



Commerce Adopts Export Controls on Artificial Intelligence Software for Geospatial Imagery - Controls on Additional Technologies Expected Shortly

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On January 6, 2020 the Bureau of Industry and Security (?BIS?) within the Commerce Department adopted export licensing requirements on certain artificial intelligence software used to automate the analysis of geospatial imaging. Under the new controls an export license will be required for the export and reexport of the controlled software to all countries except Canada, effective immediately.

Geospatial software can be used to process, analyze and visualize satellite imagery and other types of geospatial information, and artificial intelligence software is increasingly being used for change detection and the classification and identification of objects in geospatial images. However, the software subject to the new export licensing requirements is limited to only a specific subset of this technology, namely:

Geospatial imagery ??software?? ??specially designed?? for training a Deep Convolutional Neural Network to automate the analysis of geospatial imagery and point clouds, and having all of the following:

1.

Provides a graphical user interface that enables the user to identify objects (e.g., vehicles, houses, etc.) from within geospatial imagery and point clouds in order to extract positive and negative samples of an object of interest;

2.

Reduces pixel variation by performing scale, color, and rotational normalization on the positive samples;

3.

Trains a Deep Convolutional Neural Network to detect the object of interest from the positive and negative samples; and

4.

Identifies objects in geospatial imagery using the trained Deep Convolutional Neural Network by matching the rotational pattern from the positive samples with the rotational pattern of objects in the geospatial imagery.

Technical Note: A point cloud is a collection of data points defined by a given coordinate system. A point cloud is also known as a digital surface model.

The terms "specially designed" and "software" have specific meanings under the definitions set forth in the Export Administration Regulations ("EAR") Part 772 and are important in interpreting these new controls.

Geospatial information is used in a wide variety of commercial and civil applications. However, it is also a critical component in sensitive defense and intelligence activities. Artificial intelligence software can be used to automate the analysis of the increasing amounts of geospatial imagery that is being collected to allow for more timely and accurate identification.

Under the new controls, an export license will be required for the export and reexport of the controlled software to all countries except Canada. In addition, licenses will be required to disclose the software to foreign persons^[1] in the U.S., including foreign persons who are employees working in your company (and including foreign person employees who were involved in developing the software).^[2]

BIS classified the software under ECCN 0Y521 based on a determination that the item warrants control because it provides a "significant military or intelligence advantage" to the United States or because foreign policy reasons justify control, pursuant to the ECCN 0Y521 procedures. ECCN 0Y521 is a "temporary holding category" for BIS to control items until it reaches a final determination, in conjunction with the State, Defense and other Departments, regarding the permanent classification of the item.^[3] Licenses will be considered under a case-by-case review policy, and the only license exception available for these items at this time is for exports, reexports, and retransfers made by or consigned to a department or agency of the U.S. Government within the scope of EAR § 740.11(b)(2)(ii).

The new regulation is in the form of an interim final rule with request for comments. While the requirements are effective immediately, BIS is also soliciting comments from interested parties. BIS may revise the classification of the software based upon the comments in accordance with the procedures set forth in the final BIS rule that created the 0Y521 process. The deadline for the submission of comments is March 6, 2020.

Under §1758 of the Export Control Reform Act of 2018, the Commerce Department is required to adopt new export controls on "emerging and foundational technologies." BIS has not stated in the new rule whether the new controls on geospatial imagery software are part of its forthcoming regulation of "emerging technologies." The regulations for "emerging technologies" are likely to have a delayed effective date and public comment period whereas the new geospatial imagery regulation was adopted under ECCN 0Y521 with an immediate effective date.

Regardless of the legal authority, however, it is highly likely that geospatial imagery software is just the first of a large number of technologies that will become subject to increased export controls within the coming months. BIS is under pressure from Congress to adopt its emerging technologies controls, and there is continuing concern in the administration about threats from China. This is likely the first of a long list of new controls with long term ramifications for U.S. industry.

Note: This article contains general, condensed summaries of actual legal matters, statutes and opinions for information and education purposes. It is not intended and should not be construed as legal advice.

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[1] The term "foreign person" is defined in EAR Part 772 as follows: "Any natural person who is not a lawful permanent resident of the United States, citizen of the United States, or any other protected individual as defined by 8 U.S.C. 1324b(a)(3). It also means any corporation, business association, partnership, trust, society or any other entity or group that is not incorporated in the United States or organized to do business in the United States, as well as international organizations, foreign governments and any agency or subdivision of a foreign government (e.g., diplomatic mission). "Foreign person" is synonymous with "foreign national," as used in the EAR, and "foreign person" as used in the International Traffic in Arms Regulations (22 CFR 120.16). This definition does not apply to part 760 of the EAR (Restrictive Trade Practices or Boycotts)."

[2]

Licenses will also be required for exports abroad of (i) foreign-made software that is "comingled" with the controlled U.S. software in quantities exceeding the *de minimis* levels set forth in EAR §734.4, and (ii) foreign-made commodities that are "bundled" with the controlled U.S. software in quantities exceeding the *de minimis* levels set forth in EAR §734.4.

[3] The procedures for use of 0Y521 are set out in Supplement No. 5 to Part 774 of the EAR.

Related People

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