立法會 Legislative Council

LC Paper No. CB(4)987/20-21(04)

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Panel on Transport Meeting on 21 May 2021

Information note on Proposed Regulatory Framework for Autonomous Vehicles

Autonomous vehicles ("AVs") are one of the elements of the Government's Smart City Blueprint released in 2017, the Smart Mobility Roadmap in early 2019 and the Smart City Blueprint 2.0 in 2020. In accordance with the Road Traffic Ordinance (Cap. 374), a motor vehicle must be registered and licenced by the Transport Department ("TD") if it is to be used on roads, including private roads. AVs, however, are normally not designed, constructed and operated in compliance with technical standards and driving rules of conventional vehicles. Thus they cannot be registered and licenced under the existing regulatory framework.

- 2. At present, the operation of AVs on any road can only be possible with a "movement permit" issued by the Commissioner for Transport ("C for T"). Such permit, as allowed under the Road Traffic (Regulation and Licensing of Vehicles) Regulation (Cap. 374E) is to cater for unlicenced vehicle which is "not normally used on road" and "driven only for the purpose of proceeding from one site to another". Under the permit, C for T may exempt the vehicle from complying with other provisions of the Regulation, and impose conditions on the time and route of movement.
- 3. TD has issued "Guidance Notes on the Trials of Autonomous Vehicles" ("Guidance Notes") in December 2019 to help the industry understand the requirements and procedure on the trials of AVs in Hong Kong. Generally, the permitting requirements include:
 - (a) a roadworthy AV that meets certain technical standards such as safe breaking distance as required by TD;

- (b) appropriate insurance coverage in force during the trial period;
- (c) the presence of a competent driver with a valid driver licence for at least three years in the vehicle to take control when necessary; and
- (d) risk mitigation measures supported by a hazard analysis and risk assessment.

The Guidance Note does not provide any penalty for a permit holder for failing to follow the above requirements, except that the permit may be revoked.

- 4. According to a paper 1 published by the Research Office of Legislative Council ("LegCo") in January 2021, as of May 2021, there are 30 AV trials involving at least eight AV models at various venues. 2 To facilitate AV tests, the Science Park has set up in November 2018 an Autonomous Vehicle Road Testing Hub to assist TD in evaluating AV's roadworthiness before public road test can be conducted. The hub has a size of 929 square metres and has replicates of commonly used road signage in Hong Kong. Recently, the Airport Authority has announced a plan to launch in 2027-2028 autonomous minibus carrying passengers to and from the boundary crossing of the Hong Kong-Zhuhai-Macao Bridge and intended to extend the service to the Tung Chung town centre.
- 5. The Government has set up a Technical Advisory Committee on the Application of Autonomous Vehicle Technologies in Hong Kong ("Advisory Committee") in November 2019 comprising experts from the trade and research institutions. The Advisory Committee will explore the drawing up of an appropriate regulatory framework for AVs. Apart from updating the Guidance Notes, TD has also begun to study the necessary legislative amendments to allow the industry to conduct trials of innovative technology through a "regulatory sandbox" approach. The objective is to foster a suitable and safe road environment for AV trials in Hong Kong.

These venues include West Kowloon Cultural District, Hong Kong Science Park, Hong Kong University of Science and Technology, Tai Po Industrial Estate, Hong Kong Air Cargo Terminals and Hong Kong Productivity Council.

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¹ LegCo paper No. ISE13/20-21 Policy on testing and deployment of autonomous vehicles

Questions raised by Members at LegCo meetings

6. Members raised questions on the development of AVs and the application of information systems to facilitate the development at LegCo meetings of 27 November 2019 and 15 January 2020 respective. A set of the Guidance Notes as mentioned in paragraph 3 (updated in December 2020) is in **Appendix I** (English version only). Press releases of the two questions are in **Appendices II and III** respectively.

Relevant papers

7. A list of relevant papers is in **Appendix IV**.

Council Business Division 4
<u>Legislative Council Secretariat</u>
14 May 2021

(English version only)

Guidance Notes on the Trials of Autonomous Vehicles





GUIDANCE NOTES ON THE TRIALS OF AUTONOMOUS VEHICLES

Transport Department
December 2020

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1. Introduction

- 1.1 The Government of the Hong Kong Special Administrative Region ("Government") released in December 2017 the Smart City Blueprint for Hong Kong ("Blueprint") with a vision to build Hong Kong into a world class smart city. Different policy areas are involved and smart mobility is one of the six major areas identified in the Blueprint. In December 2020, the Government released the Smart City Blueprint for Hong Kong 2.0 ("Blueprint 2.0") which continues to enhance and expand existing smart city management measures and services.
- 1.2 For smart mobility, Blueprint 2.0 recommended a number of initiatives, and one of which is to carry on facilitating trials of Autonomous Vehicles (AVs). The Government will also continue to explore and formulate initiatives to facilitate technology advancement and industry development in vehicle-to-everything (V2X) and AV and ultimately introduction of AV with integrated Internet access.
- 1.3 In this "Guidance Notes", an AV means a motor vehicle equipped wholly or substantially with an autonomous system which enables vehicle operation without the active physical control of, or monitoring by, a human operator.
- 1.4 In accordance with the Road Traffic Ordinance (Cap. 374) (the "Ordinance"), a motor vehicle must be registered and licensed by the Transport Department (TD) if it is to be used on roads¹, including private roads. AVs, however, are normally not designed, constructed and operated in compliance with technical standards and driving rules of conventional vehicles. Thus, they cannot be registered and licensed under the existing regulatory framework.
- 1.5 TD has been facilitating trials (including tests and demonstrations) of AVs in Hong Kong by issuing movement permits under the Ordinance. "A Guide on Application for Movement Permit for Test, Trial and/or Demonstration of Autonomous Vehicles on Roads within Designated Sites in Hong Kong" was also published in 2017 as a reference for prospective applicants to prepare an application to TD for movement permits for conducting AV trials.

