

For Information

Bills Committee on Road Traffic (Amendment) (No.2) Bill 2011

Response to Members' Request for Information

Purpose

This paper provides the Administration's responses to the questions raised by Members at the meeting of the Bills Committee (BC) on Road Traffic (Amendment) (No.2) Bill 2011 (the Bill) on 3 February 2012.

Requirements on EDRD

2. Members asked whether there would be any formal trial of the Electronic Data Recording Device (EDRD) before the actual implementation of the proposed installation requirement for new Public Light Buses (PLBs), and whether it was necessary to stipulate the specific requirements for EDRD in the legislation before the commencement of the provision. A Member asked whether it would be feasible to retrofit EDRD on all PLBs.

3. EDRD records speed and maneuvering data of a vehicle, and the data stored in the device is useful for fleet management and accident investigation. The Administration proposes to require all new PLBs to be installed with the device whilst continuing to study the feasibility of retrofitting. The proposed installation and performance requirements for EDRD, including the kinds of data to be recorded, the minimum storage period, construction, anti-tampering function, etc, were drawn up taking into account overseas experiences as well as the unique mode of operation of PLBs in Hong Kong. Local research institutions, vehicle suppliers, as well as local and overseas EDRD suppliers have been consulted in the process, and reference has been made to the technical specifications and test requirements of the European Union and the Mainland. We consider that there is indeed a need to specify the requirements in the legislation so that EDRD suppliers may follow to design, test and produce the right products before actual implementation. If there is no legislation clearly specifying the installation and performance requirements of the EDRD device, it would be difficult for equipment suppliers to make investment and come up with products that meet our requirements. As explained in previous meetings, we will only introduce the necessary subsidiary legislation for negative vetting by the Legislative Council enabling the commencement of the installation requirement for EDRD when the Transport Department (TD) is satisfied that there are suitable EDRD models that

can be fitted to new PLBs and will fully meet the various requirements specified in the legislation. Sufficient time will be allowed for the design, production, testing, approval and installation of the devices before the installation requirement comes into effect.

4. At present, there are 17 PLB models in use in Hong Kong (listed at [Annex A](#)). They use different fuel types, and have different emission standards and engine designs. Some of these models are old and have become obsolete, and it would be technically more challenging to retrofit these PLBs with EDRD to meet the specifications proposed in the Bill. Moreover, as PLBs of different models and manufacture dates have different specifications regarding sensors and signal transmission, such as voltage, pulse, signal generation method and means, etc., the actual installation solutions and anti-tampering measures would need to be considered individually for each and every combination of PLB and EDRD specifications. Therefore, if the entire PLB fleet is to be installed with EDRD, significant time and effort will be required to verify and test the different installation solutions and anti-tampering measures before the feasibility and cost of retrofitting can be ascertained. Furthermore, a long lead time will be required for the development of such a wide range of EDRDs.

5. Taking into account the experience gained from local trials of EDRD, overseas experiences, the large number of different PLB models in the existing fleet, and the fact that EDRDs meeting the local requirements have yet to be manufactured and approved, the Administration considers it more prudent and appropriate to mandate the installation of EDRD on new PLBs first. Through this mandatory requirement, vehicle owners, EDRD suppliers and installers will have sufficient time to resolve the potential technical, installation, software as well as operational problems that may be encountered in attempting to install different brands/models of EDRD on different PLBs. This will help improve the overall installation efficiency as well as reliability of EDRD.

Use of data collected by EDRD by franchised bus operators

6. The installation of EDRD on franchised buses was undertaken voluntarily by franchised bus operators as a fleet management tool. Franchised bus operators use the data collected from EDRD for fleet management and investigation of accidents and driving behaviour. In view of the usefulness of the EDRD as a tool for managing bus operations and driving behavior, the franchised bus operators have committed to the installation of the device on their entire fleets.

7. The franchised bus operators have drawn up the requirements of the EDRD device to suit their operational needs. In general, the EDRD device on franchised buses can record operation data on actual vehicle speed, harsh acceleration and deceleration, opening and closing of doors, and speeding. The franchised bus operators would download the data stored by EDRD on a daily or monthly basis.

8. Some examples of cases in which the Police has used the data recorded by EDRD installed on franchised buses to facilitate prosecution on traffic accidents are given at Annex B.

