technology'.[46] This means that for the information to be technology under the EAR, the information must pertain to commodities, software, or technology of an 'item'. For example, a dissertation on theoretical physics may not pertain to an actual *item*, and thus, may not be considered technology subject to the EAR.

The additional attributes of technology including development, production, and use are further defined as follows: 'Development' relates to all stages prior to serial production, such as: 'design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, layouts'.[47]

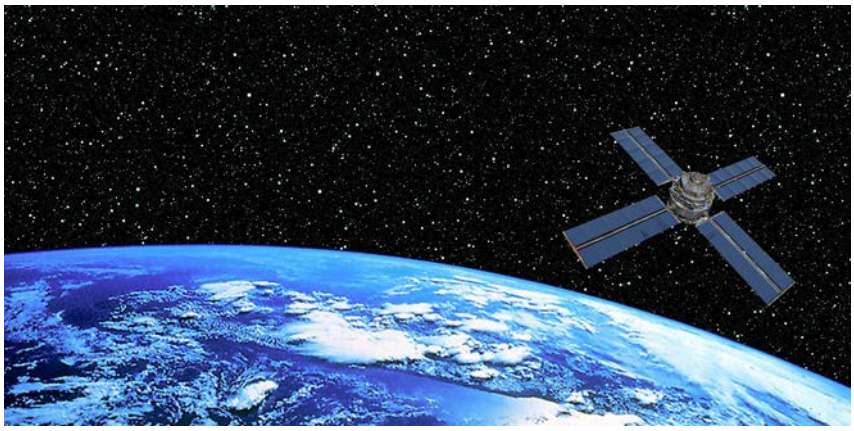
'Production' means 'all production stages, such as: product engineering, manufacture, integration, assembly (mounting), inspection, testing, [and] quality assurance.'[48]

'Use' includes 'operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing.'[49]

In sum, the limiting criteria for technology may be thought of as follows: (i) development as planning for serial production, (ii) production as executing serial production, and (iii) use as operation, installation, maintenance, repair, overhaul and refurbishing.[50]

Second, per the longstanding BIS interpretation, for information to qualify as 'use' technology, the technology must support all six activities within the definition of use: operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing.

'After thorough review, BIS has concluded that the existing definition of "use"in Section 772.1 of the EAR should remain in the conjunctive. As such, the word "and" is appropriate and the definition of "use" remains unchanged: All six activities in the definition of "use" *must be present to*



Telemetry data, defined to include information 'transmitted to or from a satellite or "spacecraft,"' is not subject to classification within Category 9, Product Group E of the EAR.

trigger a license requirement. Changing "and" to "or" in the definition, as suggested by the OIG, would lead to a situation in which mere operation of a controlled item by a foreign national could trigger the requirement for a deemed export license. Consequently, BIS has determined that revision to the existing definition would result in an expansion of deemed export license applications imposing a substantial licensing burden on the regulated community, without a corresponding benefit to national security. Hence, the definition of "use" remains unchanged.'[51]

Through the foregoing analysis, BIS removed from the definition of 'use' any technology not supporting all six activities within the use definition.

Conversely, the definition of 'use' has a note to address the stricter policy goals of the 500 Series (space and satellite) and 600 Series (military) items transferred to the CCL through the process of Export Control Reform.[52]

Links and notes

1 Export Administration Regulations, 15 C.F.R. §§730-774 (2016). The EAR is administered by the Bureau of Industry and Security.

2 15 C.F.R. §774, Supp. No. 1 to Part 774 — The Commerce Control List.

3 The filters derive from sections of the EAR, but are not a linear section of the EAR. Thus, the filters are conceptual abstractions derived from the EAR, and not simply cited sections of the EAR.

4 Information is not defined within the EAR, see 15 C.F.R. §772.1 Definitions of terms as used in the Export Administration Regulations (EAR). But rather information is generally contained within the definition of Technology, Id. 'Item' means 'commodities, software, and technology,' each of which is also independently defined within 15 C.F.R. §772.1, Id. So when the EAR intends to refer singularly to commodities, software, or technology, the text of the EAR will use the specific reference commodities, software, or technology.

5 15 C.F.R. §734.3(b)(1)(i)-(vi) Items subject to the EAR.