¹ As stipulated in Road Traffic Ordinance (Cap. 374), road (路、道路) includes every highway, thoroughfare, street, lane, alley, court, square, car park, passage, path, way and place to which the public have access either continuously or intermittently, whether or not the same is the property of the Government, and includes the carriageway of the North-west Railway, but does not include any private road, or any part of the carriageway of the North-west Railway designated by the Commissioner by notice in the Gazette

1.6 This "Guidance Notes" is intended to update and replace the above-mentioned "A Guide on Application for Movement Permit for Test, Trial and/or Demonstration of Autonomous Vehicles on Roads within Designated Sites in Hong Kong", and set out a clear yet flexible mechanism to facilitate applications for movement permits for conducting more advanced AV trials (including tests and demonstrations) while ensuring safety.

2. Application Procedures for Movement Permit

- 2.1 Organisations intended to conduct AV trials shall apply for a movement permit regarding their proposed trials on roads, including private roads, by submitting a completed Form TD298 with the following to the Licensing Section of TD (see Annex A for contact details):
 - (i) Copy of the applicant's Hong Kong Identity Card/Passport or Certificate of Incorporation of a company (for company applicants);
 - (ii) Original or photocopy of proof of present address which is issued not more than three months from the date of application;
 - (iii) Contacts of the applicant, or its representative in case of a company applicant;
 - (iv) Relevant application fee; and
 - (v) A trial proposal (see Section 3).
- 2.2 Form TD298 (see Annex B) could be downloaded from the website of TD or via the following hyperlink: https://www.td.gov.hk/filemanager/common/td298(6.2019)_eng_r1.pdf
- 2.3 As mentioned above, there are comprehensive interpretations of "Road" and "Private Road" in the Ordinance. Applicants are encouraged to consult TD to confirm whether a movement permit is required for their proposed trial of AV (see Section 7 for contact details) at particular areas/sites.
- 2.4 Each application will be assessed on a case by case basis depending on its own merit. The applicant shall allow ample time, say at least 30 working days after submission of all the necessary document or information, for TD to process the application for movement permit.
- 2.5 During the assessment, comments would be sought from other Government departments such as the Hong Kong Police Force (HKPF) regarding the proposed trial.

- 2.6 If a movement permit is issued, permit conditions will be included with which the permit holder must comply.
- 2.7 Permit holders shall comply with other conditions which may be imposed by TD throughout the validity period of the movement permit. Contravention to any conditions may render the permit liable to cancellation.
- 2.8 Permit holders shall inform TD as soon as possible if there is any change to the trial, e.g. change of technologies or devices to be used. If the change is significant, application for a new movement permit is required. However, it would be considered on a case-by-case basis.

3. General Requirements

3.1 Trial on road is an important step in developing a fully functioning and safe AV. Trialling organisation should only consider trial on roads if adequate in-housing testing and trials within cordoned-off areas or roads have been completed to ensure safety and reliability of the AV. Trialling organisation should start with, after completion of in-house testing, trial within cordoned-off areas first before advancing to trials on open roads with or without interaction with other road users and motor vehicles.

To apply for a movement permit regarding any trials of AV on roads, the applicant is responsible for ensuring that the following major requirements are met:

- (i) the AV shall be roadworthy and in good / serviceable conditions;
- (ii) appropriate insurance coverage shall be in place;
- (iii) a competent driver / operator is present during the trial on roads, to monitor the operation of the AV and take over operation of the AV if necessary; and
- (iv) adequate mitigation measures shall, after completing a hazard analysis and risk assessment, be identified and implemented to reduce safety risks of the AV as far as reasonably practicable.
- 3.2 The applicant is required to submit a trial proposal including the following information:
 - (i) description of the organisation intended to conduct the proposed trial;
 - (ii) trial objective, proposed location and routing, timing and duration;
 - (iii) acceptance criteria of various tests to be conducted in the trial;
 - (iv) description of the AV to be used and the proposed operating speed;

- (v) design and functions of the AV key components (e.g. sensors, cameras, data recording device, etc.);
- (vi) description of the technology being put on trial with the proposed trial scenarios and procedures;
- (vii) description of the AV driver/operator and trial participants on board;
- (viii) driving competency of the AV driver/operator;
- (ix) the Temporary Traffic Management Plan (if necessary);
- (x) infrastructure/communication network requirements (if necessary);
- (xi) insurance coverage (e.g. "vehicle insurance", "public liability insurance", etc.);
- (xii) details of the trials on the same AV covered by other movement permits;
- (xiii) a Safety Management Plan (see para. 3.3 and 3.4); and
- (xiv) other relevant information about the trial which could demonstrate the compliance of the requirements stated in para. 3.1.
- 3.3 The aim of the Safety Management Plan is to identify and outline key relevant safety risks of the trial and how they will be mitigated or eliminated. To do so, the applicant shall either have an internal hazard analysis and risk assessment method; or show compliance with an existing globally accepted standard such as ISO 26262-3: 2018 or prevalent version. The proposed risk mitigation measures, e.g. fencing off arrangements, safety warning notices, trainings to drivers/operators, etc. should be devised and included in the submission.
- 3.4 The Safety Management Plan should address major safety risks, such as the following, and propose mitigation measures:

(i) System Failure

Failure of the autonomous system is a key risk and the applicant shall set out how he intends to manage system failure which is related to both hardware and software.

(ii) Hacking

In order to avoid hacking of the autonomous system to take control of the vehicle, appropriate security measures will need to be implemented by the applicant.

(iii) Driver Errors

In case of system failure or emergency, the driver will be required to resume control from the autonomous system and operate the vehicle manually. Driver errors including slow reaction will pose significant risks to road users including the driver himself. The applicant shall list what measures would be carried out to avoid driver errors during the trial.

(iv) Vehicle Failure

Irrespective of whether the vehicle is being operated under autonomous or manual mode, vehicle failure will pose significant risks to road users and surrounding properties. The applicant shall list what measures would be carried out to ensure that the vehicle will remain in good and serviceable conditions in the event of vehicle failure (also see para. 4.6).

