

Transport Department
Notice reference: TD/VSSD/01/2007
Consultation on Legislative Amendment on
Doors, Door Latches and Door Retention Components
Road Traffic (Construction and Maintenance of Vehicles) Regulations,
Cap. 374A

INTRODUCTION

1. This Paper sets out the proposed amendment (proposal) on doors, door latches and door retention components requirements of motor vehicles in the Road Traffic (Construction and Maintenance of Vehicles) Regulations, Cap. 374A for consultation purpose.

OBJECTIVE OF THE PROPOSAL

2. The objectives of this proposal are
 - (a) to provide proper means (e.g. doors, steps, handrails etc) for access of a seating compartment,
 - (b) to provide proper means (e.g. two latched position locking system, child safety lock etc) to minimize the likelihood of occupants falling out of a vehicle accidentally,
 - (c) to provide proper means (e.g. testing standards) to minimize the likelihood of occupants being thrown from a vehicle as a result of impact, and
 - (d) to align our technical requirements with international standards (e.g. ECE Regulations¹, Global Technical Regulations² etc) so as to minimize the need for reassessment against multiple sets of requirements and facilitate trade.

BACKGROUND

3. At present, Regulation 5(2) of the Road Traffic (Construction and Maintenance of Vehicles) Regulations, Cap. 374A [hereinafter called the C&M Regulations] stipulates that the side door latches and hinges of all vehicles shall be of adequate strength but it gives no further elaboration on the installation and performance requirements. Regulation 68 stipulates some door construction requirements on light bus and bus for passengers but give no further

¹ For ECE Regulations under 1958 Agreement of United Nations, please refer to <http://www.unece.org/trans/main/wp29/wp29regs.html>.

² For global technical regulations under 1998 Agreement of United Nations, please refer to <http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29glob.html>.

consideration on door for driver (if existing) or doors for other type of motor vehicles. In order to supplement the construction requirements on different type of vehicles and prescribe the requirements more precisely for vehicle safety enhancement, it is necessary to amend the current regulations and establish a set of installation and performance requirements to evaluate if new motor vehicles or associated components can meet the safety concern addressed in this proposal. With a view to accommodating latest vehicle technology and to eliminating the technical barrier to the trade, the local requirements would mainly be derived from common practices and international safety standards.

PROPOSED CHANGES

Scope

4. This proposal applies on the doors of **new vehicles**³ (including private cars, taxis, goods vehicles, special purpose vehicles, light buses and buses) which will be supplied and registered in Hong Kong.
5. It affects the construction of doors, door locks, steps, door latches and door retention components on side doors or sliding doors leading directly into a compartment that contains one or more seating positions.
6. This proposal will not be applied to folding doors, roll-up doors and doors of emergency exits fitted on a bus or a light bus in accordance with Regulation 68 of C&M Regulations.
7. The changes do not have a retrospective effect on **in-use vehicle**⁴.

Requirements

8. This proposal amends the Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374 sub. leg. A) (“Regulations”) to –
 - (a) require the new vehicles registered on or after [**a date to be specified**⁵] to be fitted with proper doors, door locks and steps (if necessary);
 - (b) establish a set of installation and performance requirements on side door latches and door retention components for new vehicles when they are first supplied to the market in Hong Kong for registration purpose;

³ In this document, “new vehicle” means a vehicle registered on and after the new proposal comes into operation.

⁴ In this document, “in-use vehicle” means a vehicle registered before the new proposal comes into operation.

⁵ In this document, “a date to be specified” means the implementation date to be endorsed by law makers if the proposal is supported.

- (c) require the new vehicles registered on or after [**a date to be specified**] to be fitted with door latches and door retention components meeting the installation and performance requirements;
- (d) require door latches and door retention components to be approved by the Commissioner for Transport (“Commissioner”);
- (e) require the approved vehicles or door latches and door retention components to bear an approval mark for easy identification; and
- (f) prohibit any modification of approved door latches and door retention components unless written permission has been obtained from the Commissioner.

TARGET/TENTATIVE PROGRAMME

- 9. We intend to complete the consultation and legislative process (including a lead time of 12 months) within 18 months.

CONSULTATION

- 10. Before finalizing our proposal for legislative amendment, we would like to take the opportunity to conduct a consultation on the proposed changes with the trade and parties concerned and seek their views and comments on the proposed changes. The details of the proposed installation and performance requirements are attached in Annex 1 for reference.

CONSULTATION PERIOD

- 11. The period for this consultation exercise is 6th July 2007 – 31st July 2007.

YOUR FEEDBACK

- 12. We would be very much appreciated for your written comments on the proposed legislative amendments contained in Annex 1 to reach us on or before 31st July 2007 to the following address –

By Mail :

Mr. Kelvin H. C. YUEN,

Engineer (Vehicle Regulations and Standards)

Transport Department

Room 3402, 34/F., Immigration Tower

7 Gloucester Road, Wan Chai,

Hong Kong.

