



DRIVER & VEHICLE TESTING AGENCY
IMPACT OF NON-COMPLIANCE WITH THE VEHICLE TESTING
SYSTEM

Compliance Section

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INVESTOR IN PEOPLE



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KEY FINDINGS

The issue of non-compliance with the vehicle testing system is a vital area of work for the Agency. It is apparent from this project that the issue of non-compliance impacts particularly on road safety and vehicle crime to a significant degree.

Road Safety:

- Evidence from a number of studies suggests that four to five percent of Road Traffic Collisions are directly attributable to vehicle defects
- Studies also suggest that ten to thirteen percent of Road Traffic Collisions have vehicle defects as a contributory factor
- Based on the 2002 and 2003 road fatalities statistics, six people die each year on Northern Ireland roads because of vehicle defects
- Road Traffic Collisions caused by vehicle defects are costing the economy at least £17million per year
- Research into vehicle defects and collisions in the UK is minimal
- The number one vehicle defect is tyre problems
- Evidence suggests that the MOT system does have a significant impact on road safety
- Research in the European Union and America have indicated that having a MOT system can result in a reduction in Road Traffic Collisions of between 5 and 17 percent
- MOT checks encourage vehicle owners to check their vehicles

Vehicle Crime:

- 10.6 percent of vehicle owning households have been the victim of a vehicle related crime in Northern Ireland
- Vehicle crime is increasing and vehicles used to perpetrate the crimes are normally non-compliant and are involved in a disproportionate number of road traffic collisions

- Accurate information from the MOT system is a key element in the fight against vehicle crime
- A recent operation targeting non-compliance in Northampton achieved a 17 percent reduction in car theft through use of automatic number plate readers and records from the police national database.

Environment

- The European Union has adopted a number of standards and measures to limit emissions
- The European Union has agreed to a 25 percent reduction in CO² emissions from its 1997 levels by 2008
- The level of emission failures in Northern Ireland test centres is very low.
- The MOT system may be encouraging people to ensure that vehicles do not emit harmful emissions

IMPACT OF NON-COMPLIANCE WITH THE VEHICLE TESTING SYSTEM

1 INTRODUCTION

Background

- 1.1 The Driver & Vehicle Testing Agency seeks to promote and improve road safety and a cleaner environment through the advancement of driving standards and implementation of government policies for improving the mechanical standards of vehicles. The Agency currently pursues this aim by the testing of drivers` competence and the roadworthiness of vehicles. The Agency also plays a key role in roadside enforcement of vehicle standards and in combating vehicle-related crime.

Purpose of Project

- 1.2 The Agency recently developed a strategy to maximise compliance with the testing systems. In implementing the strategy, two detailed surveys were undertaken which clearly show that there is indeed a high level of non-compliance with the vehicle testing system. Having established the extent of non-compliance this report seeks to quantify the significance of the problem and the impact that it may have, particularly in respect of road safety and the environment. There is also evidence that the increase in vehicle related crime might be facilitated to some degree by non-compliance with MOT, motor tax and insurance requirements. Information in respect of these areas will mean that action in respect of non-compliance can be directed where it will be most effective. It will also assist in highlighting the tangible benefits that can result from the strategy.

Scoping Study/Project Proposal

- 1.3 In order to assess the viability of proceeding with this project a scoping study/project proposal was completed, and approved by the Agency's management board. The content of the project proposal formed the basis of the project.

Terms of Reference

- 1.4 The terms of reference for the project were agreed as:
“To establish and report on the implications of non-compliance with the MOT system in terms of road safety, the environment and vehicle related crime and to specifically report on:
- the extent to which vehicle defects contribute directly or indirectly to road traffic collisions in Northern Ireland; and
 - whether a vehicle of MOT age without a valid MOT certificate may be more useful than a compliant vehicle to those involved in vehicle linked crime”.