- 3.5 The AV under trial shall be fitted with suitable electronic data recording device capable of capturing data from sensors and control systems, in addition to information related to vehicle movement and surrounding environment. In case of an incident, the data shall be recorded in full and available for the examination of TD to provide details about the incident, including but not limited to the time, speed, location, status of brake and mode of operation (i.e. autonomous / manual), etc. The applicant shall commit that assistance shall be provided to TD or agent appointed by TD to retrieve the record for the purpose of incident investigation.
- 3.6 The applicant shall ensure that all the required policy of insurance shall be in force throughout the trial period.
- 3.7 The applicant shall set out how they intend to engage with the public and other key stakeholders as part of the trial. These could include infrastructure management, public transport service providers, or communities near the trial location, especially when the trial will be conducted on temporarily closed or non-closed roads. It is the responsibility of the applicant to find out who will be affected by the trial. Engagement shall be maintained throughout the duration of the trial. The applicant shall also consider to engage Fire Services Department before the trial and provide information such as emergency handling procedures for the AV.
- 3.8 The applicant, if approved, shall be required to provide interim reports as required, end-of-trial report and presentation sessions on findings, outcomes and feedbacks on regulatory framework. He will also be required to attend ad hoc or regular meetings regarding the trial. Commercially sensitive information, of which confidentiality will be respected, is NOT required in the reports.
- 3.9 If temporary road closure is required for the trial of AV, the applicant shall submit a Temporary Traffic Management Plan for approval by the relevant divisions of TD and HKPF regarding the trial's anticipated risks and traffic impacts, and the corresponding mitigating actions. After preliminary screening and evaluation of the application, the applicant would be advised, with comments on the plan, to

- submit the Temporary Traffic Management Plan to HKPF and relevant divisions of TD to see if there is any objection.
- 3.10 If any infrastructure or communication network is required for the trial, the applicant shall inform TD about such requirements. The applicant shall ensure that the AV and any associated backend control systems have appropriate security measures to manage data security and the risks of unauthorised data access. The communication network shall comply with Telecommunications Ordinance (Cap. 106).
- 3.11 AV trials will likely involve collection, handling and disposal of personal data. For example, image data collected by sensors fitted on the AV may give rise to the collection of personal data under Personal Data (Privacy) Ordinance (Cap. 486). The applicant must ensure that they comply with Personal Data (Privacy) Ordinance and follow the six Data Protection Principles thereat, and set out their data protection measures in the trial proposal. If warranted, the applicant shall consult the Office of the Privacy Commissioner for Personal Data and conduct a privacy impact assessment.
- 3.12 Upon issue of a movement permit, the permit holder is required to report in the format required by TD, any accident or incident during the trial of AV to TD within 24 hours from the time of occurrence of the accident or incident (see Annex C for details).
- 3.13 The trial will be inspected by TD during the validity period of the movement permit. Subject to findings of the inspection, the TD may impose additional permit conditions which are deemed appropriate.
- 3.14 The applicant shall have contingency plan with measures to handle various unintended situations, incidents or accidents. Information such as contact points of emergency services, vehicle recovery services, maintenance services, etc. should be included.

4. Vehicle Requirements

- 4.1 The applicant shall ensure and confirm that the AV to be put on trial is fit and roadworthy for the proposed trial.
- 4.2 The AV, through its sensors or control by the driver/operator, will need to respond appropriately to all type of road users, hazards and scenarios which may typically

be encountered during the proposed trial. The applicant shall conduct pre-trial tests to ensure that all sensors are in order with record properly kept and subject to the examination of TD. TD may attend and witness the pre-trial tests, if required.

- 4.3 The applicant shall substantiate that the AV is fit and roadworthy for the proposed trial with in-house trial/simulation report, report of overseas trial, operation record of the AV, relevant assessments by accredited testing organisations or academic organisations, etc. The applicant should start with in-house trials to gather and cumulate experience / evidence to substantiate the satisfactory functioning of the AV and its components before advancing to trials within a confined testing area, temporarily closed roads and finally open roads mixed with other traffic.
- 4.4 Transition function between autonomous mode and manual mode shall be proven first in in-house trials or trials within a confined area before advancing to trials on temporarily closed roads and open roads.
- 4.5 The range of object sensor detection shall be specified in the trial proposal, which shall be greater than the braking distance of the AV plus an extra safety factor regarding the resumption of control from autonomous mode to manual mode by the driver/operator.
- 4.6 The applicant shall maintain the AV in good and serviceable condition throughout the trial. Inspection and maintenance records shall be properly kept (details of maintenance/inspection scheme should be included in Safety Management Plan, see para. 3.4) and provided to TD upon request.
- 4.7 In the event of failure of AV technologies under trial, provision of visual/audible warning to driver/operator shall be available as a mitigating measure, especially for trials on road. Other mitigating measures such as slowing down, coming to a complete stop should also be considered to fit for the trial conditions. Details shall be presented in the Safety Management Plan.

5. Driver/Operator Requirements

- 5.1 During the trials of AV on road, there shall be a driver/operator to monitor the operation of the AV and take over operation of the AV if necessary.
- 5.2 To ensure that the driver/operator can operate the AV under manual mode on road, the driver/operator shall hold a valid driving licence of private car or light goods vehicles for at least 1 year. Subject to the gross vehicle weight, the dimensions

and the design of the AV, driving licence holders of other vehicle class may be required.

- 5.3 The driver/operator shall have solid understanding about the vehicle operation, capabilities and limitation of the AV technologies to be put on trial as certified by the developer of the AV technologies in writing. The applicant shall be responsible for providing adequate training and have procedures to ensure and monitor the awareness of the driver/operator during operation of the AV. The driver/operator shall be aware of the situations in which it may be necessary to intervene. Training shall cover potentially hazardous situations which may be encountered and appropriate action to take when resuming manual control of the AV.
- 5.4 The applicant shall be responsible for training the driver/operator to ensure that he has full understanding of the transition from vehicle autonomous mode to manual mode, and vice versa. The transitioning will take certain time and the driver/operator shall, in case of emergency, make timely actions after taking the time required for transitioning into account.
- 5.5 The applicant shall ensure that the driver/operator have adequate and suitable training and regular updates. Induction, refresher and any other training record of the driver/operator in relation to the AV trial shall be maintained and produced to TD or agent appointed by TD for inspection as required.

6. Record Keeping

- 6.1 The applicant shall maintain a record keeping system so that the relevant records/information could be made available to TD or agent appointed by TD, if required.
- 6.2 Relevant records/information mentioned in para. 6.1 should include the following but the list is not exhaustive:
 - (i) Pre-trial vehicle inspection records;
 - (ii) Inspection and maintenance record of the AV throughout the trial period;
 - (iii) Incident record;
 - (iv) Data stored in electronic data recording device of the AV;
 - (v) Training records of the driver, operator and other participants; and
 - (vi) Updated contingency plan.