Advice Sought

9. Members are requested to note the Administration's responses set out in this paper.

Transport and Housing Bureau
February 2012

Annex A

Models and number of existing in-use PLBs models

| | Make | Model | Engine Type | Year of Introduction | No. of PLB (as at Dec 2011) |
|------|-------------|----------------|--------------------|-----------------------------|------------------------------------|
| 1. | Toyota | BB42R COASTER | Diesel(Euro I) | 1993 | 8 |
| 2. | Toyota | BB42R-ZCMSS | Diesel(Euro I) | 1994 | 336 |
| 3. | Toyota | BB43R-ZCMSW | Diesel(Euro II) | 1998 | 497 |
| 4. | Toyota | BB43R-ZCMSW | Diesel(Euro III) | 2001 | 7 |
| 5. | Toyota | BZB40R-ZCMSC | LPG(Euro III) | 2001 | 2,357 |
| 6. | Toyota | BZB40R-ZCMSC | LPG(Euro IV/V) | 2006 | 429 |
| 7.* | Toyota | BZB40R-ZCMSC | LPG(Euro V) | 2011 | 3 |
| 8. | Toyota | BB50R-ZCMSZ | Diesel(Euro III) | 2003 | 371 |
| | Toyota | BB50R-ZEMQZ-HH | Diesel(Euro III) | 2003 | 6 |
| 9. | Toyota | BZB50R-ZCMSC | LPG | 2003 | 56 |
| 10. | Toyota | XZB50R-ZCMSY | Diesel(Euro IV) | 2007 | 27 |
| | | XZB50R-ZEPQY | Diesel(Euro IV) | 2007 | 1 |
| 11. | Toyota | XZB40R-ZCMSY | Diesel(Euro IV) | 2008 | 62 |
| 12.* | Toyota | XZB40R-ZCMSY | Diesel(Euro V) | 2009 | 48 |
| 13. | Mitsubishi | BE639ERMHDAA | Diesel(Euro II) | 2000 | 4 |
| | | BE639ERMDAA | Diesel(Euro III) | 2001 | 3 |
| 14. | Mitsubishi | BE649ERMDAA | Diesel(Euro III) | 2002 | 37 |
| 15. | Mitsubishi | BE649ERMDA | Diesel(Euro IV) | 2005 | 7 |
| 16. | Mitsubishi | BE639GRMDA | Diesel(Euro IV) | 2005 | 61 |
| 17. | Mitsubishi | BE63DGRMDA | Diesel(Euro IV) | 2008 | 30 |
| | | | | Total | 4,350 |

**The latest model available for sale in Hong Kong*

**Cases in which data recorded by EDRD on franchised buses
has been used to facilitate the Police's prosecution on traffic accidents**

Case 1

| | |
|-----------------------|---|
| Date of accident: | 9 November 2009 |
| Location: | Tseung Kwan O |
| Accident: | A franchised bus lost control and turned over onto the second lane of a road when entering the road from a roundabout. 2 passengers on the bus were killed and 33 persons including the bus driver were injured. |
| Police investigation: | The Police has requested the bus company to provide the data recorded by the EDRD on the bus. According to the speed data recorded by the EDRD and expert analysis, the court confirmed that the bus driver had driven at excessive speed when leaving the roundabout, which caused the serious traffic incident. The bus driver was subsequently prosecuted for Dangerous Driving Causing Death. |
| Result: | The bus driver was finally convicted and imprisoned for 4 years and disqualified from driving for 3 years. |

Case 2

| | |
|-----------------------|---|
| Date of accident: | 17 September 2010 |
| Location: | Yuen Long |
| Accident: | A franchised bus collided with a medium goods vehicle at a junction. The bus driver was injured and the two vehicles were slightly damaged. The driver of the goods vehicle alleged that the bus had travelled at high speed and the bus driver did not decelerate at the junction, which led to this traffic accident. |
| Police investigation: | <p>The Police has requested the bus company to provide the data recorded by the EDRD on the bus.</p> <p>The driver of the goods vehicle was prosecuted for Careless Driving. The defendant maintained his defence during the trial.</p> |
| Result: | The driver of the goods vehicle was convicted after the court has considered all evidence including the speed data recorded by the EDRD of the bus concerned. The driver of the goods vehicle was finally convicted and fined \$2,500. |