Approach

- 1.5 The approach to the project, as outlined in the project proposal, was as follows:
- Research and background reading in relation to previous studies and discussions would be carried out.
 - Key personnel would be identified and interviews would be arranged to obtain as much relevant information as possible.
 - Analysis of information gained from research and interviews would be undertaken.
 - A draft report outlining results, conclusions and recommendations would be completed and forwarded to the DVTA Management Board for comments and approval.
 - Issue of a final report.

2 INFORMATION REVIEW

A brief biography of the information sources used for the project is attached at Appendix 1. Each biography details the information source, the relevance of the person or organisation involved and why the information has been included. The information for the project was obtained in three ways.

Interviews

- 2.1 A series of interviews were set up with people or organisations identified as being able to provide a useful input to the project. The interviewees were provided with a background to the project and a series of questions regarding their areas of expertise.

Book research

- 2.2 A number of publications both internal and external to the organisation were identified and these were used to provide information for the project.

Internet Research

- 2.3 Many of the studies used in this project were conducted overseas and information from these studies was sourced through the internet.

3 FINDINGS

- 3.1 Project findings have been subdivided into the three areas identified in the project proposal. They are:
- Road Safety,
 - Vehicle Crime, and the
 - Environment.

Road Safety

Level of Road Traffic Collisions with defects as a causal factor

- 3.2 There is a general opinion, across many jurisdictions, that the level of collisions where defects play a part is under reported in official police reports. As some of the studies referred to in this report rely on police data and others use information obtained from multi disciplinary teams, it is possible that the figures quoted may be lower than is actually the case.

Meetings with the Police Service of Northern Ireland (PSNI)

- 3.3 The review team met with a PSNI accident investigator and also members of the PSNI Road Policing Unit. The issue of vehicle defects being a causal factor in some of the collisions they investigated was discussed. The officials indicated that, in their professional opinion, vehicle defects do not have a significant impact on the level of collisions.

All those interviewed voiced the opinion that the main causes of road traffic collisions are excess speed and driver behaviour and that failing to wear seatbelts contributes significantly to the seriousness of collisions.

PSNI Form Analysis

- 3.4 Copies of the forms and booklets completed at road traffic collision scenes were obtained and analysed. Although the forms are quite bulky, and require a lot of information regarding the collision to be provided, they do not contain a section on the possibility of a vehicle defect(s) causing the collision or being a causal factor. Analysis of the traffic statistics identified in the Chief Constables report indicated that a figure of 0.81%, 55 out of a total number of 6,784, collisions have been attributed to vehicle defects. If the information, however, is not required in the collision report then it follows that this figure is likely to be under

reported and that many of the collisions could in fact have vehicle defects associated with them.

Keatsdale Pty

- 3.5 Findings from the Australian commissioned Keatsdale Pty report on the role of vehicle defects in road traffic collisions found that vehicle defects were ranked 12th of 14 factors associated with fatal road collisions and 11th of 14 factors associated with all vehicle collisions. Keatsdale estimated that vehicle defects are a causal factor in 4 percent of vehicle collisions and a contributing factor in up to 9 percent of vehicle collisions involving light vehicles.

Rompe and Seul

- 3.6 Rompe and Seul in their 1985 report, commissioned by the Directorate General for Transport of the commission for the European Communities, concluded that probably between 3 percent and 5 percent of all road traffic collisions are caused primarily by vehicle defects, and that they may also be one of the contributing factors to or aggravate, a further 7 percent to 18 percent of all road collisions.

Victorian Parliament

- 3.7 The submission to the Victorian Parliament Road Safety Committee by Michael Paine identified the following key points:
- pilot studies with roller brake testers in New South Wales estimated that about 10 percent of cars have serious service brake faults
 - vehicle defects contribute to road traffic collisions to a much greater extent than is suggested by police statistics.