6 For example, the DoD maintains jurisdiction over classified information controlled under the National Industrial Security Program, see Exec. Order No. 12,829 (6 January 1993), as amended, 'National Industrial Security Program,' further amended by section 6 of Exec. Order No. 13,691, 80 Fed. Reg. 9349 (13 February 2015).

7 15 C.F.R. §734.3(b)(1)(i)-(vi) Items subject to the EAR.

8 Id.

9 Id. at (i).

10 International Traffic in Arms Regulations, 22 C.F.R. §§ 120-130 (2016).

11 Id. at §121.

12 15 C.F.R. §734.3(b)(1)(ii) Items subject to the EAR.

13 See https://www.bis.doc.gov/index.php/policy-guidance/country-guidance/sanctioned-destinations/iran last checked 2 February 2017.

14 15 C.F.R. §746 Embargoes and Other Special Controls.

15 10 C.F.R. §95 NRC Regulations —Facility Security Clearance And Safeguarding Of National Security Information And Restricted Data.

16 15 C.F.R. §734.3(b)(1)(iii) Items subject to the EAR.

17 15 C.F.R. §734.3(b)(3)(i) – (v) Items subject to the EAR. Note under §734.3(b)(3)(vi) that qualifying telemetry data is not 'publicly available,' but rather such telemetry data more closely aligns with Filter Four Operations.

18 15 C.F.R. §734.7 Published.

19 Id. at (a)(1)-(5).

20 5 C.F.R. §734.3(b)(2) Items subject to the EAR. Note.

21 But see 15 C.F.R. §734.3(b)(2) and (b)(3). Items subject to the EAR. Note to paragraphs (b)(2) and (b)(3): 'A printed book or other printed material setting forth encryption source code is not itself subject to the EAR (see §734.3(b)(2)). However, notwithstanding §734.3(b)(2), encryption source code in electronic form or media (e.g., computer diskette or CD ROM) remains subject to the EAR (see §734.17)). Publicly available encryption object code 'software' classified under ECCN 5D002 is not subject to the EAR when the corresponding source code meets the criteria specified in §742.15(b) of the EAR.'

22 15 C.F.R. §734.8(c) 'Technology' or 'software' that arises during, or results from, fundamental research.

23 Id. at (b)(3).

24 Id. at Note 2 to paragraph (a).

25 15 C.F.R. §734.3(b)(3) Items subject to the EAR.

26 15 C.F.R. §734.10 Patents.

27 Id.

28 Id.

29 15 C.F.R. §734.3(b)(3)(v) Items Subject to the EAR.

30 See Collins English Dictionary – Complete and Unabridged (HarperCollins Publishers, 12th ed., 2014), http://www.thefreedictionary.com/nonproprietary (last visited Nov. 14, 2016).

31 15 C.F.R. §772.1 Definitions of terms as used in the Export Administration Regulations (EAR). System.

32 Id. Note to definition of System.

33 NASA Systems Engineering Handbook SP-2007-6105 Rev 1, 3 (2007).

34 15 C.F.R. §740.13(a) Technology and software—unrestricted.

35 15 C.F.R. §740.13(b) Technology and software—unrestricted.

36 The end-use, end-user and destination controls of the EAR continue to apply to information subject to the EAR.

37 15 C.F.R. §774, Supp. No. 2 to Part 774 (1). General Technology Note.

38 Id.

39 15 C.F.R. §772.1 Definitions of terms as used in the Export Administration Regulations (EAR). Definition of Use.

40 15 C.F.R. §740.13(a) Technology and software—unrestricted.

41 15 C.F.R. §774, Supp. No. 2 to Part 774, Note 2 to Category 9.

42 Id.

43 Except for information that is subject to the EAR's anti-boycott provisions. The anti-boycott provisions are designed to encourage US persons to refuse participation with foreign boycotts, such as the Arab League Boycott of Israel. 15 C.F.R. §734.4(b)(3) Note to paragraph (b)(3): 'Except as set forth in part 760 of this title [Restrictive Trade Practices or Boycotts], information that is not within the scope of the definition of 'technology' (see §772.1 of the EAR) is not subject to the EAR.'

44 15 C.F.R. §772.1 Definitions of terms as used in the Export Administration Regulations (EAR). Note 1 to definition of Technology.

45 Id. Definition of Technology.

46 Id. Definition of Item.

47 Id. Definition of Development.

48 Id. Definition of Production.

49 Id. Definition of Use.

50 Id.

51 71 Fed. Reg. 30840 (May 31, 2006) at page 30843.

