

Legislative Council Panel on Transport

Information Note on Deployment of Environmentally Friendly Buses in Busy Corridors

Purpose

At the meeting of the LegCo Panel on Transport on 14 January 2003, Members discussed the deployment of more environmentally friendly buses to busy corridors and requested information about the criteria for the choice of busy corridors, the initiative to deploy more environmentally friendly buses to serve the selected busy corridors, as well as the anticipated/actual improvements in air quality. This note presents the relevant information for Members' reference.

Environmental Initiatives and Deployment of Environmentally Friendly Buses in Busy Corridors

2. In the past few years, franchised bus companies have taken a number of initiatives to reduce bus emissions and help improve the environment. The Government has also introduced new requirements to ensure the environmental performance of the bus fleet. Details of the measures are summarized below:

(a) Use of cleaner fuel

With effect from 1 February 2001, all franchised bus companies have converted to use ultra low sulphur diesel for their entire bus fleet.

(b) Use of cleaner buses

All new buses introduced on or after 1 October 2001 are required to meet the Euro III standard. By end 2002, all pre-Euro buses have either been scrapped or retrofitted with diesel catalysts ("CATs"). By the first quarter of 2004, all Euro I buses will be retrofitted with CATs or continuous regenerating traps ("CRTs"). The bus companies also have plans to progressively retrofit Euro II and above buses with CRTs. The details are being considered by the bus companies and Transport Department ("TD").

(c) Deployment of environmentally friendly buses in busy corridors

From January 2002, bus companies deploy only Euro II or above buses for operation at Yee Wo Street. TD is working out arrangements with bus companies for deploying more environmentally friendly buses to run on busy corridor, details of which are in paragraphs 3-5 below.

(d) Service rationalization

The Administration has been working with the bus companies to enhance the efficient use of buses and reduce the number of bus trips and bus stopping activities in busy corridors. In 2002, about 350 bus trips passing through Central and 140 bus trips passing through Yee Wo Street per day were removed through route amalgamation, route truncation and frequency adjustment, and about 1,600 bus trips per day were removed in Kowloon, including a reduction of about 250 bus trips per day passing through Nathan Road. During the same period, bus stop rationalization schemes were implemented to reduce about 120 bus stoppings per peak hour between Central and Causeway Bay on Hong Kong Island and about 190 bus stoppings per peak hour along Nathan Road.

3. In selecting busy corridors for deployment of more Euro II and Euro III engine buses, considerations are given to the following factors:

- (a) they are corridors with busy bus traffic and are the main destinations/arteries for bus routes which serve the busy urban areas;
- (b) the corridors are located in the main business centres and pedestrian-busy areas. The impact of deploying more environmentally friendly buses would be more noticeable by the general public; and
- (c) the corridors are areas where we have received the most complaints about too many bus trips and where plans are being developed to rationalize the bus services.

4. Based on the above considerations, we have identified the following busy urban corridors in addition to Yee Wo Street:

- (a) Hennessy Road;
- (b) Queensway;
- (c) Des Voeux Road Central; and
- (d) Nathan Road.

5. TD has discussed with the franchised bus operators arrangements to deploy more buses of Euro II or above standards to the aforesaid busy corridors, taking into account practical consideration such as their current bus fleet composition, and the possible impact on operational flexibility and efficiency. It is expected that by end 2003, about 75% of buses operating in the aforesaid busy corridors will be buses of Euro II or above standards. TD will continue to discuss with the franchised bus operators with a view to further increasing the percentage of these more environmentally friendly buses operating in these corridors in the next few years.

6. At present, the franchised buses are responsible for about 8.5% of the particulate matter (“PM”) emissions and 18.3% of the nitrogen oxide (“NOx”) of all motor vehicles in the urban area¹. The environmental benefits of additional measures to reduce emission from franchised buses will largely be localized and more related to the reduction of PM and NOx concentrations at the roadside and of nuisances to pedestrians and ground floor shops.

7. Upon completion of the retrofitting of CATs and CRTs to Euro I and Euro II/III buses respectively and the deployment of only buses of Euro II or above standards in the aforesaid busy corridors, the PM and NOx emissions from franchised buses at the roadside of the busy corridors are expected to be reduced by 72% and 12% respectively.

¹ “urban area” covers HK Island (excluding HK South) and Kowloon.