

Interim report of the Advisory Group on Motorcycling

Contents

Interim Report of the Advisory Group on Motorcycling	2
Introduction.....	2
Background.....	2
Motorcycling within an Integrated Transport System.....	2
Road Safety Strategy.....	3
Other Safety Initiatives.....	4
The Task Forces.....	6
Integration and Traffic Management	8
Introduction.....	8
Progress.....	8
Environmental and Fiscal	10
Introduction.....	10
Progress.....	10
Vehicle safety and Security	13
Introduction.....	13
Progress.....	13
Research	15
Introduction.....	15
Progress.....	15
Statistics	17
Introduction.....	17
Progress.....	17
Next Steps	18
ANNEX A Advisory Group on Motorcycling	20
Terms of Reference.....	20
Advisory Group Members.....	20
Annex B	21
ANNEX C Powered two wheelers - fleet profile	23
ANNEX D Powered two wheelers - emission factors	24
ANNEX E The MCI Guide to Moped and Motorcycle Exhaust System Markings	26
Aim.....	26
Subjective Identification	26
Illegal Exhaust Systems	26
Markings and their Locations.....	26
Contents	30

Interim Report of the Advisory Group on Motorcycling

Introduction

1. The Government's Advisory Group on Motorcycling was established in May 1999. Significant progress has been made by the Group. Its work has, and continues to, assist the Government in refining its strategy on motorcycling. The purpose of this paper is to provide an interim report on progress and identify the future work required.

Background

2. The Government's White Paper on the Future of Transport, *A New Deal for Transport: Better For Everyone*, recognised that mopeds and motorcycles can provide an alternative means of transport for many trips. It also acknowledged that where public transport is limited and walking unrealistic, motorcycling can provide an affordable alternative to the car. The motorcycle is the preferred form of transport for some people, and can widen their employment opportunities. Consequently the White Paper advised local authorities to take account of the contribution motorcycling can make to integrated transport and consider specific measures to assist motorcyclists.

3. The White Paper also acknowledged the potential benefits that motorcycling offers for the environment and for congestion. However it recognised that these were dependent on a number of factors and that the role of motorcycling in an integrated transport policy raises some important and complex issues, including safety and environmental impact. It stated that an Advisory Group would be set up bringing together motorcycling interests and other interested parties. Lord Whitty established the Advisory Group on Motorcycling (AGM) on 6 May 1999 (Terms of Reference and membership are at Annex A). The AGM has now met seven times and has set up Task Forces to examine environmental and fiscal issues, statistics, research, vehicle safety and security, and integration and traffic management.

Motorcycling within an Integrated Transport System

4. The Government recognises that powered two wheelers (PTWs) have a role to play in a national transport strategy. Its aims were set out in the integrated transport White Paper. Since then, aided by advice from the AGM, the Government's policies have begun to develop so that they better reflect motorcycling as an integrated form of transport.

5. In March last year, the Government published its Local Transport Plan (LTP) guidance, *Guidance on Full Local Transport Plans*. This stated that local authorities should take account of the contribution PTWs can make in delivering integrated transport policies, for example where they are being used in congested traffic conditions, and should consider specific measures to assist motorcyclists in making integrated journeys. Indeed, it advised that all relevant aspects of LTPs - including road safety, planning and social policies - should take account of the needs of motorcyclists. Specifically, the guidance advised local authorities to:

- consider the appropriate number of total parking spaces for cars and motorcycles;
- consider good access, suitable facilities and secure parking at public transport interchanges;
- consider the implications for vulnerable road users, such as motorcyclists, in deciding how to remedy deficiencies in the road surface when preparing maintenance strategies;

- consider running properly monitored pilot studies on the use of bus lanes by motorcyclists, to help inform decisions on this practice; and
- be aware of the role PTWs can play in remote or rural areas, where they offer an affordable alternative to the car and can bring benefits to the individual, including widening employment opportunities;

6. The Government's 10-Year Plan for transport, published last July, also recognised that PTWs have a part to play in an integrated transport policy. The Plan acknowledged the advantages of PTWs over cars in terms of flexibility and affordability. It noted that PTWs can make more efficient use of road space in congested town centres and provide a cheaper alternative for people on low incomes living in rural areas. The Plan did not, and was not intended to, reiterate Government policy in detail; its focus is investment, describing funding plans to deliver the policy goals already set out in the White Paper and daughter documents. It is these latter documents which spell out Government public policy on motorcycling.

7. Also last year, as part of the its Energy Efficiency Best Practice Programme, the Government published a travel plan resource pack for employers. This, too, highlighted the potential environmental benefits of PTWs over cars and the space efficient nature of PTWs, particularly in terms of parking and congestion. The advice noted that benefits to an organisation's employees could include lower running costs and quicker travel than by car. The resource pack also detailed ways that employers might assist motorcyclists: by provision of safe and secure parking; changing/storage locker facilities; interest free loans for small motorcycles; and safety training. In addition to encouraging businesses to adopt travel plans, the Government has produced guidance for its own Departments on developing effective travel plans. This acknowledges that small motorcycles and mopeds can make faster progress in congested traffic conditions, take up less parking space, have lower running costs and may be more environmentally friendly than private cars. It also advises that safety-training programmes for riders should be considered.

8. The Government is consulting on a revision of Planning Policy Guidance (PPG) Note 13. This note concerns planning as applied to land use and transport. The consultation elicited comments on implications for PTWs, and these are being considered in the development of revised guidance.

Road Safety Strategy

9. A significant issue for Government, which will be fundamental to the conclusions reached on powered two wheeler strategy, is the safety of motorcyclists. There has been a very welcome decrease in the rate of casualties. In 1999 TWMV traffic rose by 16% compared to 1998. However, there was a 9% decrease in the casualty rate per 100 million vehicle kilometres. That said, total casualties rose by over 6%, and deaths among two-wheeled motor vehicle (TWMV) users rose by 10%. PTWs represent a large proportion of road casualties in relation to their numbers and they remain our most vulnerable road users.

