



The Future Is Coming: Paving the Legal Way for Self-Driving Vehicles and Delivery Robots

May 1, 2023

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I. Overview

The revised Road Traffic Act (the “**Revised Act**”) which aims at broadening the use of automated driving systems (“**ADSs**”) came into force on April 1, 2023.

Major amendments under the Revised Act include:

(a) Establishing a system allowing for the use of Specific Automated Operations (as described below)

The government’s approval granted under this system allows any businesses to utilize a driver-free ADS in the specified areas and under the specific conditions, such as expressways and depopulated areas, subject to some requirements.

(b) Establishing a registration system for remote-controlled small vehicles

The Revised Act introduces a registration system for small vehicles operated remotely (e.g., delivery robots), specifying the traffic rules applicable to such vehicles.

(c) Making it mandatory to make effort to wear a bicycle helmet

Unlike the Road Traffic Act before the present revision, under which only the guardian(s) of children under 13 had to make an effort to see to it that the children wore a helmet, the Revised Act now generally requires, on a make-an-effort basis, that all bicycle riders wear a helmet.

This article offers an explanation of the amendments referred to in items (a) and (b) above.

II. System for Approving Specific Automated Operations¹

1. Outline

Under the Revised Act, a type of ADS, often referred to as having “level 4 autonomy,” which enables automated operation of a vehicle in specific areas under specific conditions (for example, on expressways or in depopulated areas) and which had been used only on private properties or as part of trial operations², is now available for public use. More specifically, the Revised Act has categorized

¹ *Outline of the Revised Road Traffic Act* (Traffic Bureau, National Police Agency): <https://www.npa.go.jp/bureau/traffic/selfdriving/L4-summary.pdf>

² Automated Driving Services in Haneda Airport: https://haneda-innovation-city.com/bus_schedule/; Trial Operation by Osaka Metro: https://subway.osakametro.co.jp/news/news_release/20221107_jidouunten_level4.php

automated operations of vehicles utilizing such an advanced type of ADS as “Specific Automated Operations” (“SAOs”), and made it subject to the government’s approval.

It is expected that SAO services enabled by such approval under the system introduced by the Revised Act (the “**System for Approval**”) should solve the shortage of human resources in logistics and enhance the traffic infrastructure in depopulated areas, for example, by making autonomous driving of trucks in a “platoon” formation³ on expressways possible or running automated local bus services in depopulated areas.

2. System for Approval

The System for Approval is designed not for general personal-use automobiles but for businesses providing transportation services utilizing an ADS. The Revised Act categorizes such businesses as Specific Automated Operation Entities (“**SAO Entities**”) and requires them to develop a Specific Automated Operation Plan (“**SAO Plan**”).

SAO Plans must include: the types of vehicles intended to be used; the details of the services utilizing an ADS; the location and contact details of the place where the SAO will be supervised; and the details of the fulfillment of the requirements applicable to the business running the SAO (Revised Act, Art. 75-12).

To meet the criteria for granting approval under Article 75-13 of the Revised Act, the relevant inquiries are whether:

- (i) the vehicles to be used are all capable of performing SAO;
- (ii) the SAO will be performed in accordance with the Operational Design Domain (ODD), which is a set of specific conditions, such as routes, time and weather under which the relevant ADS operates;
- (iii) the SAO Entity and other relevant persons/entities are likely to fulfill their mandatory obligations under the Road Traffic Act in a smooth and reliable manner;
- (iv) the SAO Plan causes no significant threat to general traffic; and
- (v) the SAO Plan is intended for transportation of persons or goods, and whether its purpose is to improve the convenience and/or welfare of residents in the region(s) concerned (consultation with the head of the region’s local government is required as part of the reviewing process).

³ To digress, apart from the ADS context, the Japanese government has been active in advancing international standards for truck platooning – a subject perhaps deserving of a separate article. See Ministry of Economy, Trade and Industry (METI), *New International Standard Issued for Truck Platooning Systems Proposed by Japan* (Sept. 21, 2022), available at https://www.meti.go.jp/english/press/2022/0921_001.html.