7. Enquiry

For any enquiries, please feel free to contact Transport Department by:

Email : <u>vssenq@td.gov.hk</u>

Mail : Vehicle Safety and Standards Division,

Transport Department,

10/F South Tower, West Kowloon Government Offices,

11 Hoi Ting Road,

Yau Ma Tei,

Kowloon.

Annex A

Address

Kwun Tong Licensing Office 5/F, Kowloon East Government Offices, 12 Lei Yue Mun Road, Kowloon

Office Telephone No.

2775 6835

Fax No.

2348 2150

Important Notice

Requirement of Address Proof

The original or a copy of the proof of address issued within the last three months **has to** be produced when submitting a licensing application. In accordance with the relevant legislation, the Transport Department may suspend processing the application in the absence of address proof. [Please refer to the list of acceptable proof of address]

Change of Address

According to the law, driving licence holders or registered vehicle owners have to notify the Transport Department within 72 hours of their change of address. Any person without reasonable excuse contravenes such requirement commits an offence and is liable to a fine of \$2,000. You may notify the Transport Department of change in address with your proof of new address in writing, through MyGovHK or by submitting the specified form ("Change of Personal Particulars or Vehicle Particulars").

Mail items with insufficient postage

Underpaid mail items are subject to surcharge by Hongkong Post. This department will not accept underpaid mail items, which will be returned to the sender (with return address) or disposed of (without return address) by the Hongkong Post. For proper delivery of your mail items to the department, and to avoid unnecessary delivery delay or unsuccessful delivery, please ensure your mail items bear sufficient postage with return address before posting. [Please note details about postage and pay attention to the New Postage Structure effective from 1 January 2016]

If you are a registered elector and your residential address has changed, please notify the Registration and Electoral Office (REO) as early as possible. For enquiries, please call the REO hotline 2891 1001.





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Receiving Officer's Signature		
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備路政署考慮。

Note:

If (12) above exceeds 8.4 tonnes and (13) is less than 3 metres, please submit your application in quadruplicate and attach a drawing of the vehicle showing configuration and spacing of wheels, to each copy. It is required to be considered in consultation with the Highways Department.

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Da			(*	總警司 (交通)/高級警司 (交通)港島/九龍/新界代行) (for *CSP Traffic/SSP Traffic HKI/K/NT)
* 請	新不適用 -	音刪去 ·		

發證條件 Conditions of Issue

發證條件可包括但不限於以下條件:

- 1. 申請車輛行駛許可證的人士必須為該車車主。
- 2. 車輛如未領牌,且通常並非在道路上使用,而是僅為從某一地點前往另一地點的目的而在道路上行駛。
- 3. 車輛行駛許可證的有效期由運輸署署長決定,且只在該車可以行駛的指定時間內有效。
- 4. 當該車在道路行駛時,除該車輛通常運載的裝備、零件或燃料外,不得運載其他負載物。
- 5. 該車只准由該類車輛的有效駕駛執照的持有人在路上駕駛。
- 6. 該車 (拖車除外) 在道路行駛時,必須依照《汽車保險 (第三者風險) 條例》(第272章)之規定,預先投保,一如依照道路交通條例及規例的規定作登記及領牌的車輛一樣。
- 7. 該車在道路行駛時,應準備一輛可以隨時出動的搶救車輛。
- 8. 該車必須備有緊急警告標誌,在發生故障時一定要加以使用。
- 9. 許可證持有人在駕駛該車輛進入有管理機關或擁有人限制車輛進出的任何地方或私家路,必須取得管理機關或擁有人的預先批准。

Conditions of issue may include but not limited to the following -

- 1. The applicant should be the owner of the vehicle to which a movement permit is sought.
- 2. A vehicle which is not licensed and which is not normally used on a road and is driven on a road only for the purpose of proceeding from one site to another.
- 3. A movement permit is issued shall be valid for the period as specified by the Commissioner for Transport and subject to such other conditions in regard to the time when the vehicle may be moved.
- 4. When the vehicle is being used on a road, no load is carried on the vehicle other than such equipment, spares or fuel normally carried on the vehicle.
- 5. The vehicle is to be driven on the road only by a person holding a valid driving licence authorizing him to drive a vehicle of that class.
- 6. When the vehicle (with the exception of a trailer) is driven on a road, it shall be covered by such insurance required by the Motor Vehicle Insurance (Third Party Risks) Ordinance (Cap. 272) as if it were a motor vehicle registered and licensed in accordance with the provisions of the Road Traffic Ordinance and the regulations made thereunder.
- 7. A recovery vehicle should be available all the time the vehicle is on the road.
- 8. Emergency warning signs must be carried and used in the event of a breakdown.
- 9. The permit holder shall seek the approval from the relevant authority prior to driving the vehicle in any area or private road of which the management authority or owner may restrict the access of the vehicle.