10. We need to address this and guard against increased casualties should congestion encourage car drivers to shift to PTWs. In March 2000 the Government published a Road Safety Strategy for the next 10 years, Tomorrow's Roads - Safer for Everyone. This includes road accident casualty reduction targets to be achieved by 2010. These are a 40% reduction in the number of people killed or seriously injured; a 50% reduction in the number of children killed or seriously injured; and a 10% reduction in the slight casualty rate. Action is required to deliver these targets. On motorcycling, the Strategy includes measures to:

- improve training and testing for all learner riders;
- provide guidance for people returning to motorcycling after a break, and people riding as part of their work;
- ensure the quality of instruction;
- help drivers become more aware of the vulnerability of motorcyclists; and
- promote improvements in engineering and technical standards which could protect motorcyclists better, including new safety helmet standards.

11. The Government is already taking action to deliver the Strategy. Following consultation in 1999, the Government announced plans to improve PTW safety by modernising training, testing and licensing arrangements, at the same time as removing unnecessary restrictions. The Government recently introduced Regulations - with effect from 1st February 2001 - implementing many of the proposals.

12. The regulations have ended the unpopular "2-years-on, 1-year-off" rule, under which learners could be excluded from riding for a year if they did not pass a motorcycle test before the end of the 2-year life of the licence. Instead, the new regime will provide provisional entitlement until age 70, but the rider must hold a current CBT certificate to be able to use the licence. In conjunction with this, the Regulations reduce the life of a Compulsory Basic Training (CBT) certificate from 3 to 2 years. The Government believes that the requirement to renew a CBT certificate is a more appropriate response than a ban for those not passing a test within 2 years, and that this provides a sensible balance between providing learners with an incentive not to delay reaching test standard, whilst giving a reasonable period to accommodate individual circumstances.

13. Also, the Government believes that riding a moped safely involves very different skills from driving a car safely. Therefore car drivers qualifying after 1 February 2001 will be required to complete a CBT course before using their moped entitlement to ride on the road. This change will ensure that car drivers receive appropriate training before taking to two wheels.

14. Car and motorcycle theory tests are now distinct in terms of content. The motorcycle test now better meets the needs of learner riders than when the test was introduced in 1996. To ensure learners obtain the benefit of these tests, the Regulations provide that exemption from the motorcycle theory test for full car licence holders, and vice versa, is ended.

15. A number of other measures are being taken forward in furtherance of safer motorcycling. The Driving Standards Agency (DSA) is working on improving pre-test rider training, based on a range of competencies to be achieved, supported by training logbooks. To complement this DSA will be improving the standards of motorcycle instructors, which will be supported by a voluntary register of accredited motorcycle instructors. In the longer term the Government wants to make this a statutory register.

16. DSA will also be developing guidance for full motorcycle licence holders returning to motorcycling. The issues will be different depending on whether the rider is newly qualified or returning to motorcycling after a break. DSA is working with trainers, riders, retailers, manufacturers and insurers to develop standards, publicise schemes and encourage participation.

Other Safety Initiatives

OCCUPATIONAL MOTORCYCLING

17. The Government has set up an inter-Agency Task Group to consider how to improve work-related casualties. The Group includes DETR, the Health and Safety Executive, and other interested parties. It has included motorcycling safety. Initiatives underway are the development of agreed Codes of Practice for motorcycle couriers (the Courier Code) and for fast food deliveries (the Code of Practice for Home Delivery Operators and Drivers). These, together with improved rider training standards, are being developed in partnership with representatives of the courier and pizza delivery industries. The aim is to achieve an agreed list of training competencies for each sector and national standards for training schemes.

DRIVING SKILLS PUBLICATIONS

18. DSA has reviewed "The Motorcycling Manual" and the "Compulsory Basic Training" books and updated them for publication in spring 2001. "The Motorcycling Manual" has been amended so it now complements the "Driving Manual". Information about CBT and the practical test has been removed while general advice on motorcycling skills has been increased to include PTW security, maintenance, new technology (Anti-lock Braking Systems, Traction Control Systems, linked brakes), motorway riding, defensive riding techniques, effects of weather, traffic signs and road markings and continental travel.

19. A new publication containing information about CBT and the practical test and specifically aimed at new riders is being prepared. This groups together information for new riders which was previously in "The Motorcycling Manual", "Compulsory Basic Training" and "The Driving Test".

CHANGES TO THE MOTORCYCLE TEST

20. Hazard perception is the ability of a driver to identify situations, at the earliest possible opportunity, that might require them as a rider or driver to take some form of avoiding action, such as changing speed or direction. This involves techniques such as scanning, selecting a safe separation distance, using an appropriate speed, planning well ahead, and having good anticipation. DSA will be introducing hazard perception testing for all test candidates during the autumn of 2002.

EUROPEAN CHANGES TO THE PRACTICAL TEST

21. The Second European Council Directive on driving licences sets minimum requirements for driving tests conducted by Member States. The European Commission recently published a revised Second Directive which prescribes more features for practical tests. The intention is to ensure that tests provide a more thorough assessment of knowledge, understanding and skills relating to the type of vehicle that the licence applicant wishes to drive.

22. The revisions will require significant changes to the GB practical test for motorcyclists. Candidates will have to undertake:

- Checks of the emergency stop switch (if applicable), chain, and oil levels.
- At least two manoeuvres executed at slow speed, including a slalom.
- At least two manoeuvres executed at higher speed, of which one manoeuvre should be in second or third gear, at a speed of at least 30 km/h and one manoeuvre avoiding an obstacle at a minimum speed of 50 km/h.
- At least two braking exercises, including an emergency brake at a minimum speed of 50 km/h.