DEKRA

- 3.8 Extensive accident research carried out by DEKRA from 1990 to 2000 using a team of expert road traffic collision investigators concluded that 12.71% of the road collisions investigated involved a vehicle defect; with 4.95% directly attributable to a vehicle defect as can be seen from the table one below

Table One

DEKRA Road Traffic Collision Research Project		
Total number of collisions investigated	15809	
Number of collisions caused directly by vehicle defects	783	4.95%
Number of collisions probably caused by vehicle defects	609	3.85%
Number of collisions where the vehicle defect was co-contributory	618	3.91%

Australian Capital Territories

- 3.9 A study in the Australian Capital Territories where random inspections were carried out on 1462 vehicles identified that 12% had defects that had to be rectified within 14 days and that a further 3% involved defects which meant the vehicle could not be driven.

Results of Studies

3.10 Most of the studies analysed, therefore, have attributed a percentage to the level of defects causing road traffic collisions. It is noticeable, however, that studies involving multi-disciplinary teams have tended to attribute a larger percentage. Table two below draws together the figures from the thirteen studies analysed for this project. The average of all the studies is 4.4% defects as a direct cause and a further 6% to 7.6% as a contributory cause. When these figures are applied to Northern Ireland 2002 statistics they equate to seven fatalities and between 394 and 499 collisions.

Table Two

ROAD TRAFFIC COLLISIONS CAUSED BY VEHICLE DEFECTS		
	Direct Cause (%)	Contributory Cause (%)
ECE Commissioned Report* (Rompe & Seul 1985)	Between 3% & 5%	A further 7% to 18%
Queensland 1995	4%	4%
RTA Australia	4%	9%
Industry Commission, Victoria	5%	
Australian Government Stats	2%	6%
CCRAM Melbourne in depth study	1.2%	5.4%
Adelaide in depth study	1.0%	5.3%
Victoria in depth study	Between 1.1% & 2.1%	A further 3.6% to 5.2%
DEKRA research	4.95%	7.76%
Northern Ireland PSNI statistics	0.81%	
Victorian Road Safety Committee report	12.0%	
Traffic Safety Centre , Hurt Study on motorcycles	3.0%	
Institute for Research in Public Safety	12.6%	

*** Figures shown are an average of statistics taken from a number of different countries**

Cost to the economy of defects

3.11 The Department of the Environment Road Safety Branch identified that a single fatality resulting from a road traffic collision costs the economy more than £1.25 million, a serious injury costs around £140,000 and a slight injury costs £11,000. Table three below identifies the cost to the Northern Ireland economy over the last five years assuming that 4.4% of accidents are a direct result of vehicle defects. The overall cost to the economy is estimated to be at least £91.86m over a five year period and this does not include any costs associated with less serious injuries.

Table Three

	1998	1999	2000	2001	2002	TOTAL
Number of injury collisions	7487	7562	8388	7447	6784	37668
Estimated Number with defects involved	329	332	369	328	298	1656
Number of fatalities	160	141	171	148	150	770
Estimated fatalities because of defects	7	6.2	7.5	6.5	6.6	33.8
Cost of fatalities	£8.75m	£7.75m	£9.4m	£8.1m	£8.3m	£42.3m
Number of serious injuries	1538	1509	1786	1682	1526	8041
Estimated serious injuries because of defects	67.7	66.4	78.6	74	67.1	353.8
Cost of Serious injuries	£9.5m	£9.3m	£11.0m	£10.36m	£9.4m	£49.56m
Total Cost to the economy of vehicle defects over a five year period						£91.86m

Types of defects causing collisions

- 3.12 Australian studies have shown that vehicles involved in road traffic collisions are much more likely to have serious defects than the general population of vehicles. The three main defects associated with fatal road collisions relate to tyres, main brakes and steering. The figures shown in table four below identify the prevalence of each defect.

Table Four

<i>Defect</i>	<i>Percentage</i>
Tyre Problems	61%
Brakes	18%
Steering	7%

Information from the National Car Test system in the Republic of Ireland identified the top three failure items in their car test as defective brakes, emission failures and defective steering

The Role of Periodic Motor Vehicle Inspection (PMVI)

- 3.13 The use of Periodic Motor Vehicle inspection was the subject of several of the studies analysed. Some of the studies found that it does have an effect on road safety and others considered that the effect on road safety was unproven.