52 See generally EXPORT.gov, About Export Control Reform, http://2016.export.gov/ECR/.

53 15 C.F.R. §772.1 Definitions of terms as used in the Export Administration Regulations (EAR). Definition of Use, Note.

54 15 C.F.R. §774, Supp. No. 1 to Part 774. Commerce Control List ECCN 9E619.

55 Id. Definition of Technology.

56 Id.

57 Id. Definition of Technology N.B.

58 15 C.F.R. §774, Supp. No. 2 to Part 774 (1). General Technology Note.

59 Id. Definition of Required.

60 Id.

61 Id.

The note allows an ECCN to list within ECCN control parameters any single element of the six activities of 'use' for control by that ECCN: 'If an ECCN specifies one or more of the six elements of "use" in the heading or control text, only those elements specified are classified under that ECCN.[53] Therefore, generally, the ECCN control parameters must be analysed when reviewing use technology arising under 500 Series and 600 Series ECCNs.

By way of example, ECCN 9E619 controls 'technology' 'required' for the 'development,' 'production,' operation, installation, maintenance, repair, overhaul, or refurbishing of military gas turbine engines and related commodities controlled by 9A619, equipment controlled by 9B619, materials controlled by 9C619, or software controlled by 9D619.[54] The foregoing provides an example of the exception to the standard BIS 'use' technology requirements requiring the presence of all six activities of use. The technology controls for ECCN 9E619 provide controls for the individual use activities listed within the ECCN control parameters.

To sum up, Filter 5 catches information which is not technology under the EAR, and such information is not subject to the EAR.

Filter 6: 'Required' Technology under the General Technology Note

Filter 6 focuses on determining whether information that comprises technology, as defined in the EAR, further comprises controlled technology under the EAR by coming within the parameters of the General Technology Note.[55] Technology outside the parameters of the General Technology Note is not controlled technology under the EAR.[56] The distinction of whether the information comprises controlled technology under the EAR is complex because Filter 6 may force the beginning stages of a classification analysis.

To apply Filter 6, whether the technology satisfies the criterion as 'required' under the General Technology Note[57] must be determined. This is because the General Technology Note only controls the export of 'technology' that is 'required' for the 'development', 'production', or 'use' of items on the Commerce Control List according to

the provisions in each Category.[58] And under the EAR definition, 'required' technology only refers to that portion of [the] 'technology' . . . which is *peculiarly* responsible for achieving or exceeding the controlled performance levels, characteristics or functions of other items on the CCL.[59]

The implication of the term 'peculiarly' is highlighted in the following example provided within the EAR definition of 'required':

'Such "required" "technology" or "software" may be shared by different products. For example, assume product "X" is controlled on the CCL if it operates at or above 400 MHz and is not controlled if it operates below 400 MHz. If production technologies "A", "B", and "C" allow production at no more than 399 MHz, then technologies "A," "B", and "C" are not "required" to produce the controlled product "X". If technologies "A", "B", "C", "D", and "E" are used together, a manufacturer can produce product 'X' that operates at or above 400 MHz. In this example, technologies "D" and "E" are peculiarly responsible for making the controlled product and are thus "required" technology under the General Technology Note.'[60]

The example provides that 'peculiarly' may be understood to mean actually responsible for achieving the controlled performance level; i.e., 'required' for achieving the controlled performance level. So to analyse whether the technology is 'required', first determine the specific controlled performance levels, characteristics or functions, and then, determine which portions of the technology is *peculiarly* responsible for achieving or exceeding the controlled performance levels, characteristics or functions.[61]

To sum, Filter 6 catches and releases information satisfying the EAR definition of technology, yet is not 'required' as 'peculiarly' responsible for achieving or exceeding the controlled performance levels stated on the CCL, although such information remains subject to the EAR.

Conclusion

Information filtration is a methodology that serves to collect a broad set of information possibly subject to the EAR and then filters and releases from detailed classification analysis information subject to exceptions and exclusions of the EAR. Information filtration provides valuable compliance insights and assurances over this broad set of information without unnecessarily devoting valuable resources necessary for a detailed classification analysis. With the information filtration process complete, a detailed classification analysis may be the final step undertaken as necessary to determine whether the information is EAR99 or properly classified under an ECCN.

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