注意事項 Notes for Attention

- 1. 如任何駕駛執照持有人/登記車主曾向運輸署署長提供其姓名、地址或身分證明文件有所改變,他/她須在改變出現後 72 小時內以書面或遞交已填妥的運輸署表格 TD559 ,將有關改變通知運輸署署長,並需提交有關改變的證明。任何人無合理辯解而違反此規定,即屬犯罪,可處罰款\$2,000。如屬姓名的改變或身分證明文件的改變,駕駛執照持有人/登記車主亦須將現有的駕駛執照正本(如持有)、駕駛教師執照正本(如持有)、車輛登記文件正本(如持有)、車輛牌照(如持有)及自訂登記號碼分配證明書(如持有)送交運輸署署長,以作修改。
- 2. 運輸署署長在處理牌照申請時,可要求申請人出示其地址證明(住址/公司地址(如以公司登記為車主)及通訊地址,例如水/電/煤氣/手提電話費單或銀行信件等),以及可在申請人出示該等證明之前,暫停處理該申請。因此,請申請人士帶同其最近三個月內的地址證明,並在牌照事務處人員要求下,出示其地址證明。
- 3. 所有在本署以你的身分證明文件/公司註冊證號碼登記的車輛牌照或駕駛執照的記錄,會根據你在本申請表內填報的地址而同時更改。
- 1. If a change occurs in the **name**, **address or identity document of a driving licence holder/registered owner** previously provided by the driving licence holder/registered owner to the Commissioner for Transport, the driving licence holder/registered vehicle owner shall, within 72 hours of the change, notify the Commissioner for Transport in writing or by submitting the completed Transport Department Form TD559 with the proof of change. Any person who without reasonable excuse contravenes such requirement commits an offence and is liable to a fine of \$2,000. For cases of change of name or change of identity document, the driving licence holder/registered vehicle owner shall also deliver to the Commissioner for Transport the existing original driving licence (if applicable), original driving instructor's licence (if applicable), original vehicle registration document (if applicable), vehicle licence (if applicable) and Certificate of Allocation of Personalized Registration Mark (if applicable) for amendment.
- 2. The Commissioner for Transport may, in processing licensing application, require the applicant to **produce proof of his/her address** (residential/company address (if using company as registered vehicle owner and correspondence address, e.g. water/electricity/gas/mobile phone bill or bank correspondence), and may <u>suspend the processing of the application</u> until the production of such proof. Therefore, applicants please bring along with address proof issued within the last three months for presentation as and when requested by officers of Licensing Office.
- 3. For any change of address notified in this application form, all vehicle/driving licence records of the applicant under the same identity document/Certificate of Incorporation held by this Department will also be changed.

遞交申請表 Submission of Application

請將該份申請表親自或由代理人遞交或郵寄至運輸署屬下任何一個牌照事務處。 如需查詢各運輸署牌照事務處服務時間,可致電 2804 2600 或瀏覽本署網站 (www.td.gov.hk)。

運輸署牌照事務

- 1. 香港牌照事務處 香港金鐘道 95 號統一中心 3 樓 2804 2642
- 2. 九龍牌照事務處

九龍長沙灣道 303 號長沙灣政府合署 2 樓 2150 7714

 沙田牌照事務處 新界沙田上禾輋路1號沙田政府合署2樓 2606 1468

4. 觀塘牌照事務處

九龍觀塘鯉魚門道 12 號東九龍政府合署 5 字樓 2775 6835

本署已就簽發車輛行駛許可證實施服務表現承諾,詳情請瀏覽本署網頁(https://www.td.gov.hk/tc/about_us/performance_pledge/index.html)。

Please submit the application in person or by agent or by post to any licensing office of Transport Department. For enquiry on service hours of Transport Department licensing offices, please call 2804 2600 or visit our website (www.td.gov.hk).

Transport Department Licensing Offices

 Hong Kong Licensing Office 3/F., United Centre, 95 Queensway, Hong Kong. 2804 2642

Kowloon Licensing Office

2/F., Cheung Sha Wan Government Offices,

303 Cheung Sha Wan Road,

Kowloon. 2150 7714 Sha Tin Licensing Office 2/F., Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin, New Territories. 2606 1468

4. Kwun Tong Licensing Office

5/F., Kowloon East Government Offices

12 Lei Yue Mun Road,

Kwun Tong, Kowloon. 2775 6835

This department has implemented the performance pledge on the issuance of movement permit, please visit our website (https://www.td.gov.hk/en/about_us/performance_pledge/index.html) for details.

所需文件及費用 Required Documents and Fees

遞交申請表時請出示以下文件:

- 1. 車主的香港身份證或護照/公司註冊證 (商業登記證不會被接納);而身分證明文件的影印本亦會被接納作核對用,本署會於辦理你的申請後將副本銷毀。
- 2. 車輛的規格。
- 3. 說明該車構造、車輪之間距離及車輛總體積的繪圖。
- 4. 要求該車往來各地點的代理人所發出的委托書或書面證明。
- 5. 以車主名義投保該車的第三者意外風險有效證明書。
- 6. 該車的照片(包括車身的前方、後方、左邊及右邊)。
- 7. 現時的地址證明(住址 / 公司地址及通訊地址)正本或副本,而該地址證明需發出距今不超過三個月(包括水電煤或電訊公司帳單、政府部門、公共機構、銀行或本地大學 / 專上教育機構發出的信件等)。如有查詢,可致電2804 2600。
- 8. 其他有助申請的有關文件或資料(本署可能要求申請人提交額外文件);及
- 9. 如欲知申請本許可證的最新費用,你可於本署各牌照事務處詢問處、或致電顧客服務熱線2804 2600 / 1823 電話中心查詢、參閱牌照事務處的牌照費用表 (TD341) 或瀏覽運輸署網頁 (www.td.gov.hk)。如以支票/銀行本票付款,請劃線並寫明「**香港特別行政區政府**」為收款人,並在支票/銀行本票背面寫上你的姓名、車輛登記號碼及日間聯絡電話號碼;請勿郵寄現款。 When you submit your application please also produce:—
- 1. Hong Kong Identity Card or Passport/Certificate of Incorporation of a company (Business Registration Certificate will not be accepted). Photocopy of the identity documents is acceptable and will be destroyed after the processing of your application.
- The specification of the vehicle.
- 3. Drawing of the vehicle showing configuration, spacing of wheels and overall dimensions.
- 4. Copy of assignment or written confirmation from the agent concerned requiring the movement of the vehicle.
- 5. A valid Third Party Risk Insurance Certificate covering the use of the vehicle in the name of the owner.
- 6. A photograph of the vehicle (including the front, back, left side and right side of the vehicle).
- 7. Original or photocopy of proof of present address (residential address/company address and correspondence address) which is issued not more than 3 months from now (includes utility or telecommunication bills, correspondence from government departments, public organisations, banks or local universities/tertiary education institutions etc.). For enquiries, please call 2804 2600.
- 8. Other relevant documents/information in support of your application not mentioned above (this department may request the applicant to submit supplementary information); and
- 2. For enquiry about the updated application fee for a movement permit, you may make enquiries at the enquiry counters of Licensing Offices or from Customer Service Hotline 2804 2600/1823 Call Centre, refer to the licence fees table (TD341) from licensing offices, or visit Transport Department's website (www.td.gov.hk) for information]. If pay by cheque/cashier order, please make cheque/cashier order payable to "The Government of the Hong Kong Special Administrative Region" or "The Government of the HKSAR" and crossed. Please write down your name, vehicle registration mark and daytime contact telephone number on the back of the cheque/cashier order; cash should not be sent by post.