Keatsdale

- 3.14 The Keatsdale project carried out a cost effectiveness report on Periodic Motor Vehicle Inspection taking into consideration cost of collisions, costs of setting up a PMVI system etc and the report concluded that a national PMVI program with annual vehicle inspections commencing for vehicles at 4 years of age is unlikely to prove cost effective.

Keatsdale found that in order to be effective PMVI tests needed to be very comprehensive. The report concluded that this would entail large test fees and would prove time consuming to the vehicle owners.

Studies have shown that within 6 months of passing an annual check that the same vehicle will have developed a large number of vehicle defects and in fact vehicles that are inspected every three years have been proven to have a defect rate similar to vehicles not tested.

American Association of Motor Vehicle Administrators (AAMVA)

3.15 The AAMVA reports that more than 6.7 million police-reported motor vehicle collisions occurred in the United States in 1997 and that a number of these collisions could have been avoided through PMVI. As mentioned in the previous section of this report, American research has identified that defects account for 12.6% of collisions and this applied to the US vehicle collision statistics would equate to 850,000 collisions avoided. NHTSA have used as their rationale the state of Idaho where a study was conducted two years after they had repealed their PMVI. The key points from this study were:

- The total rate of mechanically defective or unsafe vehicles on the road had significantly increased
- The condition of brake systems in older cars were in worse condition than similar cars 2 years earlier when the PMVI program was in place
- The condition of the steering, suspension, and power train subsystems had noticeably declined for all vehicles since the repeal of the PMVI program.

Government Accounting Office (GAO) in America

3.16 The GAO concluded that those American States with PMVI programs had traffic collision rates 17% lower than those without such programs.

The European Union (EU)

- 3.17 The EU used information from the Rompe and Seul 1985 report to prove that periodic motor vehicle checks are needed to improve road safety. It has since instigated a program of vehicle testing across the union (Directive 96/96). The vehicle testing regime in the European Union sets a minimum standard of vehicle testing where the vehicles first test should be carried out no later than four years after manufacture and as a minimum every two years thereafter. Many European countries operate a more stringent regime than this e.g. Great Britain test the car in its third year and thereafter annually. Rompe and Seul observed that the most accurate and cautious US surveys suggested that periodic roadworthiness tests could reduce the number of collisions caused by vehicle defects by about 50%. Rompe and Seul concluded that this implies a reduction of between 2 and 3% in the number of collisions caused by vehicle defects and a further 4 to 9% partially caused or aggravated by defects. They also concluded that periodic roadworthiness tests could reduce the number of road fatalities by between 5 and 10%.

Victorian Parliament Road Safety Committee

- 3.18 The Victorian Parliament Road Safety Committee commissioned a road safety report from the Australian Vehicle Design and Research laboratory in April 2000. As a result of the report it recommended that a centralised program with several dedicated roadworthiness/emissions inspection stations, that would undertake periodic inspections of heavy trucks, buses and older cars and invitation inspections of randomly selected newer cars should be instigated. They also recommended that these should be supplemented with a program of random roadside inspections, using portable roller brake testing machines.

VEHICLE CRIME

- 3.19 Vehicles play a key role in many forms of crime. Such crime includes theft, arson, traffic collisions, burglary etc. Other less well known vehicle related crimes include:

Ringing

- 3.20 A thief obtains the identity from a vehicle that has either been crashed, or disposed of as a total loss; or an identity is obtained from an MOT failure, or even from his or her own vehicle that may have reached the end of its useful life. A similar vehicle, of the same make, model, year, specification and colour is stolen, and fitted with the false identity. The paperwork is transferred leaving the thief to dispose of the new vehicle.

Cloning

- 3.21 A thief will note the details of a late model vehicle in a car park on the road etc. An application is made to DVLNI for a duplicate registration document stating that the seller did not hand over the original. The thief then steals a vehicle to match the registration document and sells the stolen vehicle on to a dealer.