23. The Directive allows Member States up to 3 years to implement the changes to the random checks, and 5 years for the new manoeuvres. DSA has issued a discussion paper inviting views by the end of April on the proposed approach to implementation in GB.

ROAD MAINTENANCE

24. In November, the Government announced funding for the first two years of the 10-Year Plan to tackle the backlogs in local authority highway maintenance. Over £1 billion will be provided in the next two years through the Local Transport Plan settlement. This represents double the money available in 2000/01 and will help to eliminate the potholes and bad surfacing that cause so many problems to motorcyclists, and other road users. The LTP *Guidance on Full Local Transport Plans*, advises local authorities to consider the implications for PTWs in deciding how to remedy deficiencies in the road surface. Furthermore, the Government is developing a revised Code of Good Practice for local road maintenance with the Local Government Association which should be ready before the end of 2001.

DARK VISORS

25. There have been calls from some motorcyclists for the law to be changed to allow darker tints for helmet visors. In order to take the issue forward, DETR commissioned new research last year on the safety aspects related to drivers' and motorcyclists' vision. Among other things, this is looking at the benefits and disadvantages of visors with dark tints. This work is still continuing and it is anticipated that the report will be publicly available later this year. At this stage the Government remains open-minded about the possibility of amending the regulations to allow a darker tint for visors but, at the end of the day, must ensure that any changes to the law will not compromise efforts to improve road safety.

DIESEL SPILLAGE

26. The EC Fuel Tank Directive was amended in March 2000 with new measures aimed at reducing fuel spillage. It provides that the tank cap must be fixed to the filler pipe, the seal must be retained securely in place, and the cap must latch securely in place against the seal and filler pipe when closed. The UK will of course be implementing all the mandatory requirements of this Directive, which must be by 3 May 2002 for new car types and from 3 May 2003 for all new cars. At a date to be decided DETR will be consulting on the implementation of similar requirements for HGVs. The Government will also be considering the extent to which any optional provisions will enhance our current national Construction and Use requirements. European emissions Directives are also introducing requirements for new vehicles that will minimise evaporative emissions and fuel spillage caused by a missing fuel filler cap. Whilst these Directives do not apply retrospectively, a gradual but nonetheless noticeable decline in fuel spillage should result from this.

27. In respect of existing vehicles, there are current legislative measures contained within the Road Vehicles (Construction and Use) Regulations 1986, as amended, aimed at preventing diesel spillage from taking place. These measures are contained in Regulation 39 and stipulate that fuel tanks must be constructed and maintained in such a manner that neither liquid nor vapour can escape from them. Also Regulation 61 prohibits spillage of any oily substance onto the carriageway if they are likely to result in danger being caused to other road users. The maximum penalty on conviction is currently a fine of £5,000 or disqualification.

The Task Forces

28. As stated earlier, the Task Forces were set up to focus on specific issues and report to the AGM periodically. Their work is described below.

Integration and Traffic Management

Introduction

29. The Task Force was established to identify the practical advice and guidance needed to help highway authorities, employers and public transport providers to provide for PTWs in their plans, identifying the research and trials needed to support this advice. Its task is also to identify examples of good practice and innovations, and research needed in this area. This work is to enable the Task Force to recommend action to the AGM in these areas.

30. The Task Force concluded that irrespective of the ultimate view Government took on its motorcycling strategy, there was a need to reflect existing PTW users in policy and technical guidance documents. Consequently the Task Force has focused mostly on this aspect of its work.

Progress

31. Powers have been included in the Transport Act 2000 to enable local authorities to install secure parking devices on street and in their car parks. Until now, there has been concern that such devices could comprise unlawful obstructions in the highway. This has deterred many authorities from installing them. The new powers will enable authorities to provide secure parking for PTWs, helping to reduce the high level of PTW theft.

32. The Task Force identified that little technical guidance was available to those needing to take account of motorcycling in the public or private sectors, either from the Department or elsewhere. A number of local authorities are active in increasing the amount of PTW parking they provide. It was therefore decided that the Task Force should devise a Traffic Advisory Leaflet, for publication by the Department, on PTW parking. This is in preparation. It will cover various aspects of the planning and provision of parking facilities, including secure parking. These leaflets are aimed mainly at practitioners in local authorities, consultants and other organisations involved in local transport matters.

33. A research project is underway to look at the impact of PTW use on congestion. It has been argued that if more trips were done by PTW rather than by car there would be less congestion. The reasoning is that PTWs take up less road space, are able to filter between stationary traffic and move off quickly at junctions, and may thereby increase overall traffic throughput. Furthermore, as they spend less time stationary with their engines idling, emissions could be reduced. Research has not been done in this area in the past. It is recognised that this project will not provide the definitive answer to all questions posed with regard to motorcycling and congestion. The project will rely on modelling the changes based on existing models which were not originally developed to look at motorcycling issues. However, it will provide a first assessment of the order of impact on congestion that more motorcycling could have and may well point the way to further areas of research.

34. The Department is keen to see proper monitoring and evaluation of the effect of PTWs in bus lanes. This is a practice that has developed in a number of local authorities. There have been concerns about the safety of other vulnerable road users if PTWs are able to use these lanes. The traffic implications also need examination. However, to date, no thorough evaluation has been done. DETR has therefore approached a number of highway authorities interested in the possibility of allowing PTWs into bus lanes with a view to participating in fully monitored trials over the next

year or two. The Department is also preparing guidance for local authorities to set out what would be involved for them in participating in these trials in order to encourage them to take part.

35. Discussions have started between cycling interests, PTW interests and the Department about the possible use of advanced stop lines by PTWs as well as bicycles. Advance stop lines have been provided by many authorities as a means of helping cyclists to position themselves at the head of the queue at traffic lights, and particularly to help right turning cyclists to manoeuvre themselves to the correct position on the road. There are a number of issues to be addressed - safety, legality, capacity, purpose - when considering the mixing of cyclists and motorcyclists in this situation, but discussions have started with a view to looking at whether and how such an idea could be taken forward.

