

**立法會**  
**Legislative Council**

LC Paper No. CB(4)344/15-16(06)

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**Panel on Transport**  
**Meeting on 16 December 2015**

**Background brief on electronic road pricing**

**Purpose**

This paper provides background information on electronic road pricing ("ERP") and summarizes the major views and concerns expressed by members of the Panel on Transport ("Panel") on the subject in recent years.

**Background**

ERP as a measure to solve the traffic congestion problem

2. The Government has been following a three-pronged approach, namely improving transport infrastructure, expanding and improving the public transport system, and managing road use to tackle road traffic congestion. In March 2014, the Secretary for the Transport and Housing invited the Transport Advisory Committee ("TAC") to conduct a study to identify various factors contributing to road traffic congestion in Hong Kong and to put forward practicable recommendations to the Government to tackle road traffic congestion. TAC submitted its report<sup>1</sup> on 30 December 2014 ("TAC Report"). In brief, TAC concluded that there was a need for the Government to consider implementing additional measures as well as strengthening the existing ones to solve traffic congestion. A total of 12 short, medium and long-term practicable measures at the territorial level were recommended in the TAC Report to contain road traffic congestion. One of the measures was to start planning for a ERP pilot scheme.

3. ERP scheme is a traffic management tool aiming at reducing congestion at a designated area by adopting the "user pays principle", i.e. charging motorists for entering the designated area at busy times of the day and encouraging travellers to switch to public transport or change their routes. According to the TAC Report, the scheme is considered to be a very effective way to tackle congestion in a particularly congested area.

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<sup>1</sup> [http://www.thb.gov.hk/eng/boards/transport/land/Full\\_Eng\\_C\\_cover.pdf](http://www.thb.gov.hk/eng/boards/transport/land/Full_Eng_C_cover.pdf)

4. As the implementation of such a scheme is not straightforward, TAC recommended that sufficient time must be allowed for the Government to fully engage the public before the launch of any scheme. As such, TAC suggested the Government to engage the public as soon as possible for the planning of ERP, recognizing that it would take longer time to conduct detailed planning for the implementation of the scheme. TAC also considered that given the importance of the Central District as Hong Kong's central business district and its road traffic situation, with the commissioning of the Central-Wan Chai Bypass ("CWB"), the Central District should be a suitable location for an ERP pilot scheme.

5. In response to TAC's recommendations, the Government said that ERP was well-tested in a number of overseas cities, including Singapore, London, Stockholm and Gothenburg. The Government believed that this tool would also be effective in tackling the serious congestion in some areas in Hong Kong. Since the community at large was not familiar with the concept of ERP, its practical operation and the implications of implementing ERP, the Government would conduct a public engagement exercise to explain these issues in greater detail and to listen to public views on the implementation of such a scheme in Hong Kong.

#### Previous studies on ERP

6. ERP as a measure to solve the traffic congestion problem has been discussed in the community for decades. In 1985, the Administration commissioned a study on an ERP Pilot Scheme which showed that ERP had the potential of reducing peak hour trips by 20% to 25%. In view of public concern over possible intrusion into privacy, the Government decided not to proceed with the project.

7. In 1994, the Working Party on Measures to Address Traffic Congestion set up by the Administration recommended, *inter alia*, the adoption of the "user-pays" principle by pricing the use of roads, and commissioning a technical consultancy to examine the requirements for an ERP system. During the ensuing public consultation exercise, there was general support for this recommendation. In April 2001, the Government completed a Feasibility Study on ERP<sup>2</sup>. While the Study confirmed that there were feasible ERP technologies which could be adopted in Hong Kong, based on the findings of the Study and a review by the then Environment and Food Bureau, the Administration concluded that there was no immediate justification for implementing ERP on transport and environment grounds but would continue to monitor closely the development of ERP technologies overseas as well as the transport and environmental needs for additional traffic restraint measures in

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<sup>2</sup> See Legislative Council Brief on Electronic Road Pricing (Ref: TBCR 2/1/2061/89 Pt 16)

Hong Kong in future.