Joyriding

- 3.22 Joyriding is the illegal driving of somebody else's vehicle without permission, but with no intention of taking the car permanently.

Bilking

- 3.23 A person who, knowing that payment on the spot for any goods supplied or service done is expected of him, dishonestly makes off without having paid as required or expected and with intent to avoid payment of the amount due commits an offence. In Northern Ireland this mainly

occurs on garage forecourts where vehicles are driven away without the driver paying for their petrol.

Level of Vehicle Crime

- 3.24 The level of car related crime in the United Kingdom has been rated as fourth in a survey of 15 industrialised nations and the cost of vehicle related crime is estimated at £3bn a year. At a local level in the year 2000/01, 10.6% of vehicle owning households were the victim of a vehicle related crime.

Vehicle Theft

- 3.25 During the 2002/2003 financial year the PSNI auto crime unit disclosed that 8,317 vehicles were stolen. Only 4,770 have been recovered and more than 3,500 have yet to be traced. It is believed that 25% of cars stolen last year were exported to the Irish Republic, Britain or mainland Europe. The estimated value of these vehicles is between £3 million and £5 million.

Link between Vehicle Crime and non-compliance

- 3.26 Interviews with PSNI crime prevention concluded that they are certain that there is a link in that most of the vehicles usually involved in crime tend to be older less valuable vehicles known as runabouts.

The Head of the PSNI Crime Prevention Unit has commented that the users of such vehicles have been shown to display a huge disregard for the law in terms of unlicensed and uninsured use and appear to be involved in a disproportionate number of road traffic collisions.

A pilot exercise carried out in Northampton using 100 cameras (ANPRs) and a dedicated team has resulted in a 17 percent reduction in car theft in these areas as the team has been able to identify a number of untaxed, criminal and stolen vehicles using the police national computer.

ENVIRONMENT

- 3.27 The following areas of pollution have been linked to vehicles and their emissions:

Air Pollution

- 3.28 Global warming is considered to be one of the greatest environmental threats. When petrol, diesel or certain alternative fuels are burnt for energy in an engine the main by products are water and carbon dioxide. Carbon dioxide is a greenhouse gas and contributes greatly to climate change. Cars are purported to make a significant contribution to overall emissions of carbon dioxide in the United Kingdom.

At the Kyoto conference on climate change in 1997 all the developed countries agreed to legally binding targets to reduce their greenhouse gas emissions. As a result of this agreement the European Commission and the European Automobile Manufacturers Association (ACEA) agreed to reduce the carbon dioxide emissions from new passenger vehicles by over 25% by 2008

Noise pollution

- 3.29 This relates to the external noise emitted by passenger vehicles. The motorcars excessive noise regulations were introduced in 1929. Since 1973 new cars have been required to meet Europe wide noise limits. These have been progressively reduced from 82 decibels in 1976 to the current limit of 74 decibels.

Current legislation and initiatives on emissions

- 3.30 The European Union adopted catalyst-forcing standards for new gasoline and diesel fuelled cars in the early 1990`s and these were called Euro I standards. Since then the European Union has gradually tightened the standards and a further Euro II standard was introduced in 1996, Euro

III in 2000 and a Euro IV standard will be implemented in 2005. Each of the standards is linked with the introduction of new vehicle technologies or changes to fuels. The latest standards are very stringent on emissions as can be seen in table five. The European Union stipulates that vehicle manufacturers are responsible for assuring that vehicles meet the in use standards for 80,000km, failure to meet these standards can result in vehicles being subject to a recall program whereby defective vehicles will be repaired at the manufacturers costs.