36. An analysis has been done of the preliminary and full Local Transport Plans for England submitted in 1999 and 2000 respectively. These have identified the areas where local authorities have shown interest in PTW related issues such as parking, use of bus lanes, etc. The analysis shows that many authorities are taking motorcycling more seriously and are incorporating it within their Local Transport Plans alongside other modes. A summary of the analysis is at Annex B.

37. The Department's programme of research into the relationship between air quality and traffic management (TRAMAQ) has added PTWs to the range of vehicles for which emissions generated as a result of various traffic management measures will be studied.

CONGESTION CHARGING AND ROAD PRICING

38. Although not addressed by this Task Force, the Government believes that powered two wheelers should generally be exempt from road user charging and workplace parking schemes. Including PTWs would require practical difficulties to be overcome. However the Government intends to leave decisions on exemptions to local discretion, but DETR will explore the practical issues further with any local authorities considering including PTWs in such schemes, as part of its Charging Development Partnership.

Environmental and Fiscal

Introduction

39. This Task Force was established to explore the environmental impact of PTWs and to agree what measures, if any, should be taken in light of the conclusions reached. Progress has been made on the issues of air quality, climate change, noise, fiscal issues and enforcement. In clarifying the scope of the work, the Task Force agreed that any output should be informative rather than prescriptive in order for the Advisory Group to be able to assess all contributions and influences affecting motorcycling before recommending future action.

Progress

AIR QUALITY

40. In considering the environmental impact of PTWs, the Task Force considered it important to set out some basic information. This included the size of the national fleet, its age profile, and the average annual distance travelled. From this basic information, and making assumptions on the emission characteristics for individual types of PTW's, the overall emissions impact for these vehicles can then be derived. This information is set out in Annexes C&D.

41. These data indicate that the overall PTW emission performance is mixed - good in relation to NO_x but poor in relation to CO and HC. In assessing these observations, it should be noted that:

(i) as PTWs tend to be used mainly in urban areas, their contribution to urban emissions will be greater than their contribution to national emissions;

(ii) PTWs have different "cold start" characteristics from cars; and

(iii) PTWs have different travel performance in congested conditions.

42. In recognition that "real-world" emission characteristics from PTWs may be significantly different from the data derived from current regulatory test cycles, a new test is under development in the Geneva UN/ECE forum based on actual road data. The intent is that this should form the basis for a worldwide-harmonised cycle to be used to set future PTW emission standards. Once completed, tests carried out on this new cycle should provide a much better comparator for which to assess PTW emissions and fuel consumption against other vehicles. Research has been commissioned by the Department on this and other "road-cycles" that should enable a much more accurate comparison of emissions and fuel consumption to be made.

43. An important further point is that the percentage of emissions from PTWs will increase as the emissions from the car fleet decrease over time. A new PTW emission standard is currently under discussion in Brussels - a first stage in 2003/4 and a second stage (using the new test cycle) in 2006/7 is planned. The Task Force will keep these developments under review. The new standard is important. It has, for example, been estimated that PTWs currently produce around 4% of HC emitted, and without the stricter controls envisaged, this could have grown by up to 20% over the next 20 years or so.

CARBON DIOXIDE/FUEL CONSUMPTION

44. There is no standard fuel consumption test for PTWs that is equivalent to that used for cars. Some researchers use an ISO format test, while others record figures during the ECE 40/40.01 emissions test procedure. Nevertheless, NAE estimated that in 1998 PTWs contributed 0.38% of CO₂ emissions as a percentage of national traffic emissions. The European Commission's Auto-Oil programme estimated that they contribute between 0.35% and 0.37%. Again, these figures may be compared with the yardstick figure of 1% of national mileage travelled.

45. These figures need to be interpreted in the light of a number of other factors, including occupancy factors and performance in congested traffic conditions. It has been suggested that journeys in congested traffic are quicker by PTW than by car, however as CO₂ estimates are assessed on a gm/km basis, this should not influence comparisons. As mentioned above, the development of the new world-harmonised test cycle that better reflects real world driving by PTWs will provide a much welcomed basis for assessing and comparing PTW CO₂ emissions with other vehicle sources. Further work is planned in this area, but in the meantime the Task Force has noted that PTWs have better CO₂ performance than other vehicles.

NOISE

46. Since the late 1980s, all PTWs marketed in the UK have been subject to an EC requirement under which the largest machines are subject to a maximum noise output of 82dB(A). Under the EC's type approval requirements, standards for new machines range from 66dB(A) for the smallest mopeds to 80dB(A) for motorcycles over 175cc.

47. In addition, comprehensive UK regulations have been in place since 1995 that set strict controls on the sale and marking of silencers and also on their use. These regulations make it an offence to sell, to fit and to use a silencer for a PTW that is not appropriately marked to show that it meets "as new" noise standards. In addition they also require a silencer to be effectively maintained so as to avoid excessive noise.

48. Despite these very comprehensive controls, PTW noise is still a major cause for public complaint. It arises primarily, if not totally, from the illegal sale and use of non-compliant silencers on PTWs. Enforcement and control of illegal silencers is a matter for the police, but as the regulations are comprehensive, and therefore complex, the Task Force has prepared a summary of the requirements (Annex E) to aid better understanding by the enforcement bodies at point-of-sale and on the road. Broadly, unless the PTW was made prior to 1983, all PTW silencers sold for, and used on the road should carry an approval mark, they must not be marked "not for road use", and they should be in good and efficient working order.