(Ref : Consultation on Legislative Amendments on Doors, Door

Latches and Door Retention Components Requirements under the Road Traffic (Construction and Maintenance of Vehicles) Regulations)

By Fax :

2802-7533

2824-4255

By e-mail :

hcyuen@td.gov.hk

hwt seng@td.gov.hk

INQUIRY

13. Any inquiry on this Consultation Paper should be made to the following subject officers –

Mr. Kelvin, HC YUEN,
Engineer (Vehicle Regulations and Standards)
Vehicle Safety and Standards Divisions
Transport Department
Tel : 2829-5467
E-mail : hcyuen@td.gov.hk or

Mr. HW TSENG, Senior Engineer (Vehicle Regulations and Standards)
Vehicle Safety and Standards Divisions
Transport Department
Tel : 2829-5843
E-mail : hwt seng@td.gov.hk

- END -

Vehicle Safety and Standards Division
Transport Department
6th July 2007

Transport Department
Notice reference: TD/VSSD/01/2007
Consultation on Legislative Amendment on
Doors, Door Latches and Door Retention Components
Road Traffic (Construction and Maintenance of Vehicles) Regulations,
Cap. 374A

DETAILED PROPOSAL

It is proposed to add the follow requirements in the Road Traffic (Construction and Maintenance of Vehicles) Regulations, Cap. 374A [hereinafter called the C&M Regulations].

Doors, door latches and door retention components

- (1) Subject to Paragraph (2) and (3), every entrance and exist of a private car, taxi, a goods vehicle, a special purpose vehicle, a light bus and a bus leading directly into a compartment that contains one or more seating positions shall be fitted with approved doors, door latches and door retention components.
- (2) Paragraph (1) shall not apply to
 - (a) folding doors, roll-up doors, or doors for emergency exits fitted on light bus and bus accordance with regulation 68 of C&M Regulations which are provided for passenger.
 - (b) a motor vehicle accepted for registration before **[a date to be specified]** without doors.
- (3) Any doors, door latches and door retention component of a motor vehicle other than those in regulation (1) shall be of adequate strength to meet the designed purpose as defined by the manufacturer.
- (4) Door latches, door retention components, locks and door closure warning system of a motor vehicle shall be maintained in good working order.
- (5) For the purposes of this proposal, **“approved doors, door latches and door retention components”** means the side doors, door latches and door retention components of a new motor vehicle belonged to the class of vehicle mentioned in paragraph 1 which is registered on or after **[a date to be specified]** –
 - (a) conform with the installation and performance requirements of doors, door latches and door retention components set out in **Schedule 1**;
 - (b) has been examined to the satisfaction of the Commissioner; and
 - (c) either –

- (i) bears an approval mark recognized or assigned by the Commissioner; or
 - (ii) is fitted to a vehicle bearing an approval mark recognized or assigned by the Commissioner in respect of the doors, door latches and door retention components.
- (6) No alteration in respect of design shall be made to the approved doors, door latches and door retention components fitted as required by paragraph (1), except as permitted in writing by the Commissioner.
- (7) For the purposes of paragraph (5)(b), the Commissioner shall signify his satisfaction in writing.
- (8) For the purpose of this proposal, “**door closure warning system**’ means a system that will activate a visual signal located where it can be clearly see by the driver when a door latch system is not in its fully latched position and while the vehicle ignition is activated.

**INSTALLATION AND PERFORMANCE REQUIREMENTS OF DOORS,
DOOR LATCHES AND DOOR RETENTION COMPONENTS FOR
MOTOR VEHICLES REGISTERED ON AND AFTER [A DATE TO BE
SPECIFIED]**

General Safety Requirements

1. Doors, entries and exits of a motor vehicle shall be such that they can be used easily and without danger.
2. Entrance or exit of a motor vehicle shall be fitted with proper handrails and one or more steps if the vertical distance between the floor of the entrance and the ground is more than 600 mm.
3. Steps shall be constructed in such a way to preclude the risk of slipping.
4. In this schedule, the wheel hub, rims and other parts of the wheel shall not be deemed to be steps.
5. In case a goods vehicle and a special purpose vehicle with permitted gross vehicle weight exceeding 7.5 tonnes,
 - (a) the distance vertical between the upper surface of the steps shall not be more 400 mm;
 - (b) every step shall not be less than 80 mm in depth and 200 mm in width;
 - (c) the clearance of every step shall not be less than 150 in depth;
 - (d) handrails provided for access the seat compartment should be positioned in such a way that they can be grasped and do not obstruct such access; and
 - (e) for the purpose of paragraph (d),
 - A. the height of the lower edge of at least one handrails shall not be more than 1850 mm.
 - B. the length of the handrails shall extend up to 550 mm above the floor of the entrance.
6. Door latches and door retention components on any side door shall be so designed, constructed and fitted that
 - (a) each latch of the hinged door shall have a fully latched position and an intermediate latched position.
 - (b) each latch of the sliding door shall have