3. Obligations

The matters for which SAO Entities and their personnel engaged in SAOs are responsible under the Revised Act include:

- (i) Compliance with the conditions stated in the relevant SAO Plan and other statements (including the conditions that are added or modified by the National Security Committee in addition to the conditions originally included in the SAO Plan submitted during the course of seeking approval) (Revised Act, Art. 75-18);
- (ii) Education of the SAO personnel (a person in charge of the SAO (the “SAO Director”), on-site operator(s) and persons otherwise engaged for the SAO) (Revised Act, Art. 75-19(1), Enforcement Regulation of Road Traffic Act, Art. 9-27);
- (iii) Designation of the SAO Director and on-site operator(s) (Revised Act, Art. 75-19(2) and (3));
- (iv) Implementation of mandatory measures to be taken during SAO (either (a) installation of and monitoring by dash cams or other similar equipment, or (b) deploying the SAO Director on board the vehicle in operation) (Revised Act, Art. 75-20(1));
- (v) SAO Director’s duties and obligations specified in Article 75-21 of the Revised Act;
- (vi) Implementation of the measures to be taken when SAO ends (Revised Act, Art. 75-22); and
- (vii) Implementation of the measures to be taken in case of traffic accidents during SAO (Revised Act, Art. 75-23).

4. Summary

Businesses have to invest a considerable amount of effort to make use of the System for Approval. Moreover, even after obtaining approval, they could still potentially be subject to penalties specifically applicable to SAO. However, the provision of SAO services enabled by this system offers great potential for solving some of the existing problems that have long been defiant of adequate solutions. Furthermore, considering that a wide range of demonstration tests are actively being carried out in recent years, it is likely that this system will be utilized by more and more businesses in the future, and SAO services will be seen all around us.

III. System for Registering Remote-Controlled Small Vehicles

1. Outline

Another system introduced by the Revised Act legalizes the public-road use by Remote-Controlled Small Vehicles (as defined in the Revised Act; “RCSVs”), subject to registration (*todokede*) of the RCSVs to be used with the government. Vehicles that qualify as RCSVs are electric vehicles that are remotely controlled and roughly the size of a motor-powered wheelchair⁴ not capable of moving in excess of 6 km/h. It is also required for safety purposes that RCSVs should, among other things,

⁴ Length 120 cm x Width 70 cm x Height 120 cm

(a) have no sharp protrusions, (b) be equipped with an emergency stopping device that can be activated by pressing a button placed and colored in a prominent manner, and (c) properly display a sign specifically designed for RCSVs.

Once registered, RCSVs will be treated as pedestrians under the Revised Act, which means that they will be allowed to move in some designated areas of public roads (such as walkways and crosswalks) in the same way as pedestrians, while, at the same time, being subject to the traffic rules applicable to pedestrians.

2. Remote-Control Operations

Various types of small-sized electric vehicles are now being tested by companies in great anticipation of being utilized for transportation of passengers⁵ or deliveries of goods, and in particular with respect to the last leg of travel or movement of goods referred to in the argot of logistics as the “last mile delivery.”⁶

That said, autonomously-operated vehicles, which comprise most of the electric vehicles undergoing the above-mentioned tests, are not covered by the Revised Act, which only allows for the use of “remote-controlled” vehicles.⁷ Remote-controlled vehicles are specified in the Revised Act as vehicles capable of performing maneuvers, such as going forward and backward (including changing direction by performing turning maneuvers), stopping, accelerating, reducing speed and turning right and left, through remote-control operation at a location one or two meters away from the vehicle itself.

At this point in time, specific types of vehicles that qualify as RCSVs, or the details of potentially-available services that can be provided by using such RCSVs, remain unclear. However, actual examples of such vehicles and/or services are expected to be published when a sufficient number of actual cases handled by the authorities or the use of these technologies by businesses have accumulated over time.

3. Fully-Automated Deliveries

While on the subject of deliveries, the establishment of a legal system for fully-automated delivery services, which is expected to significantly innovate the field of logistics in addition to self-driving technologies, may require a little more time. While fully-automated delivery vehicles are, as mentioned above, already subject to many experiments, before they can be legally treated as

⁵ <https://gekidaniino.co.jp/>

⁶ <https://lomby.jp/>

⁷ Notification Issue 323 from Traffic Planning Section (*Tei*), National Police Agency:
<https://www.npa.go.jp/laws/notification/koutuu/kouki/05enkakusousagatakogatasya.pdf>

pedestrians will depend on whether further reviews and assurances of safety can adequately support such proposition.

IV. Our Team

Chuo Sogo Law Office has established a working group which is constantly sharing the latest information on matters concerning automated-driving technologies, as part of our continued endeavors to deepen our understanding of legal trends, impacts and developments associated with emerging services and technologies expected to be available on public roads.

To consult with an expert about any of the business activities involving ADSs (automated driving systems), which are anticipated to proliferate on our roads and beyond following the enactment of the Revised Act, please get in touch with any of our lawyers listed below:

Hironori Nishikino: nishikino_h@clo.gr.jp

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We advise on many other matters relating to the Road Traffic Act, including the expansion of the scope of business-use vehicles subject to mandatory alcohol tests, or the categorization of electric kick scooters.