Table Five - European Union Standards

Euro Standard	Fuel	Directive	Limit Values (gm/km)				
			CO	HC	NOx	HC+NOx	PM
Euro I	Petrol	93/59/EC	2.72			0.97	
	Diesel	93/59/EC	2.72			0.97	0.14
Euro II	Petrol	93/59/EC	2.2			0.50	
	Diesel	93/59/EC	1.0			0.70	0.08
Euro III	Petrol	98/69/EC	2.30	0.20	0.15		
	Diesel	98/69/EC	0.64		0.50	0.56	0.05
Euro IV	Petrol	98/69/EC	1.0	0.10	0.08		
	Diesel	98/69/EC	0.50		0.25	0.30	0.025

Initiatives

- 3.31 The United Kingdom has introduced a number of steps to encourage the use of more efficient vehicles including lower excise duty on vehicles with smaller engines, graduated excise duty based on carbon dioxide emissions and grants for dual fuelled vehicles.

Levels of emission failure and Prosecutions in Northern Ireland

- 3.32 DVTA figures show that the current failure rate for emissions is approximately 1%. DVTA Enforcement Section has received no referrals from local councils in the last nine months and in the previous eighteen months received between 8 and 10. Only two of these referrals resulted in failed vehicles and remedial action was carried out in both cases. No prosecutions have been carried out or are pending.

4 CONCLUSIONS / RECOMMENDATIONS

Road Safety

- 4.1 The information used by the police to complete their statistics does not address effectively the issue of collisions with defects involved. The booklets completed by the PSNI at the scene of a road traffic collision do not contain a category for defects and it is not an area that is investigated in detail when a collision occurs. Police information in Northern Ireland and in other countries is therefore not detailed enough to provide accurate figures on the impact of defects.
- 4.2 The PSNI are the only organisation in Northern Ireland that routinely investigates road traffic collisions. They employ a small number of qualified vehicle collision investigators who would be capable of identifying defects that may have caused a road traffic collision or were contributory to it. Currently these investigators are used to investigate fatal or very serious collisions. When less serious collisions occur they would normally be investigated by policemen who in many cases will have limited experience of vehicle defects and who may be unable to identify them in the vehicles involved.
- 4.3 Worldwide studies contradict PSNI statistics and quite clearly show that a percentage of all road traffic collisions are directly attributable to defects. An average of these studies used for this report has identified a figure of 4 %, which equates to six people killed on Northern Ireland roads in 2002 and in 2003 at a cost to the economy of £8.75million each year.
- 4.4 Vehicle defects are considered to be a contributory cause in six to eight percent of road traffic collisions investigated in worldwide studies. In Northern Ireland this equates to between 394 and 499 collisions in 2002.

- 4.5 The main causes of defects identified in studies of collision vehicles are tyre problems, brakes and steering.
- 4.6 Statistical information on the MOT compliance rate of vehicles involved in collisions is unavailable.
- 4.7 Studies on the value of Periodic Motor Vehicle Inspections in relation to road safety mostly concur that they do play a part in ensuring that vehicles are safer on the roads.
- 4.8 The main reason for countries not carrying out PMVI is cost effectiveness rather than road safety.
- 4.9 Vehicles that have completed a PMVI may develop defects after the annual inspection that may not be spotted until the next inspection.

Vehicle Crime

- 4.10 The PSNI have identified that the level of vehicle crime is increasing dramatically and that the vehicles used to perpetrate the crimes are invariably vehicles with few if any records kept on them or that the vehicles have been outfitted with a false registration to aid the criminal. The vehicle inspectorate in England estimate that there are 40,000 certificates stolen per year and that the problem of certificate forgeries is a lot more widespread than this.
- 4.11 To be more effective in reducing the level of vehicle crime the PSNI need to have instant access to accurate information on vehicles and their owners. Currently any information available to them is not real time.
- 4.12 Information available to the PSNI from the DVLNI database is dependant on the information obtained from initial registration of the vehicle.

4.13 The only physical vehicle check carried out at present is by DVTA at the annual MOT or if the vehicle is suspected for some reason. This could mean that data has been incorrect for up to four years.

4.14 DVLNI and PSNI have carried out several joint exercises that have identified large numbers of vehicle excise duty evaders.