郵遞申請 APPLICATION BY POST

如果你以郵寄遞交申請表,請填寫下列資料 PLEASE FILL IN THE FOLLOWING ITEMS

請在支票/銀行本票背面寫上你的姓名、車輛登記號碼及日間聯絡電話。

Please write down your Name, Vehicle Registration Mark and Day Time

Contact Telephone No. on the back of the cheque/cashier order.

2. 請填上你的付款資料。

Please fill in your Remittance Details.	
銀行名稱 Name of Bank:	
付款總額 Amount Paid:	
支票/銀行本票號碼 Cheque/Cashier Order No.	

- 3. 為方便本署郵寄本申請表所申請的許可證給你,請在以下填上你的姓名/公司名稱(如以公司登記為車主)及你於本申請表 A 欄所填寫的住址/公司地址/通訊地址。
 - To facilitate us to mail the permit applied in this application form to you, please fill in below your name/company name (if using company as registered vehicle owner) and residential address/company address/correspondence address provided in Part A of this application form.

姓名 Name:	
住址/公司地址/通訊地址 Correspondence Address:	Residential/Company/

關於你個人資料的說明 NOTES ABOUT YOUR PERSONAL DATA

收集目的

- 1. 運輸署會使用透過本申請表所獲得的個人資料作下列用途:
 - (a) 辦理有關審批你在本申請表中所提出的申請的事務;
 - (b) 依照道路交通(車輛登記及領牌)規例第 4(2)條的規定,保存一份車輛記錄,讓市民索閱; (只適用於與車輛有關的申請)
 - (c) 依照道路交通 (駕駛執照) 規例第 39 條的規定,保存一份詳列駕駛執照上各細項的記錄; (只適用於與駕駛執照有關的申請)
 - (d) 辦理有關交通及運輸的事務;
 - (e) 方便運輸署與你聯絡;及
 - (f) 根據道路交通 (車輛登記及領牌) 規例附表 P ,許可證持有人的姓名和地址將會列載在許可證上。
- 2. 你必須提供本申請表所要求的個人資料。假如你未能提供所需資料,你的申請可能不獲接納。

獲轉交資料的部門 / 人士

- 3. 你透過本申請表所提供的個人資料會向下列人士/部門公開:
 - (a) 其他政府部門、決策局及有關機構,以作上述第1段所列的用途;
 - (b) 任何人士,以作上述第1段(b)項所列的用途;及
 - (c) 隧道公司、青馬管制區營運者及青沙管制區營運者,以便該等機構執行與交通及運輸有關的法定職責。

索閱個人資料

4. 根據個人資料 (私隱) 條例第 18 及 22 條及附表 1 第 6 條,你有權索閱及修正你的個人資料。你的索閱權包括獲取本申請表所提供的個人資料副本一份。

查詢

5. 有關透過本申請表收集的個人資料的查詢,包括索閱及修正資料,應寄往:

香港 金鐘道 95 號 統一中心 3 樓 牌照事務組 行政主任/首次登記稅收

Purposes of Collection

- 1. The personal data provided by means of this form will be used by Transport Department for the following purposes:
 - (a) activities relating to the processing of your application in this form;
 - (b) maintenance of a register of vehicles for public access under regulation 4(2) of the Road Traffic (Registration and Licensing of Vehicles) Regulations; (applicable to vehicle-related applications only)
 - (c) maintenance of a record of particulars of driving licences under regulation 39 of the Road Traffic (Driving Licences) Regulations; (applicable to driving licence-related applications only)
 - (d) activities relating to traffic and transport matters;
 - (e) facilitating communication between Transport Department and yourself; and
 - (f) the name and address of the permit holder will be entered on the permit in accordance with Schedule P of the Road Traffic (Registration and Licensing of Vehicles) Regulations.
- 2. It is obligatory for you to supply the personal data as required by this form. If you fail to supply the required data, your application may be refused.

Classes of Transferees

- 3. The personal data you provided by means of this form may be disclosed to:
 - $(a) \quad other \ Government \ departments, bureaux \ and \ relevant \ organization \ for \ the \ purposes \ mentioned \ in \ paragraph \ 1 \ above;$
 - (b) any person for the purpose mentioned in paragraph 1(b) above; and
 - (c) tunnel companies, Tsing Ma Control Area operator and Tsing Sha Control Area operator for execution of their statutory duties in traffic and transport matters.

Access to Personal Data

4. You have a right of access and correction with respect to personal data as provided for in sections 18 and 22 and principle 6 of Schedule 1 of the Personal Data (Privacy) Ordinance. Your right of access includes the right to obtain a copy of your personal data provided by this form.

Enquiries

5. Enquiries concerning the personal data collected by means of this form, including the making of access and corrections, should be addressed to:

Executive Officer/FRT Licensing Section, 3/F, United Centre, 95 Queensway, Hong Kong.

Reporting of Notifiable Incident for Test, Trial or Demonstration of Autonomous Vehicles on Roads

Purpose

The purpose of this document is to set out the mechanism for reporting notifiable incident during test, trial or demonstration of autonomous vehicles on roads.

Definition of Notifiable Incident

The owner of the movement permit shall report any accidents or incidents occurred during test, trial or demonstration of autonomous vehicles on roads, included, but not limited to, the following:

- Fire
- Collision with object, vehicle or personnel
- Overturning of vehicle
- Malfunctioning of braking system
- Trapping of participant or operator for over 15 minutes
- Incident has led to fatality or injury
- Incident has led the presence of emergency services (such as police, firemen or ambulance)
- Incident has led to the inquiry of media or the presence of media
- Incident leading to the suspension of test, trial or demonstration
- Incident has safety concerns

Reporting Requirements

- The incident shall be reported to Transport Department within 24 hours of the incident occurrence, using the attached template (Appendix A).
- Further information shall be provided to Transport Department, if required.
- The staff of Transport Department shall be allowed to attend the scene and inspect the concerned autonomous vehicle.
- The owner of the movement permit shall submit an investigation report within 14 calendar days of the incident occurrence, detailing the cause of the incident, remedial measures taken and the improvement measure to prevent the recurrence of similar incident.

