Feature Article

March 2019

Legal Issues on Data Collection and Protection of Intelligent Connected Vehicles (I)

In the era of internet and vehicle network connectivity, the positioning of cars is no longer purely a means to facilitate people's easy travel. With the development of telematics, intelligent transportation and autonomous driving technology, cars are being transformed from a traditional transportation tool into a large, intelligent mobile terminal device. Under this background, one direct manifestation of the business model extension is the dramatic increase in the quantity of data collected during driving and the diversification of the types of data being processed.

Different from traditional vehicles which almost entirely rely on mechanical hardware to realise the functions, for the new generation of vehicles, the proportion of software and hardware installed on such vehicles has undergone significant changes. In the near future, it is expected that there will be more vehicles equipped with autonomous driving systems of Level 3 (i.e., conditional automation) or above. These new generation of vehicles that (1) are equipped with advanced sensors, controllers and other devices; (2) use information communication, internet, big data, cloud computing, artificial intelligence and other new technologies; (3) has partial or full autonomous driving functions; and (4) are gradually transformed from pure transportation tools into intelligent mobile space, are often referred to as Intelligent Connected Vehicles which are also commonly known as autonomous vehicles[1] (collectively "**ICVs**"). The collection and processing of various types of data during the driving process is an important prerequisite for ICVs to realise their autonomous driving functions.

The data collected and processed by ICVs can be broadly divided into two categories: (1) data based on which functions such as environmental perception, intelligent decision-making and collaborative control of ICVs can be realised. Such data includes but is not limited to the surrounding environmental information, vehicle running information, vehicle position data and vehicle operation information, etc collected during the course of driving (collectively the "**Vehicle Data**"); and (2) personal information and data relevant with the ICVs, including without limitation identity information and personal tracking records, etc of owners, drivers and passengers of such ICVs (collectively the "**Personal Data**"). Due to limited space, in this article, we will discuss the legal issues related to the collection, processing and transfer of Vehicle Data of ICVs, and will discuss the legal issues regarding collection and processing of Personal Data of ICVs in the next article.

Collecting and Processing Real Time Images of Geographic and Spatial Information and Data by Groud-Level Mobile Vehicles Constitute Surveying and Mapping

How to achieve stable and safe autonomous driving function under complicated road conditions is an important issue that needs to be solved by ICVs. Through cameras, sensors, short-range and long-range radars, and data recording devices installed on ICVs, ICVs can sense the surrounding environment in real time, identify, detect and track surrounding static and dynamic objects, and will collect, record and process a large amount of real-time road information and geographic data during the course of driving. Such data include: (1) surrounding environment information, including surrounding roads, traffic participants, weather conditions, etc. during the course of driving; (2) vehicle running information, including location data, vehicle bus data, V2X communication data and other control and execution system data, etc; and (3) vehicle operation information, including driver operating status, autonomous driving system operation data, and remote operation instruction

[1] Innovation Development Strategy of Intelligent Vehicles (Draft for comment).

data, etc[2]. Through the collection of a large amount of internal and external environmental data and geographical data, ICVs can improve its environmental perception ability of people and other vehicles on the road, and the algorithm for making driving decisions will be safer, more intelligent and more precise.

According to relevant PRC law, if an ICV collects and processes the raw spatial coordinates (i.e., raw latitude, longitude and altitude data such as GPS position coordinates in WGS-84 format) by sensors installed on the vehicle that can be connected to the global navigation satellite system ("GNSS", including Beidou Navigation Satellite System, GPS, etc.) to determine the ground spatial location of any place, and collects and processes various kinds of real image geographic and spatial information and data by sensors placed on ground-level mobile devices, such behavior falls within the definition of "mobile ground survey", a kind of surveying and mapping activity under PRC law. In this situation, the collector of such Vehicle Data will be subject to a series of regulatory restrictions on surveying and mapping activities under PRC law, which include but are not limited to:

Prohibition of Foreign Investment

Companies engaged in surveying and mapping activities are required to obtain the corresponding Grade A or Grade B surveying and mapping qualification licenses. According to the new *Special Administrative Measures for Foreign Investment Access (Negative List) (2018 Version)* and the *Special Administrative Measures for Foreign Investment Access in Pilot Free Trade Zones (Negative List) (2018 version)*, mobile ground survey falls within an industry where foreign investment is prohibited.

Submission of Surveying and Mapping Results to Authorities

After obtaining the relevant surveying and mapping qualification licenses, companies engaged in surveying and mapping activities are required to submit their surveying and mapping results to the in charge authority of surveying and mapping geographic information free of charge as required by PRC law. Companies engaged in surveying and mapping activities need to pay special attention to China's unified examination and publication system of important geographical data to avoid unauthorized publication or disclosure of such data.

State-Secret Protection and Management

China has a strict supervision system for State-secrets collected and formed in the process of conducting surveying and mapping. If it's indeed necessary to provide surveying and mapping results constituting State-secets to foreign organizations or individuals, prior government approval is required. In addition, submission, storage, publication, use and destruction of surveying and mapping results are subject to various regulatory restrictions under PRC law.

