

**Project 23/2004 – Towards developing an engineering strategy to reduce
tire-pavement noise**

Purpose

This paper seeks Members' advice on funding the captioned application for ECF submitted by the Hong Kong Polytechnic University.

Background

2. The funding requested by this project is \$403,650.00 for the staff cost of employing one Research Assistant for 18 months (\$270,000.00), the equipment cost for the noise measuring trailer (\$50,000.00), the cost for converting a vehicle to tow the trailer (\$24,000.00), the local transport cost for the study (\$5,000.00), the refreshment cost for organizing workshop (\$1,000.00), the printing cost for 1,000 leaflet (\$1,000.00), and the overhead administrative cost (\$52,650.00). The project is expected to last for 18 months.

3. The objectives of this proposed research are as follows:

- a) to design and fabricate a trailer-based device employing the Close Proximity Method to measure the tire-pavement noise;
- b) to conduct on-road tire-pavement noise surveys employing the trailer over selected low-noise pavement segments;
- c) to conduct roadside traffic noise measurements over selected points along the road segments surveyed in b) above;
- d) to assess noise-reduction performance of various types of road pavements;
- e) to evaluate the effects of different tire constructions and conditions on tire-pavement noise; and
- f) to provide recommendations that facilitate the development of an engineering strategy to reduce tire-pavement noise.

4. The Environmental Protection Department (EPD), the Highways Department (HyD) and two external expert assessors had reviewed the proposal and considered it worthy of support. The ECF Research Projects Vetting Subcommittee discussed the proposal at its meetings on 25.5.2005 and 7.9.2005. Members supported the proposal with an approved budget of \$351,000.00 after deducting the amount of \$52,650.00 for the overhead administrative cost in

accordance with the “Guide to Application for the Fund”¹.

Advice sought

5. Members are invited to advise whether the application for ECF should be approved with a grant of \$351,000.00 as detailed in paragraphs 2 to 4 above.

Secretariat, ECF Research Projects Vetting Subcommittee
September 2005

¹ The Guide to Application for the ECF/WWGF stipulated that funding for general administrative costs incurred by the recipient organization in undertaking the project will not normally be given.