FISCAL ISSUES

49. The Task Force has debated whether it would be desirable to incentivise the early introduction of the new PTW emission standards currently under development in the EU. One possible mechanism would be to change the VED arrangements for PTWs to reflect this. The Task Force recognises that further work is needed to assess the cost-effectiveness of such a proposal, especially given the high level of VED evasion and the limited scope due to the relatively low VED rates for PTWs in comparison to other types of vehicle. This will be taken forward by DETR in the next phase of the work.

50. The use of incentives in other fiscal areas, e.g. the application of VAT to protective clothing, have been discussed, but international rules on the application of VAT may prohibit such options. A summary of the rules in this area is in the process of being prepared.

ENFORCEMENT

51. Enforcement is an important issue for PTWs, both for VED and noise standards. On VED, statistics indicate that there is around 25% evasion of VED among PTWs. Evasion is highest among older machines, and among smaller machines. Improved enforcement of SORN (Statutory Off Road Notification) may have a role to play in reducing evasion. DVLA has been increasing the level of enforcement in the last year or so, and is about to begin a national advertising campaign reminding motorists of the need to tell DVLA when they take vehicles off the road. The advantage of SORN enforcement is that it can be done from the vehicle record, rather than relying on catching people in the act of using unlicensed vehicles. On noise, the Task Force considered that non-compliance among PTWs may be in the order of 20%.

52. The Task Force welcomes the development by DETR and the industry of guidance to Trading Standards Officers and the Police on recognising noise-compliant silencers, at point-of-sale and on the road. The Task Force considers it important to recognise the need for sensitivity in the handling of enforcement activities; an appropriate balance needs to be struck between the opportunity for rectification and the imposition of penalties.

Vehicle safety and Security

Introduction

53. This Task Force was set up to investigate how improvements in the area of vehicle safety and security could help the motorcyclist.

54. As two members of the Task Force (BMF and MCIA) are members of the Motorcycle Theft Action Group (MTAG) of the Home Office Vehicle Crime Reduction Action Team (VCRAT), it was decided that the Task Force should not duplicate that work but wait until VCRAT reported before discussing security and how VCRAT recommendations could be progressed by the Task Force. VCRAT has now reported and the Task Force will now address security. Also, since helmets are subject to international agreement it was decided not to include discussion on them, at least in the short term.

Progress

CONSTRUCTION

55. The Task Force needs to discuss primary or secondary safety. This will involve consideration of areas such as: Daytime Running Lights; lighting distinctly different from other vehicles, including the colour of lights; expansion in the use of Antilock Brakes; Leg Protection; Air Bags; the Advanced Safety Vehicle concepts from Honda, Kawasaki, Suzuki and Yamaha; and the new development of vehicles incorporating safety features such as the BMW C1. The Task Force membership will need to be expanded for this purpose.

56. Discussion has focused on the quality of replacement brake linings; ensuring the correct specification of replacement tyres; and ensuring the correct specification of replacement wheels.

57. To ensure the quality of replacement brake linings, the Task Force recommended to the AGM that the UK should urge the European Union that the motorcycle replacement brake lining element of the United Nations Economic Commission for Europe's Regulation 90 should be introduced into the European Union Directive for motorcycle braking (93/14/EEC). Since then the European Commission has given an informal commitment to introduce UNECE Regulation 90 into a future planned amendment of the EU Directive. The UK Government, in anticipation of this, has gone out to consultation recommending inclusion of the measure into UK law.

58. To assist in ensuring the correct specification of replacement tyres, it was decided that information which could help the rider find a suitable replacement should be made more easily available. The industry active in supplying replacement tyres has agreed to co-operate in making available the comprehensive information they have for the fitting of the correct tyre.

59. The Task Force decided it would not, at present, make recommendations on replacement wheels because replacement was not a frequent occurrence.

CLOTHING

60. Clothing was considered by the Task Force, including reinforcement for clothing and body armour. No recommendations have been developed. The European Union Personal Protective Equipment Directive was welcomed as an aid to consumer guidance.

MOTORCYCLE THEFT

61. As explained, this issue has not been addressed by the Task Force so far, but it will now be on the agenda for future work. However progress is nevertheless being made. The MTAG has responsibility for taking forward issues which have particular relevance to PTW theft. They take a keen interest in the progress being made on security devices for PTWs, secure parking, parts marking, new procedures at the DVLA and regulation of the salvage industry. They are also aware of the rising level of theft in the under 125cc category, including the increasing incidence of scooter theft. Theft is running at an average of over 20,000 machines per year. The recovery rate is estimated at no more than 28%. As a consequence insurance rates are going up.

62. Three sub-groups of MTAG have been set up to carry forward action points between meetings, covering pre-theft, post-theft and publicity issues.

63. The Government is tackling PTW theft in four ways:

- £950,000 has been earmarked to fund three vehicle crime projects by the National Criminal Intelligence Service (NCIS), one of which will aim to combat organised PTW theft. The projects will run for a two-year period.
- the provisions to regulate the salvage industry contained in the Vehicle Crime Bill will help to tackle the problem of PTWs being stolen for spare parts, or being "cloned" for resale.
- as mentioned earlier, Local Authorities have been given enabling powers to provide secured parking facilities for PTWs.
- future phases of the three-year vehicle crime reduction publicity campaign will include security messages aimed at owners of PTWs.

64. Also, the Policing and Reducing Crime Unit in the Home Office is considering taking forward a research project into PTW theft. A research evaluation of the three NCIS vehicle crime projects referred to above is currently out to tender and the contract is expected to be awarded shortly.

Research

Introduction

65. The Research Task Force was established primarily to identify research needed to support the further development of measures to improve motorcyclist safety. Its remit covers the motorcyclist in terms of accident liability, behaviour, training etc. First, consideration was given to a scoping study on PTW safety, which was prepared for the Road Safety Division of DETR by TRL. This study provided a review of work done to date and identified areas where further research was needed.

