

CLIENT ALERTS

Artificial Intelligence and Machine Learning Algorithms Export Control - Impact to the U.S. and China Automotive Industries

10.26.2020

Export control on artificial intelligence (“AI”) and machine learning algorithms should be considered by multinational automotive suppliers and OEMs, especially for those who have research and development (R&D) facilities overseas.

On August 28, China’s Ministry of Commerce and Ministry of Science and Technology jointly revised the Catalogue of Technologies that are Subject to Export Bans or Restrictions (the “Catalogue[1]”).

With respect to AI, five technologies were added to the negative list, including speech synthesis, voice recognition, smart review of exam answers, artificial intelligence user interface, and data analysis-based personalized recommendation pushes. This move has generated media headlines as some have surmised that the additional restrictions, especially the data-based categories, have potentially impacted the sale by ByteDance Ltd. (“ByteDance”) of its Tiktok app. Nevertheless, the automotive industry, typically any developer of autonomous technology, is also affected by such restrictions.

As the name implies, technologies in the “prohibited” section of the Catalogue are banned from export; for technologies in the “restricted” section of the Catalogue, China government approval (currently at the provincial level) is required before parties can engage in substantive negotiations regarding export and execution of formal agreements. The export license has to be obtained before the export can be made. Notably, the word “export” is defined as “the transfer of technology from China’s territory to abroad through trade, investment or economic and technological cooperation.” Even though the definition appears territorial based, it remains to be seen whether the Catalogue will be triggered in the case of “deemed exports.”

Related Services

Artificial Intelligence

Cybersecurity and Privacy
Specialty Team

Emerging Technology Specialty
Team

International Business

International Trade and
Customs Specialty Team

CLIENT ALERTS

Similar to the previously existing items in the Catalogue, the criteria descriptions in the newly added items are quite generic. For example, several descriptions contain the term “key technologies” although that term is undefined.

From the U.S. side, on January 6, 2020, the U.S. Department of Commerce, Bureau of Industry and Security (BIS), amended the Export Administration Regulations (EAR) to control the software under the authority of Export Control Classification Number (ECCN) 0D521. BIS published an interim final rule to add a new worldwide (minus Canada) unilateral export control on a type of geospatial imagery software specially designed for training Deep Convolutional Neural Networks to automate the analysis of geospatial imagery.[2]

Although BIS is studying emerging “AI and machine learning” technologies that are not now but should be controlled consistent with the standards in the Export Control Reform Act of 2018, this amendment is not such a control. Rather, it is an “0Y521” control[3], which is a temporary holding control created in 2012 to authorize relatively quick controls over uncontrolled items the government decides might provide a significant military or intelligence advantage to the United States. A condition of using this unilateral authority is that the government must submit the new control to the Wassenaar Arrangement for consideration as a multilateral control.

Tech companies and auto manufacturers are striving for how we travel safer and more efficiently. Self-driving vehicles may convey passengers to their destination with minimal human intervention or room for error [4]. Geographic Information Science (GIS) has a crucial role in clearing the path ahead for autonomous vehicles. Training Deep Convolutional Neural Networks to automate the analysis of geospatial imagery is the key to achieving robust GIS car systems.

Virtually, all transfers of technology outside of the U.S. or China must comply with the new rules respectively. Any autonomous R&D facility, who is developing something export-controlled, has to go through the compliance due diligence in order to export such technology.

Butzel Long will continue to monitor developments in this area, and its impacts to the automotive industry.

Bill Quan Yang

313.225.7094

yang@butzel.com

[1] “China Adjusts Catalogue of Technologies Subject to Export Bans and Restrictions,” September 3, 2020, China Ministry of Commerce. (<http://english.mofcom.gov.cn/article/newsrelease/counseloroffice/westernasiaandaficareport/202009/20200902998461.shtml>)

[2] “Federal Register / Vol. 85, No. 3 / Monday, January 6, 2020 / Rules and Regulations” (<https://www.bis.doc.gov/index.php/documents/regulations-docs/federal-register-notices/federal-register-2019/2507-85-fr-459/file>)

CLIENT ALERTS

[3] "Rules Affecting the Export Administration Regulations" (<https://www.bis.doc.gov/index.php/federal-register-notices#fr459>)

[4] "Self-Driving Cars and the Role of GIS in Transportation's Future," November 2, 2019 (<https://gis.usc.edu/blog/self-driving-cars-and-the-role-of-gis-in-future-transportation/>)