Notifiable Incident Report for Test, Trial or Demonstration of Autonomous Vehicles on Roads

From: (Owner of Movement Pern	nit)	To: Transport Department
Date:		Fax: 2802 7533
Location of Incident:		
Document of Including		
Date & Time of Incident:		
Injury (no. of person):		
Fatality (no. of person):		
Brief Description of the Incident:		
Remedial Measures Taken:		
Presence of HKPF / HKFSD / Ambulance		
Presence of Media (name of media)		
Inquiry from Media (name of media)		
Contact Person (name, position, fax, office and mobile telephone numbers)		

Appendix II

Press Releases

 ${\tt LCQ20:}$ Facilitating the application of information systems and development of autonomous vehicles

Following is a question by the Hon Charles Peter Mok and a written reply by the Secretary for Transport and Housing, Mr Frank Chan Fan, in the Legislative Council today (January 15):

Question:

It is learnt that the mainstream design of new-generation telematics is to connect smart devices and cloud platforms through radio waves for drivers to access driving information, communicate and browse the Internet for information, as well as to provide features that help enhance driving safety and efficiency. However, the existing legislation imposes stringent restrictions on the contents of the information or the view given by a visual display unit visible to the driver whilst in the driver's seat (visual display unit). As such, it is required to disable some features of new-generation telematics and even remove some accessories from them prior to vehicle registration. On the other hand, the Government indicated in April last year that the Policy Innovation and Co-ordination Office (PICO) would review the Road Traffic Ordinance (Cap. 374) and relevant subsidiary legislation to see whether the relevant legislation was capable of supporting the development and application of autonomous vehicles and telematics. In this connection, will the Government inform this Council:

- (1) of the progress of the review of Cap. 374 and relevant subsidiary legislation conducted by PICO as well as the outcome so far;
- (2) given that the new-generation telematics operable in an interactive mode have gradually become mainstream and standard devices for vehicles and are widely used in other places, whether the authorities will, in the light of technological advancement, amend the Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374A) to the effect that all of the features of such type of systems are permitted to be used in Hong Kong; if so, of the details; if not, the reasons for that;
- (3) whether it will consider, before all of the features of new-generation telematics are permitted to be used in Hong Kong, amending section 37 of Cap. 374A to impose different requirements on the respective applicable features of telematics when a vehicle is moving or parked, to the effect that telematics with the following features are permitted to be installed in vehicles: display of restricted information (e.g. television programmes and stored visual images which are not for the purpose of navigating the vehicle) for viewing by the driver whilst in the driver's seat when the vehicle is parked; and
- (4) of the expected date on which the legislation will be amended to allow the application of autonomous driving technology (e.g. the automated car-hailing feature) in Hong Kong?

Reply:

President,

Upon consultation with the Policy Innovation and Co-ordination Office (PICO), my reply to the various parts of the Hon Charles Peter Mok's question is as follows:

(1) Reviewing the legislation and regulations that impede

innovation and technology (I&T) and economic development is one of the Government's eight major directions for I&T development. PICO's work in this respect includes a review of the Road Traffic Ordinance (Cap. 374) and its subsidiary legislation to see whether the legislation is capable of supporting the development and application of autonomous vehicle (AV) technology and telematics in Hong Kong. During the course of the study, PICO maintained liaison with the Transport and Housing Bureau and the Transport Department (TD) to better understand the local situation. PICO also conducted research on the development of and facilitation measures for relevant technologies in other cities; as well as the applicability of other jurisdictions' experience in the local context.

In brief, in respect of the application of visual display units, PICO has noted that the current Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374A) (the Regulations) already allow a driver to view driving-related information whilst in the driver's seat, including the required navigation and driving information. As for AV technology, PICO considers that a clear legal framework will be conducive to the development of the technology in the long run. In this regard, TD has commenced studying relevant legislative amendments.

- (2) and (3) As mentioned in Part (1) of the reply above, the Regulations already allow a driver to view the following information on a visual display unit whilst in the driver's seat:
 - (i) the current state of the vehicle or its equipment;
- (ii) the current closed-circuit view of any part of the vehicle or the area surrounding the vehicle;
 - (iii) the current location of the vehicle; or
- (iv) any other information for the only purpose of navigating the vehicle.

The above provisions governing the use of visual display units are intended to ensure road safety through enabling drivers to drive attentively without being distracted by visual images not relevant to driving. As compared with other cities, Hong Kong is densely populated with heavy traffic; high level of concentration is required on the part of drivers when driving. If the Government allows drivers to view information that is currently restricted (e.g. television programmes and stored visual images) whilst their vehicles are stationary, it will jeopardise road safety as the drivers could be distracted by the information displayed.

Overall speaking, apart from allowing telematics to provide drivers with information in compliance with the requirements of the Regulations (e.g. driving-related information), the Regulations could cater for the development of today's advanced driver assistance systems (e.g. Lane Keep Assist alert system), thereby facilitating the application of such systems on vehicles in Hong Kong for safer driving.

(4) On promoting AV technology, TD set up the Technical Advisory Committee on the Application of Autonomous Vehicle Technologies in Hong Kong in November 2019. The Committee, comprising representatives and experts from the trade and relevant research and development institutes, will explore how best to draw up an appropriate regulatory framework for AVs. TD will work in close collaboration and liaison with the trade and make reference to local experience of trials of AV technology when contemplating the long term regulatory framework with necessary legal backing. Besides, TD published a new set of "Guidance Notes on the Trials of Autonomous Vehicles" in December 2019 to stipulate safety guidelines on the trials of AVs so that the trade could have a firmer grasp of the requirements for conducting AV trials on roads under the existing legislation.

Separately, TD has commenced studying the necessary legislative amendments with a view to allowing the trade to conduct

trials of innovative technologies through a "regulatory sandbox" approach, and is working in close collaboration with the trade to jointly stipulate the regulatory model for AVs as well as the conditions and supporting measures required for trials of AVs. The objective is to create a suitable and safe road environment for such trials. We will conduct relevant research in full swing and report our findings to the relevant Panel of the Legislative Council in due course.