8. In 2009, the Transport Department completed a feasibility study on "Congestion Charging Transport Model" which, amongst other things, developed a computerized transport model to test the effect of various ERP charging scenarios in the northern part of the Hong Kong Island (including the Central District). The Government advised that it would explore the possibility of ERP application in the Central District after the commissioning of CWB.

### **Major views and concerns of Panel members in recent years**

9. The Panel has been raising concern over the problem of road traffic congestion in Hong Kong and has been expressing views on whether ERP should be implemented as one of the measures to tackle the problem.

#### Reference to Singapore's experience

10. In September 2014, the Panel conducted a duty visit to Singapore<sup>3</sup> and had studied its experience in implementing ERP. The delegation noted that ERP has been the pillar of Singapore's traffic demand management strategy for managing road congestion. Based on a pay-as-you-use principle, ERP system charges motorists when they use the priced road at places and at times where and when they may cause congestion. It uses a dedicated short-range radio communication system to deduct ERP charges from smartcards inserted in the in-vehicle units of vehicles each time they pass a pricing point when the system is in operation. ERP charges differ for different roads and time periods depending on local traffic conditions so as to encourage motorists to change their mode of transport, travel route or time of travel.

11. The delegation also noted that to manage traffic congestion in a more targeted, flexible and fairer way, the Land Transport Authority in Singapore is developing a new road pricing system based on global navigation satellite system technology. In the light of worsening traffic congestion in Hong Kong, the delegation considered that the Hong Kong Government could implement ERP if certain issues like privacy could be overcome.

#### Views expressed at Panel meetings

12. When the Panel discussed the traffic distribution among road harbour crossings and measures to tackle road traffic congestion at its meetings on 28 February 2014 and 12 May 2015 respectively, some members indicated support for implementing ERP. They expressed concern over the

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<sup>3</sup> See LC Paper No. CB(4)823/14-15

Administration's plan, including the charging method, and the timetable of implementing ERP.

13. However, some members considered that the effectiveness of ERP to tackle traffic congestion might be temporary as drivers might be adapted to such pricing strategy with time. Some members cast doubt on its genuine need as the commissioning of CWB in 2017 might have already relieved the traffic congestion in Central. Some expressed concern that ERP might cause grievance among the public as they might consider that ERP would deprive them of the right to drive. Some worried that the anticipated increase in railway patronage as a result of implementing ERP might aggravate the crowdedness problem of train compartments and they urged the Administration to improve the public transport service to attract more citizens adopting public transport.

14. The Administration advised that it would conduct a public engagement exercise within 2015 to explain the concept of ERP in detail and gauge public views on its implementation. The successful implementation of ERP would hinge on the availability of a free-of-charge alternative route for drivers to bypass the charging zone. The Administration would take this opportunity to explore the feasibility of implementing ERP in the Central District upon the commissioning of CWB.

### **Relevant question raised at Council meeting**

15. During the Fifth Legislative Council, a question relating to measures to address the problems arising from the continuous rise in the number of private cars, including ERP, was raised at the Council meeting of 22 May 2013. The hyperlink to the question and the Administration's response, together with other relevant papers, are in **Appendix**.

### **Latest position**

16. The Administration plans to brief the Panel on the Government's work relating to ERP at the Panel meeting to be held on 16 December 2015.