Environment

4.15 Vehicle emissions are considered to be very detrimental to the environment, however, the level of emission failures in Northern Ireland is very low.

4.16 The current standards applied to vehicles tested under the MOT system in Northern Ireland are Euro I,II, III and IV. Vehicles currently being tested must conform to I and II and these are not as stringent on older vehicles. Diesel emission testing is not mandatory at present.

4.17 Information from the Republic of Ireland indicates that when they first introduced a car test, emission failures were one of the top failures. These have reduced dramatically within the last two years. The low level of emission test failures in Northern Ireland could be a result of vehicles being better prepared for tests and the emission levels being quite high for older vehicles. From the evidence provided emission testing at the test centres may be acting as a very visible deterrent to vehicle owners.

5 WAY FORWARD

5.1 Action to reduce non-compliance is considered to be absolutely essential and the Agency will need to consider the use of publicity when compliance initiatives are introduced. The information contained in this document will assist the department and the minister to justify the necessity of compliance

action by identifying the impact non-compliance has on road safety and vehicle crime.

The information will also play a key role in developing the Agency compliance strategy and future operational activities within the Agency.

A number of initiatives have been identified below which should be considered:

- 5.2 It is recommended that talks should take place with the PSNI on the contents of road traffic collision booklets with a view to asking for further questions on causes of collisions. The inclusion of statistics on MOTs of vehicles involved in collisions should also be sought.
- 5.3 The DVTA should consider the investigation of fatal road traffic collisions involving private motor vehicles in the same way as is presently undertaken for HGV's.
- 5.4 A joint survey should be undertaken with the PSNI Statistics Branch to identify the level of MOT non-compliance in collisions.
- 5.5 A roadside survey of vehicles to identify the type and level of defects present. The survey should include vehicles that have passed their MOT test a short period previously to assess the level of defects that have developed.
- 5.6 Roadside emission checks to provide a more accurate indication of emission failures.
- 5.7 Joint exercises should be undertaken with the DVLNI, PSNI and DVTA to identify MOT non-compliance as well as vehicle excise duty evasion.

- 5.8 A survey should be undertaken to determine the level of accuracy of information between the vehicle registration book and the computer system on the day of an MOT.
- 5.9 Publicity on compliance should be carried out to inform the public of the benefits of maintaining vehicles in a roadworthy condition.

INFORMATION SOURCES USED IN THE PROJECT

ROAD SAFETY

PSNI Statistics (accidents with vehicle defects)

Central Statistics Unit (CSU) is the statistics branch within PSNI and is part of their corporate development role. The function of statistics branch is to act as the main source of statistical information and analysis within PSNI. CSU is responsible for providing official information and analytical advice on core area statistics to a wide range of external customers. CSU collates information from road traffic collisions on a yearly basis and this then forms the main statistics for the Chief Constables annual report.

DEKRA Accident Research

DEKRA is a large testing agency covering 13 countries. It carries out over 16 million major inspections in Europe alone each year. DEKRA carries out a wide variety of tests and it offers reporting services as well. DEKRA boasts its own road traffic collision research facility and has carried out a recent collision research using trained collision researchers to identify the main reasons for the cause of collisions.

Keatsdale Pty Ltd

The Federal Office of Road Safety in Australia commissioned Keatsdale Pty Ltd to prepare a comprehensive report on the cost effectiveness of periodic motor vehicle inspection. The study draws together research carried out in other parts of the world to identify the link between Periodic inspection and the link to road safety.

Travel Safe Committee

Queensland legislative assembly commissioned a report into the need for a form of Periodic inspection of passenger vehicles as an effective means of reducing road collisions and the severity of associated injuries and to improve the standards of motor vehicle repairs as a means of improving vehicle and road safety.

Victorian Parliament Road Safety Committee

The Victorian Parliament Road Safety Committee received a submission from Michael Paine in the Australian Vehicle Design and Research Unit giving an outline of roadworthiness issues in Australia.