66. The Task Force has also met with representatives from the Department's Traffic Management and Tolls Division and the Highways Agency to discuss research they are undertaking which is relevant to motorcycle safety, on such topics as motorcycles in bus lanes (paragraph 33 refers) and road environment issues including collision with road furniture, problems with the height of road signs, motorway rutting, manhole covers and trench reinstatements.

Progress

67. Accident causation, training, and analysis of accident risk were identified as priority areas for research, and projects to be included in the first stage of a new programme of research on PTW safety were agreed. They are:

i) Analysis of police fatal motorcycle accident reports

68. This project, carried out by the Transport Research Laboratory, looked at the reports produced by the police for accidents resulting in a fatality. In the first stage of the project, a general analysis of the factors involved in two-wheeled motor vehicle accidents was undertaken. This included analysis of contributory factors data in over seven hundred fatal accidents. The second stage consisted of a more in-depth analysis of the most common accident types. A draft report was discussed at the November 2000 meeting of the Task Force. A final report is being prepared for publication in spring taking account of comments received.

ii) In-depth study of motorcycle accidents

69. This project will analyse a selected sample of two-wheeled motor vehicle accidents resulting in injury or death. The objectives of the research are to identify the behavioural mechanisms and other relevant factors involved in the accidents with a view to developing potential countermeasures and estimate their effectiveness for different rider types. The project, which starts in April 2001, is being carried out by the Accident Research Unit at the University of Nottingham and is expected to last three years.

iii) The older motorcyclist

70. This project will investigate increases in casualties among older motorcyclists, what are the characteristics of the motorcyclists, their reasons for motorcycling, how these factors affect their accident liability and what can be done to prevent them becoming involved in accidents. The project has been advertised for expressions of interest, and full tenders have been invited from selected contractors. Work is expected to start by April 2001 and last two years.

iv) Scoping study on motorcycle training

71. The objectives of this study are to undertake an extensive review of the content and practice of existing rider training courses, and to identify remaining gaps in knowledge and areas where further research might be needed. The study will look at how the courses are advertised, what constitutes the courses syllabi, and how they work in practice. The project will start in the 2001/02 financial year and is expected to take six months to complete.

v) Multivariate analysis of factors affecting the accident risk of motorcyclists

72. The objective of this research is to explore the interacting influences of various factors upon the trend for PTW casualties, in particular examining the factors that have influenced the recent trends among motorcyclist casualties. This research project is expected to start in the 2001/02 financial year and take one year to complete.

Statistics

Introduction

73. The Statistics Task Force was set up to explore the data on PTWs collected and disseminated by DETR; to look into any areas the information is misunderstood or deficient; and to consider how the data could be improved.

74. The Task Force agreed that the main issues to be considered should be:

- Numbers (stock both licensed/unlicensed and new registrations)
- Traffic
- Accidents
- Journey Purpose

Progress

NUMBERS

75. DETR has historically published end of year figures for licensed stock. The vehicle census has been produced on a quarterly basis for about 5 years. Analyses from the quarterly census illustrate how the licensed stock varies throughout the year. It was agreed that this was more useful and that DETR would consider how this information could be disseminated on a quarterly basis in future.

76. The Task Force discussed analyses of PTWs in classifications that would be more meaningful to the industry and user groups. The current breakdown by engine capacity was felt to be less useful than an analysis by type of machine (e.g. commuter, sports, off-road etc). It was agreed that the Motorcycle Industry Association (MCIA) would attempt to define these classifications in terms of attributes on the DVLA database, following which the Task Force would consider the options for presenting the data.

TRAFFIC

77. Some concern was expressed that automatic traffic counters (ATCs) may not give full coverage of the road and therefore some traffic may be missed. DETR provided photographic examples of the counters used, demonstrating full coverage of the road. The ATCs are re-calibrated every six months against manual counts at the same sites, to ensure their continued accuracy.

78. DETR uses short-term manual counting at about 9000 sites to produce its traffic data. The ATCs are used to provide growth and expansion factors so that annual average daily flow data can be calculated from the manual counts. Manual counts take place on all major roads and a small sample of minor roads for 12 hours during neutral months (April, May, June, September and October). Since motorcyclists would tend to avoid the busy major roads in favour of quieter major or minor roads, DETR is investigating ways of improving the sample of these types of road in order to make it more representative. This will ensure a more accurate picture of what is happening to the PTW accident rate. This work is likely to take place over the next couple of years with results available by 2004.

ACCIDENTS

79. The Road Accident Survey (STATS19) collects information on all road accidents involving personal injury which become known to the police. Very few, if any, fatal accidents do not become known to the police. However, research studies have shown that an appreciable proportion of non-fatal injury accidents are not reported so there may be some under-recording of motorcyclist casualties.

80. The classification of severity of injury, in the survey, has been defined to enable police officers to make a determination at the scene without reference to medical data. However, there are difficulties in distinguishing between serious and slight injuries and studies have shown that police are more likely to underestimate the severity of casualty. DETR will examine ways to improve the coding.

81. There had been some concern that there was not enough coverage in the annual report Road Accidents Great Britain (RAGB) of the under-reporting of accidents or of how a more complete estimate could be obtained. However, this is referred to in the "Notes" section and a research report by TRL entitled "National Hospital Study of Road Accident Casualties" was included in the 1996 RAGB report. This article includes an assessment of misrecording of severity of injury. (Articles from previous years are listed in the Section of RAGB headed "Review Topics".)

82. The collection of road accident data is a collaborative process between central government, the police and local authorities and changes to the survey are made with the agreement of representatives of each of these in quinquennial reviews. DETR has proposed that data on contributory factors to accidents should be collected and is doing so from those police forces who are voluntarily collecting this material. This is being analysed with a view to consideration of introducing this data at the next quinquennial review.

83. Further research intended is to examine the possibility of matching accident records to claims received by insurance companies. This is another area where careful consideration will have to be given to any emerging data since it is not clear what data would be released by insurance companies.

