Legislative Council Panel on Transport
Recent Bus Fire/Smoke Incidents

Purpose

Further to the Legislative Council Panel on Transport Paper No. CB(1)466/08-09(01), this paper provides an update on the findings of the investigations on the three bus fire/smoke incidents which occurred on 10 December 2008 and the improvement measures taken by the operators to safeguard against similar incidents.

Findings of the investigations on the three bus fire/smoke incidents on 10 December 2008

2. Citybus Limited ("CTB") and The Kowloon Motor Bus Co (1933) Ltd ("KMB") have completed investigations on the causes of the smoke/fire incidents and submitted reports to Transport Department ("TD") with improvement measures. Their findings show that these three incidents were independent cases since no common causes were found. The causes of the incidents and the relevant operator's improvement measures are summarized below:

(a) Incident 1: CTB bus fire incident on Stubbs Road

3. CTB confirmed that the fire which broke out on the bus[1] on Stubbs Road was caused by the sudden failure of the alternator mounting bracket[2] of the vehicle. This led to a misalignment of the alternator which in turn caused the rubbing of metal pieces and generated high temperature, and ultimately caused the fire.

4. On the instruction of TD, CTB has completed checking the alternator mounting brackets of all its 222 buses of the same model in early January 2009 and found no abnormalities. In spite of this, CTB reported the fire incident to the bus/engine manufacturer. Upon the advice of the manufacturer, CTB will modify the design of the alternator mounting bracket of these buses to strengthen their support in 3 months' time.

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[1] The CTB bus was a Dennis Dragon double decker operating on Route No. 6.
[2] The alternator mounting bracket secures the alternator on the engine.

(b) Incident 2: KMB bus fire incident on Queen's Road East

5. KMB confirmed that the fire which broke out on the KMB bus[3] on Queen's Road East was caused by the sudden failure of the alternator bearing of the bus, resulting in abnormally high temperature and eventually the fire.

6. On the instruction of TD, KMB has completed checking the alternator bearing of all its 63 serving buses of the same model to ensure the normal functioning of the alternator bearing. Having consulted the bus/engine manufacturer, KMB has replaced all alternator bearings on the 63 buses with a new heavy duty design to better suit the Hong Kong bus operation environment.

(c) Incident 3: CTB bus smoke incident on Cotton Tree Drive

7. CTB confirmed that smoke emitted from the bus[4] on Cotton Tree Drive because a broken gear damaged the axle casing and led to a loss of the lubricant oil in the axle. As a result, the axle generated excessive heat and subsequently smoke.

8. On the instruction of TD, CTB has completed checking the gears and axle casings of all its 462 buses of the same model in early January 2009. No similar abnormalities were found. In spite of this, CTB has reported the incident to the bus manufacturer which will conduct further investigation.

<u>Further actions and measures to safeguard against bus smoke/fire incidents</u>

9. Following the bus smoke/fire incidents on 10 December 2008, TD had discussed with the franchised bus operators immediately and asked them to carry out thorough checks on their buses of the same models to ensure safety. TD also instructed all bus companies to conduct checks on the mounting bracket, alternator bearing and axle casing of other buses in their fleet to ensure no similar abnormalities. On the other hand, although the findings of the investigations do not indicate that these three fire/smoke incidents were due to maintenance deficiency, TD has already stepped up spot checks on

[3] The KMB bus was a Volvo B9TL double decker operating on Route No. 113.
[4] The CTB bus was an Olympian MK II double decker operating on Route No. 40.

the mechanical parts of the buses in particular those parts relating to the above incidents to ensure that they are maintained properly and meet safety standards. TD is also working with the bus companies and bus manufacturers to explore a number of options, such as the automatic fire extinguishing system, automatic shutdown of air-conditioning ventilation system in case of fire and the enhancement of the fire protection zone with a view to further enhancing the safety of franchised bus operation.

10. Members are invited to note the content of this paper.

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