National Highway Traffic Safety Administration (NHTSA)

The United States Department of Transportation established the NHTSA to carry out motor vehicle safety programs. NHTSA is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle collisions. NHTSA also carries out research studies on subjects that relate to road safety. Two significant studies are:

- The Hurt Study, an investigation to identify cause factors for motorcycle collisions and to identify possible countermeasures.
- Periodic Motor Vehicle Inspections. - facts on the effectiveness of periodic motor vehicle inspections on public safety

National Car Test System in Republic of Ireland

Ireland introduced a National Car Test on 4th January 2000, for vehicles four years of age with tests every two years thereafter.

PSNI Road Policing

Road Policing Development Branch deals with issues concerning new legislation, road safety initiatives, equipment and policies concerning traffic for the whole force. Its purpose is to support the force in providing an effective traffic policing service, thereby improving road casualty reduction and road user convenience. Interviews were carried out with road policing to ascertain their views on the impact of non-compliance.

PSNI Accident Investigators

An interview was carried out with an authorised officer from the PSNI road traffic collision investigation team. PSNI have recently employed 6 members as authorised officers who carry out investigations of collisions where fatalities or very serious injuries have occurred. Authorised officers are trained through City and Guilds for collision investigation. When called to a collision investigation the officer attending will be required to complete in detail a form 55/2a booklet titled “report of traffic collision” and a form T1 is also completed and sent to the Central Statistics Unit. At the scene of the collision the investigator will assess the collision for causal factors, this will also include a complete check of engine mountings for rust, tyres for tread, use of seatbelts or anything else that may have caused the collision to happen. The investigator will then make a judgement on the possibility of prosecutions arising from the accident.

DVTA Enforcement

Enforcement Section is responsible for roadside enforcement of legislation and is particularly prevalent in roadside taxi enforcement, random roadside lorry checks, accident investigation of HGV`s and emission checks

DOE Regulatory Impact Assessment on 3yr Testing

In May 2001 the DOE published the Northern Ireland Road Safety Strategy (2001 to 2010). The strategy proposed a number of objectives to improve road safety one of which was the introduction of roadworthiness testing for motor vehicles as from 3 yrs old, this move to bring Northern Ireland into line with the rest of the United Kingdom. A regulatory impact assessment was therefore carried out to identify all the facts and figures.

Norwegian Road Safety Strategy

The Norwegian Ministry of Transport have developed a road safety strategy for 2002 to 2011 that looks at various aspects of road safety.

VEHICLE CRIME

Vehicle Crime Bill

The vehicle crime bill was introduced into UK law in 2001, it introduces various measures aimed at reducing vehicle crime, some of these measures were proposed by the Vehicle Crime Reduction Action Team established in 1998.

Tackling Crime ; One car at a time

Norman Gibson a crime prevention officer for the PSNI completed a dissertation on crime in Northern Ireland which addresses the problems associated with vehicle crime and its link to other types of crime.

Newspaper Articles and PSNI/NIO statistics

The PSNI publish statistics on the level of vehicle crime each year and several articles have also been written on the problem of vehicle crime ie the different types and the level of it.

Crime Reduction Toolkits

The government has set up a website dealing with the issue of vehicle crime which addresses motivation of offenders and disposal of vehicles and goods, it addresses how to reduce the level of crime through the use of its toolkits.

ENVIRONMENT ISSUES

Enforcement Interviews

Interviews were carried out with members of the DVTA enforcement branch to identify the environment issues assessed by their branch and to assess the current impact of these issues.

Emission Requirements for Motor Vehicles

The emission requirements for motor vehicles are based on levels set by the European Community in their first directive 70/220/EEC and subsequent amendments

Impact of emissions on the Environment

The Environment Protection Agency conducted an impact assessment of the role of motor vehicle emissions on the environment in Melbourne.

Dept. For Transport Vehicle Emission Enforcement

The Department for Transport in the UK mainland has instigated new legislation with regard to enforcement of current vehicle exhaust emission standards by local authorities and they have issued guidance to local authorities in March 2003.