JOURNEY PURPOSE

84. The main source of journey purpose information is the National Travel Survey. This household survey collects a week's travel information from about 3000 households a year. However for comparatively rare modes such as motorcycling this produces a small sample. As part of a review of Transport Statistics and its relativity to the new transport policies it has been agreed to double the sample size so in future there should be more information available on motorcycling.

Next Steps

85. The AGM has already made a substantial contribution in assisting the Government to develop its policy on motorcycling. There is a fuller understanding of motorcycling issues and this has allowed the Government to:

- i) better recognise the needs of motorcyclists;
- ii) focus more clearly on the key issues; and

iii)develop a programme which will allow further decisions to be taken on motorcycling strategy.

86. Recognition of motorcycling needs has allowed Government to give better guidance to local authorities on how to provide for motorcyclists. The Task Forces, which have represented a partnership of interested parties both in the public and private sectors have brought together the relevant expertise. While the Government had already recognised the benefits that can be enjoyed by some individuals through motorcycling, and the contribution that moped and motorcycles can make to integrated transport, the AGM outputs, as described above, are already feeding into further policy development.

87. The Task Forces have all developed forward programmes which they are to undertake to complete their work. The issues include:

- integration trials
- vehicle security
- improved data
- research on congestion, emissions and safety.

88. The research programme is bearing upon some of the more complex issues, on which we need more information. Results will become available between now and the next 3 years. It will be during this period that the Government will be able to fully determine its motorcycling strategy.

ANNEX A

Advisory Group on Motorcycling

Terms of Reference

The Terms of Reference for the Advisory Group are:

- a) the safety record of motorcyclists and agree on measures to be taken to improve safety, including general road user behaviour and consideration of training and licensing arrangements;
- b) the environmental impact of motorcycles and to agree what measures, if any, should be taken in light of the conclusions reached by the Group; and
- c) the role of powered two wheelers of all sorts in an integrated transport policy including the scope for traffic management measures that are beneficial to motorcyclists and contribute to that policy.

Advisory Group Members

Motor Cycle Industry Association

British Motorcyclists Federation

Despatch Association

Motorcycle Retailers Association

Motorcycle Action Group

Motorcycle Rider Training Association

Automobile Association

RAC Foundation

Local Authority Road Safety Officers' Association

Association of London Borough Road Safety Officers

Local Government Association

ACPO Traffic Committee Secretariat

Annex B

Local Authority Initiative: Summary of Results 2000-2005/6								
	Bus Lanes	Bus Lane Investigation	HOV	ASL	Parking	Secure parking	Green Transport Plans	Use Targets
Total Before July 2000	12	48	6	4	106	65	14	2
Before July 1999	10	28	3	2	90	n/a	7	1
	7	0	2	0	47	0	0	0
	Forums & User Consultation	Recognition of Benefits	Explicit No Action, Or Negative Views	Scooters For Parking Attendants	Travelwise	Charging Exemption or reduced rates	Consideration in Infrastructure Planning	Encouragement
Total Before July 2000	41	61	7	1	4	17	14	16
Before July 1999	18	42	1	1	1	4	14	7
	2	0	0	0	4	0	0	0
	Unspecified Improvements	Safety Concerns	Provision for Job Seekers	Safety Initiatives	No car Lanes	Interest free loans to employees	Encourage workplace secure parking	Improved Roads maintenance
Total Before July 2000	11	56	8	41	2	1	6	31
Before July 1999	1	22	3	32	1	0	0	0
	0	0	1	4	0	0	0	0
	Exemption from traffic restrictions	Exemption from reduction targets	PTW viability study	Monitoring of use and parking spaces+AC70	Campaigns and Training (CBT etc)	Low cost hire schemes		
Total Before July 2000	2	2	4	5	44	1		
Before July 1999	0	0	0	0	0	0		
	0	0	0	0	0	0		
		1999	2000-					

			2005/6					
Total Number of LA Plans Surveyed Total Number of Measures		7	156 30					

ANNEX C

Powered two wheelers - fleet profile

1. The size of the national fleet has varied significantly over the past 20 years. Estimates prepared by the Society of Motor Manufacturers and Traders (SMMT) show that the number of PTWs has varied from 1.37m in 1980, to 0.94m in 1993 and 1.14m in 1998. Within these figures, the motorcycle proportion has increased from 75% to 90%, while the moped proportion has decreased from 30% to 10%. Annual sales of PTWs have similarly fluctuated over the past 20 years, varying from 315,000 in 1980, to 47,000 in 1993, and 120,000 in 1998.

2. Variations between various estimates of the size of the national fleet prepared by different organisations should also be noted. The above industry figures - indicating a national fleet of the order of 1,000,000 - are in contrast to other statistics:

a) Government figures indicate a national fleet of 760,000 at the end of 1999. However, this will exclude some seasonal vehicles that are used and licensed for only part of the year; latest figures of motorcycles licensed at the end of September 2000, indicate a stock of nearly 890,000. These figures are however based on registered vehicles in the motorcycles tax class. It is known that the VED evasion rate among motorcycles is around 25%, and this would explain much of the difference between the figures.

b) an EC research study published in 1999 and a figure of 800,000, but this included motorcycles only, and excluded vehicles less than 50cc.

c) an earlier EC programme of studies - Auto-Oil II - used a figure of 600,000.

The group is currently assuming a national fleet size of 1,000,000.

3. The *age profile* of the fleet is also an important consideration for the estimation of emissions from motorcycles. Of the national fleet, nearly 60% is seven or more years old.

4. The *average annual* distance travelled by PTWs is also a factor in calculating emissions from such vehicles. This is given in Road Accidents Great Britain 1998 as 4000 million vehicle kilometres, or approximately 4000km per vehicle.