## Background brief on Electronic Road Pricing

### List of relevant papers

Date	Meeting	Paper	Paper No.
7.6.1996	Finance Committee	HEAD 186 – Transport Department Subhead 700 General other non-recurrent	FCR(96-97)20  <a href="http://www.legco.gov.hk/yr95-96/english/fc/fc/papers/fc070620.htm">http://www.legco.gov.hk/yr95-96/english/fc/fc/papers/fc070620.htm</a>
13.3.1998	Panel on Transport ("TP")	Administration's paper on Feasibility Study on Electronic Road Pricing – Progress Report	TBCR 1/2061/89(97) Pt.8  <a href="http://www.legco.gov.hk/yr97-98/english/panels/tp/papers/tp13035a.htm">http://www.legco.gov.hk/yr97-98/english/panels/tp/papers/tp13035a.htm</a>
		Minutes of meeting	CB(1)1327  <a href="http://www.legco.gov.hk/yr97-98/english/panels/tp/minutes/tp130398.htm">http://www.legco.gov.hk/yr97-98/english/panels/tp/minutes/tp130398.htm</a>
24.4.2001	-	Legislative Council brief on Electronic Road Pricing	TBCR 2/1/2061/89 Pt 16  <a href="http://www.legco.gov.hk/yr00-01/english/panels/tp/papers/legco-erp.pdf">http://www.legco.gov.hk/yr00-01/english/panels/tp/papers/legco-erp.pdf</a>
24.4.2001	-	Press release published by Transport Department on no need for ERP to be implemented	<a href="http://www.td.gov.hk/en/publications_and_press_releases/press_releases/transport_department/index_id_579.html">http://www.td.gov.hk/en/publications_and_press_releases/press_releases/transport_department/index_id_579.html</a>
18.5.2001	TP	Minutes of meeting	CB(1)2193/00-01  <a href="http://www.legco.gov.hk/yr00-01/english/panels/tp/minutes/tp180501.pdf">http://www.legco.gov.hk/yr00-01/english/panels/tp/minutes/tp180501.pdf</a>

Date	Meeting	Paper	Paper No.
28.2.2014	TP	Administration's paper on Traffic Distribution among Road Harbour Crossings	CB(1)912/13-14(05) <a href="http://www.legco.gov.hk/yr13-14/english/panels/tp/papers/tp0228cb1-912-5-e.pdf">http://www.legco.gov.hk/yr13-14/english/panels/tp/papers/tp0228cb1-912-5-e.pdf</a>
		Minutes of meeting	CB(1)1574/13-14 <a href="http://www.legco.gov.hk/yr13-14/english/panels/tp/minutes/tp20140228.pdf">http://www.legco.gov.hk/yr13-14/english/panels/tp/minutes/tp20140228.pdf</a>
12.5.2015	TP	Administration's paper on Government's response to the "Report on Study of Road Traffic Congestion in Hong Kong" submitted by the Transport Advisory Committee	CB(4)922/14-15(04) <a href="http://www.legco.gov.hk/yr14-15/english/panels/tp/papers/tp20150512cb4-922-4-e.pdf">http://www.legco.gov.hk/yr14-15/english/panels/tp/papers/tp20150512cb4-922-4-e.pdf</a>
		Background brief on road traffic congestion in Hong Kong prepared by the Legislative Council Secretariat	CB(4)922/14-15(05) <a href="http://www.legco.gov.hk/yr14-15/english/panels/tp/papers/tp20150512cb4-922-5-e.pdf">http://www.legco.gov.hk/yr14-15/english/panels/tp/papers/tp20150512cb4-922-5-e.pdf</a>
		Minutes of meeting	CB(4)85/15-16 <a href="http://www.legco.gov.hk/yr14-15/english/panels/tp/minutes/tp20150512.pdf">http://www.legco.gov.hk/yr14-15/english/panels/tp/minutes/tp20150512.pdf</a>
22.5.2013	Council meeting	Hon WU Chi-wai raised a question on rise in number of private cars	<a href="http://www.info.gov.hk/gia/general/201305/22/P201305220588.htm">http://www.info.gov.hk/gia/general/201305/22/P201305220588.htm</a>
-	-	Report on the duty visit to Singapore to study its experience in development and provision of public	CB(4)823/14-15 <a href="http://www.legco.gov.hk/yr14-15/english/hc/papers/h">http://www.legco.gov.hk/yr14-15/english/hc/papers/h</a>

Date	Meeting	Paper	Paper No.
		transport facilities and traffic control measures	<a href="#">c20150424cb4-823-e.pdf</a>

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