1 INTRODUCTION

1.1 Background

In the Second Review of the 1989 White Paper issued in January 1994, the Government has indicated the intention to complete a study to investigate the practicability of reducing the adverse traffic noise impacts brought about by existing roads.

Given the nature and size of the problem, the investigation was to focus on the feasibility of providing direct technical remedies (such as barriers, enclosures etc.) on existing roads. Furthermore, the investigation was spilt into two stages. The first stage, a "Scoping Study for Providing Retroactive Road Traffic Noise Measures" (The Scoping Study) was commissioned in 1994 to define the scale of the traffic noise problem in the territory and to identify roads with the potential for retroactive noise mitigation. The Scoping Study was completed in 1995 and identified 22 sections of 18 roads for further investigation.

The second stage study was commissioned in 1996 under the Agreement No. CE 8/96 (The CE8/96 Study). This study was to investigate in details the engineering, safety, environmental, cost and maintenance aspects of the direct technical remedies for the road sections identified in the Scoping Study. The study concluded that the feasibility of mitigating noise from the existing roads is critically dependent on the local site constraints and the type of sensitive developments to be protected. To facilitate future identification of 'noisy' roads for feasibility studies, a working tool was developed as part of the study output.

This study, commissioned by the Noise Management and Policy Group of Environmental Protection Department (EPD) in August 1998, is to identify further potential at-grade roads for retroactive noise mitigation by using systematically these procedures of the working tools. Where appropriate, further investigation will be recommended.

1.2 Requirements of the Study

The requirements of the Study are:

i) To identify traffic noise problems from all existing at-grade roads in the territory;

ii) To select barrier form for the identified traffic noise problems;

iii) To evaluate the implication of the identified barrier form on the provision of existing emergency access and fire fighting requirements;

iv) To evaluate the implication of the identified barrier form on road safety, pedestrian and vehicular movements;

v) To evaluate the social implication and severance to commercial activities;

vi) To evaluate the availability of space, amenity and land for the likely barrier provision;

vii) To as certain the acoustic effectiveness and possible engineering feasibility;

viii) To produce a computer database programme and record in diskette form, an agreed format to summarize the study findings with respect to tasks (i) to (vii) and rationales of provision or non-provision of direct technical remedies to at-grade roads investigated;

ix) To recommend and list all identified at-grade roads with priority to practicable direct technical remedies which can be provided. The recommendation should include but not be limited to the following:

- appropriate form of direct technical remedies
- cost estimates (unit and total) of the direct practicable technical remedies
- likely noise reduction and number of dwellings benefitted with measures in place.

x) To prepare a time table for the incorporation of the recommended measures in task (viii);

xi) To identify and recommend further site investigation, surveys and studies necessary to fulfill the objectives required by this study.

1.3 Structure of the Report

The report has been written in 5 sections with this section providing a broad introduction.

Section 2	Study Methodology.
Section 3	Findings of the Reviewing Study
Section 4	Cost Estimate
Section 5	Prioritization of Noise Mitigation Works Programme
Section 6	Conclusions
Section 7	Recommendations