Ends/Wednesday, January 15, 2020 Issued at HKT 15:00

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Press Releases

LCQ8: Development and application of autonomous vehicles

Following is a question by the Hon Martin Liao and a written reply by the Secretary for Transport and Housing, Mr Frank Chan Fan, in the Legislative Council today (November 27):

Question:

The Transport and Housing Bureau has recently indicated that the Government "will consider legislative amendments to stipulate the conditions and supporting measures required for trials of autonomous vehicles so as to foster a suitable and safe road environment for such trials and promote the development and application of autonomous vehicles". In this connection, will the Government inform this Council:

- (1) of the specific plans and contents in respect of its work in considering legislative amendments, and whether it has formulated plans to facilitate the conduct of trials of autonomous vehicles (AVs) in ordinary road environment under safe circumstances;
- (2) of the details of the trials of various models of AVs conducted currently at designated locations in Hong Kong, as well as the technological development stage reached so far;
- (3) whether it has assessed the material support that needs to be provided by the Government to facilitate the development of autonomous driving in Hong Kong, e.g. assisting in perfecting the innovation and technology ecosystem that comprises essential elements such as big data, advanced networks, smart road infrastructure; if so, of the details; if not, the reasons for that;
- (4) whether it will follow the practices of some technologically advanced places by formulating a strategy and interim development goals for the development of AV transport and drawing up a roadmap and an implementation timetable for this purpose; if so, of the details; if not, the reasons for that; and
- (5) as it is anticipated by some technologically advanced places that AVs not only can generate huge business opportunities, but may also, along with the continued development of technologies such as artificial intelligence and ultra high-speed network, bring revolutionary changes to the way in which a society operates, including significantly enhancing road safety, providing highly efficient transportation services featured by public and private passenger and freight transport that operates on a round-the-clock and beck-and-call basis, enabling the efficient use of roads and reducing the demand for car parking spaces, and significantly reducing the need for owning a vehicle, whether the authorities have also articulated a vision for the development of autonomous driving in Hong Kong; if so, of the details?

Reply:

President,

My consolidated reply to the various parts of the Hon Martin Liao's question on promoting the development and application of autonomous vehicles (AVs) is as follows:

The Government published the Smart City Blueprint for Hong Kong (the Blueprint) in December 2017, aiming at building Hong Kong into a world-class smart city. In recent years, as one of the Smart

Mobility initiatives, the Transport Department (TD) has strived to facilitate trials of AVs at suitable locations in Hong Kong as well as the development and application of AV technology.

With the rapid development of AV technology in recent years, various road tests have been conducted across the world in the hope of improving road safety, alleviating traffic congestion, enhancing mobility of citizens, increasing productivity and reducing emission by means of new modes of transportation. Specifically, AV technology could hopefully reduce traffic accidents caused by human factors, thereby enhancing road safety, while improved transport efficiency could cut down the use of fuel and its emission, and enhance our living environment and strengthen Hong Kong's competitiveness in the long run.

On facilitation of trials of AV technology, TD has since mid-2017 issued "Movement Permits for Autonomous Vehicles" to eight different models of AVs, enabling 25 trials to take place at designated routes under safe environment. The trial sites include Zero Carbon Building, West Kowloon Cultural District, Hong Kong Science Park, Hong Kong University of Science and Technology, Tai Po Industrial Estate, Hong Kong Air Cargo Terminals and Hong Kong Productivity Council, etc. Moreover, TD issued in December 2017 "A Guide on Application for Movement Permit for Test, Trial and/or Demonstration of Autonomous Vehicles on Roads within Designated Sites in Hong Kong" to help the trade understand the requirements and procedures for application.

To further promote the development of AV technology in the city, TD has earlier on set up the Technical Advisory Committee on the Application of Autonomous Vehicle Technologies in Hong Kong. The Committee, comprising representatives and experts from the trade and relevant research and development institutes, will explore how best to draw up an appropriate regulatory framework for AVs. TD will work in close collaboration and liaison with the trade and make reference to local experience of trials of AV technology when contemplating the long-term regulatory framework with necessary legal backing. Meanwhile, TD is drafting a new set of "Guidance Notes on the Trials of Autonomous Vehicles" so that the trade could have a firmer grasp of the requirements for conducting more sophisticated AV trials on roads under the existing legislation.

At the same time, TD has commenced studying necessary legislative amendments with a view to allowing the industry to conduct trials of innovative technologies through a "regulatory sandbox" approach while maintaining close liaison with the industry to jointly stipulate the regulatory model for AVs as well as the conditions and supporting measures required for trials of AVs. The objective is to foster a suitable and safe road environment for such trials. We will conduct relevant research in full swing and report our findings to the relevant Panel of the Legislative Council in due course.

Separately, as set out in the Blueprint, the Government will facilitate technology advancement and industry development in vehicle-to-everything (V2X) and AVs, with the ultimate objective of introducing AVs with V2X incorporated. In this connection, TD will continue to maintain close contact with, and render assistance to, organisations which have expressed interest in setting up testing facilities for AV technologies or conducting trials of AVs. TD will also examine the feasibility of conducting joint trials of new AVs and related technologies on public roads. In her 2019 Policy Address, the Chief Executive has also proposed an initiative related to promotion of vehicle technology and indicated that the Government will prepare for the setting up of a Smart Traffic Fund dedicated to the transport field, with \$1 billion earmarked for providing enterprises or organisations with funding support for research into and application of vehicle-related innovation and

technology.

In the long run, when AV technology has become more advanced and relevant international technical standards have emerged, TD will formulate in due course the long-term regulatory framework with necessary legal backing to replace the "regulatory sandbox" in the regulation of AVs. Meanwhile, the Government will continue to act as an effective "facilitator" and "promoter" by proactively promoting the development and application of AVs in Hong Kong.

Ends/Wednesday, November 27, 2019 Issued at HKT 12:12

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Proposed Regulatory Framework for Autonomous Vehicles

List of relevant papers

Date	Meeting	Paper
		Policy on testing and deployment of autonomous vehicles ISE13/20-21
27.11.2019	Council Meeting	Question No. 8 – Development and application of autonomous vehicles
15.1.2020	Council Meeting	Question No. 20 – Facilitating the application of information systems and development of autonomous vehicles

Council Business Division 4
<u>Legislative Council Secretariat</u>
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