- A. a fully latched position and an intermediate latched position; or
 - B. a fully latched position and a door closure warning system.
- (c) latches shall be designed in such a way as to prevent the doors opening accidentally.
- (d) retention components of hinged side doors shall be mounted at the forward edge in the direction of travel except
 - A. a device is fitted which automatically closes the door at least to the intermediate latched position if it is unlatched when the vehicle is moving.
 - B. a safety-bolt is fitted prevent such unlatching and an audible warning device is provided which activates an audible warning to driver of the vehicle if the vehicle is driven with out the bolt in place.
- 7. Each door shall be equipped with at least one locking device which, when engaged, shall prevent operation of the exterior door handle or other exterior latch release control and which has an operating means and a lock release/engagement device located within the interior of the vehicle.
- 8. Each rear side door shall be equipped with at least one locking device which, when engaged, prevents operation of the interior door handle or other interior latch release control and requires separate actions to unlock the door and operate the interior door handle or other interior latch release control. This locking device may either be a:
 - (a) child safety lock system, or
 - (b) lock release/engagement device located within the interior of the vehicle and readily accessible to the driver of the vehicle or an occupant seated adjacent to the door.
- 9. For the purposes of this proposal, "**Side Rear Door**" means a door that, in a side view, has 50 per cent or more of its opening area to the rear of the rearmost point on the driver's seat back, when the driver's seat is adjusted to its most vertical and rearward position.

Performance Requirements

- 10. The latch and striker assembly shall be capable of withstanding a longitudinal load of 453kg (444 daN) in the intermediate latched position and 1133kg (1,111 daN) in the fully latched position.
- 11. The latch and striker assembly shall be capable of withstanding a transverse load of 453kg (444 daN) in the intermediate latched position, and 906kg (889 daN) in the fully latched position.
- 12. The latch shall not move from the fully latched position when an acceleration of 30 g is applied in both directions longitudinally and transversally to the latch, including

its actuating mechanism, with the locking mechanism disengaged.

13. The hinges or other retention components for each door shall be capable of supporting the door and withstanding a longitudinal load of 1133kg (1,111 daN) and a transverse load of 906kg (889 daN), in both directions.
14. Sliding doors the track and slide combination or other supporting means shall not separate when an outward transverse load of 906kg (889 daN) is applied to the load-bearing members at the opposite edges of the door (i.e. 1812kg or 1778 daN total).

Equivalent Standards

15. Door latches and door retention components shall conform with –
 - (a) ECE Regulation No. 11 made by the Economic Commission for Europe dated 1 June 1969 (E/ECE/324/E/ECE/TRANS/505/REV. 1/Add. 10) including all revisions with regard to door latches and door retention components made before the date this paragraph comes into operation;
 - (b) Council Directive 70/387/EEC of 27 July 1970 made by the Council of the European Communities including all revisions with regard to the doors of motor vehicles and their trailers made before the date this paragraph comes into operation;
 - (c) Global Technical Regulations No. 1 established in the Global Registry on 18 November 2004 with regard to door latches and door retention components made before the date this paragraph comes into operation;
 - (d) Device Type Designation Standard for door latches and door retention components specified in Attachment No. 19 to the Type Designation Regulations for Devices made under the Ministry of Transport Ordinance No. 66 of 9 October 1998 of Japan including all revisions made before the date this paragraph comes into operation;
 - (e) Technical Standard for door latches and door retention components specified in Attachment No. 36 to the Announcement That Prescribes Details of Safety Regulations for Road Vehicles made under the Ministry of Land, Infrastructure and Transport of Japan Announcement No. 619 of 15 July 2002 including all revisions made before the date this paragraph comes into operation, and the Test Procedure for door latches and door retention components (TRIAS 38-2-2004) of the Type Approval Test Procedures made by the Ministry of

Land, Infrastructure and Transport of Japan in Circular of Koshin No. 453 of 24 August 1971 including all revisions made before the date this paragraph comes into operation;

- (f) For a vehicle does not equipped with sliding door and manufactured before 30 June 2012, Technical Standard for door latches and door retention components specified in Attachment No. 29-2 of Technical Standards relating to the Safety Regulations for Road Vehicles made under the Ministry of Land, Infrastructure and Transport of Japan in Circular of Jisha No. 899 of 1 October 1983 including all revisions made before the date this paragraph comes into operation, and the Test Procedure for door latches and door retention components (TRIAS 38-1989) of the Type Approval Test Procedures made by the Ministry of Land, Infrastructure and Transport of Japan in Circular of Koshin No. 453 of 24 August 1971 including all revisions made before the date this paragraph comes into operation; or
- (g) any newer version of the standards referred to in paragraphs (a), (b), (c), (d), (e) and (f) approved at the discretion of the Commissioner in writing.

16. The requirements in section 15 of this Schedule do not apply to door latches and door retention components fitted on a particular type of vehicle if a test certificate or performance comparison report, as the case may require, has been submitted to the Commissioner proving that the performance of the door latches and door retention components is equivalent or superior to one or more of the approved standards referred to in that section and –

- (a) approval has been given by the Commissioner in writing; and
- (b) the door latches and door retention components, or the vehicle to which the door latches and door retention components are fitted, bears an approval mark recognized or assigned by the Commissioner.