Geographic Information Defined as Important Data shall be Stored within China

Geographic information and data are closely related to national sovereignty, security and development, and are also of great significance for matters concerning major national policy making, territorial planning and military command. Therefore, relevant Chinese regulatory authorities have always been prudent with regard to cross-border transfer of geographic information and data. In April 2017, the Cyberspace Administration of China issued the *Measures for Security Assessment of Cross-Border Transfer of Personal Information and Important Data (Draft for Comment)* (**"Draft Assessment Measures**"). On 25 August 2017, the National Information Security Standardization Technical Committee also released the *Guidelines for Cross-Border Data Transfer Security Assessment (Second Draft for Comment)* ("**Draft Assessment Guidelines**").

According to Appendix A: "Important Data Identification Guideline" ("**Draft Identification Guidelines**") of the Draft Assessment Guidelines, certain specific categories and scopes of geographic information and data are defined as important data. Therefore, if the real-time geographic information collected and processed by the ICV contains the important data defined in the Draft Identification Guidelines, i.e., geographic information of

[2] Article 32 of "*Implementation Rules for the Administration of Road Tests for Autonomous Vehicles in Beijing" (for Trial Implementation).*

important target; height limitation, width limitation and load capacity of important bridges, etc., the collector of such data is required to store such important data within the territory of China. Where cross-border transfer of such important data is indeed needed, the network operator which collects such data is required to perform security assessment before the data export.

Security Assessment for Geographic Information That Needs to be Exported

In practice, many companies developing ICVs with international background need to transmit the collected Vehicle Data to their overseas affiliates or third-party service providers (collectively referred to as "**Overseas Institutions**") for further analysis or use, or to have Overseas Institutions provide remote maintenance and technical support for the relevant telematics system (provided such system does not constitute critical information infrastructure under PRC law). As a result, cross-border data transfer issues are involved from time to time.

In addition to providing data to Overseas Institutions by traditional means such as online transmission or offline physical carrying, the Draft Assessment Guidelines specifically provide that the following three scenarios will constitute cross-border data transfer: (1) the provision of data to entities or organisations which are located in China but are not registered in China or not subject to the jurisdiction of PRC law; (2) the data is not transferred to or stored outside of China, but can be accessed and viewed by foreign institutions, organizations, and individuals (except for public information and web page visits); or (3) intra-group data transfer between Chinese and foreign affiliates. Therefore, if the relvant telematics system network operator allows its overseas affiliates to view or download certain important data via data interfaces connected with the domestic servers storing the Vehicle Data, or allow their overseas affiliates to provide remote maintenance and technical support for such telematics system which will enable them to access to all kinds of original raw data (which is most likely to include important data and personal information) in the system stored on the domestic servers, these activities will all constitute cross-border data transfer.

According to the Draft Assessment Measures, where cross-border transfer of sensitive geographic information and data is indeed needed, the network operator must apply to its in charge industrial regulator or relevant regulatory authority for security assessment before the export. Since PRC law is silent on the definition or examples of "sensitive geographic information and data", the geographic information defined as important data in Draft Identification Guidelines is very likely to be regarded as "sensitive geographic information and data". If these draft regulations are issued in their current form, the relevant network operator may be required to go through a government security assessment instead of a self security assessment before exporting such geographic information.

For automotive companies with international background which need to transfer such data abroad, they are advised to take certain technical measures with regard to such geographic information that needs to be exported in order to avoid the security assessment obligations.

Conclusion

Vehicle Data is of great importance for ICVs. In the absence of sufficient and effective data sources, the development work of ICVs will become water without a source and a tree without roots. The United States, Europe, Japan and other countries have all recognised the development of the ICV industry as a national strategy. China's National Development and Reform Commission has also pointed out that ICV is the strategic direction for the development of Chinese automobile industry. How to collect and protect Vehicle Data in compliance with the current regulatory requirements of PRC law is an issue that must be considered by each company that plans the development of ICV. Companies shall pay attention to the legal and compliance requirements for the collection, processing, storage and transfer of Vehicle Data, improve the preparation of relevant data related agreements to avoid potential compliance risks.

Contact us:

For a deeper discussion on how the issues discussed in the article may impact your business, please contact us:

Catherine Shen

Commerce & Finance Law Offices

Partner

+86 (10) 6569 3471

shenxiaolin@tongshang.com

Andrew Zhang

Commerce & Finance Law Offices

Partner

+86 (10) 6569 3399

zhangxinyang@tongshang.com

About Commerce & Finance Law Offices:

Commerce & Finance Law Offices is one of the leading full service law firms in China. The firm focuses on providing the best legal solutions for Chinese and multinational clients with regard to their various kinds of complicated cross-border and domestic transactions. Commerce & Finance Law Offices is particularly well-known for its practice in the fields of Capital Markets, Merger and Acquisition, Private Equity, Dispute Resolution, TMT, Healthcare, Education, Banking & Finance, Investment Fund and Intellectual Property.