ANNEX D

Powered two wheelers - emission factors

1. The requirement to type approve PTWs for emissions did not apply in the UK until June 1999, and the requirement applies only to new models introduced after that date. Such new models may therefore be assumed to comply with the EC Directive 97/24.

2. There is however little readily available information on the emission figures for the existing fleet. However, it is reasonable to assume that the majority of the fleet will fall into three categories: those which comply with ECE regulation 40.01; those which comply with ECE regulation 40; those which comply with neither of these standards. The equivalent standard for mopeds is ECE regulation 47. Using certain assumptions on emissions, a report was prepared for the EC by Dutch researchers TNO, entitled *The Motorcycle Emission Situation* and published in June 1999. The emission factors used (motorcycles only) were:

	Pre-1993	1993-1999
Carbon monoxide	24.1 g/km	22.4 g/km
Hydrocarbons	3.82 g/km	2.43 g/km
Nitrogen oxides NO _x	0.35 g/km	0.25 g/km

3. The group has combined these TNO emission factors with the figures for the national fleet and annual mileage to produce the following total emissions from the national fleet in 1998:

Carbon monoxide	95,000 tonnes
Hydrocarbons	13,150 tonnes
Nitrogen oxides	1,300 tonnes

4. These figures may be compared to the 1997 emission estimates from the National Atmospheric Emission (NAE) Inventories calculated on behalf of the Government by NETCEN:

Carbon monoxide	76,900 tonnes
Volatile organic compounds	20,700 tonnes
Nitrogen oxides	480 tonnes

Particulates (PM₁₀)

350 tonnes

5. There is reasonable agreement between these two estimates, but the group plans to consider further the differences between them.

6. These figures may then be expressed as a percentage of traffic emissions arising from PTWs, as shown in the following table. These percentages should be compared with a possible yardstick figure of 1%, which represents the percentage of national mileage covered by these vehicles.

		CO	HC	NO_x
Auto-Oil II*	2000	1.7%	1.6%	0.12%
	2005	2.2%	2.6%	0.22%
	2010	3.2%	5.8%	0.62%
NAE	1997	2.0%	3.2%	0.05%
ACEM**	1994	4.3%	6.7%	0.2%
	2010	4.1-4.6%	6.2-6.8%	0.36-0.40%
MCI	1998	3.0%	2.1%	0.14%

*The Auto-Oil Programme II Cost-effectiveness study, Part III, Annex B9, published in August 1999.
**The European Association of Motorcycle Manufacturers (ACEM) Pollution Research Programme on Motorcycles, published in March 1998.

ANNEX E

The MCI Guide to Moped and Motorcycle Exhaust System Markings

Aim

The aim of this guide is to assist police officers identify illegal exhaust systems with a view to rectification or prosecution.

Subjective Identification

The noise limits imposed on new motorcycles have been very stringent for many years. Certainly any motorcycle fitted with an efficient original equipment (OE) or replacement exhaust system (RESS) is most unlikely to cause offence or be illegal. This means that if a motorcycle "sounds noisy", its exhaust system is probably illegal and is worth inspecting for the appropriate markings.

Illegal Exhaust Systems

These generally fall into two categories; the poorly maintained, and more commonly, the "race or custom system". The later are in widespread use and are particularly popular among the riders of "race replica" and "custom or "chopper" style machines. Race and illegal custom silencers should bear the marking "not for highway use" or similar wording, however this may have been erased or removed. It is therefore highly probable that the exhaust system of a "noisy bike" will either be unmarked or have "not for highway use" marked on it. Either way these are evidence of an offence.

Markings and their Locations

These are required to be *"indelible and clearly legible, even when fitted to the vehicle"* (C&U and 92/61 Annex V). A popular practice among illegal RESS manufacturers is either to use chrome foil stickers or to "hide" the markings on the inward face of the silencer or in another inconvenient location.

Table 1: Original Equipment Silencer Marking (mopeds and motor cycles)		
This table refers to the exhaust Systems fitted to machines when they were made.		
Item	Date of first use	OE Marking requirements
1	Pre 1 April 1983	No requirement
2	Y reg. prefix from April 1983 to N reg. suffix to 31 January 1996	Make and Type (clearly legible and indelible)
3	N reg. suffix from 1 February 1996 to present	1. Trade name or mark of the manufacturer, and 2. Trade name given by the manufacturer, and 3. (<i>Not mopeds < 50kph</i>) EU e mark or UNECE E mark (e.g. e11 or E11 for UK), together with the silencer/exhaust system

		approval number (e.g. 007). 4. All to be clearly legible, even when fitted, & indelible)
--	--	---

Table 2: Marking requirements for mopeds and motor cycle silencers in-use		
This table refers to the markings that should be on any motorcycle, scooter or moped being use on the road except for machines first registered <i>before January 1st 1985</i>		
Item	Date of first use start and finish dates for Registration (Reg.) prefix/suffix	Marking requirements
1	All	No silencer used on the road must bear the marks NOT FOR ROAD USE
2	Pre 1 April 1983	1.No requirement.*
3	Y reg. from 1 April 1983 to B reg. up to 31 December 1984	2.O.E. marking (see Table 2). 3.No requirement for replacement silencers.*
4	B reg. from 1 January 1985 to H reg. up to 31 March 199	4. OE marking (see Table 2) or 5. If fitted as a replacement prior to 1 February 1997, name or trade mark and part number of the silencer 1manufacturer. 6. BS AU 193/T2 or 7. BS AU 193a:1990/T2 or 8. BS AU 193a:1990/T3 or 9.An International Standard mark that is equivalent to BS
5	H reg. from 1 April 1991 to N reg. up to 31 January 1996	10. OE marking (see Table 2) or 11. If fitted as a replacement prior to 1 February 1997, name or trade mark and part number of the silencer manufacturer, or 12. BS AU 193a: 1990/T3 or 13. An International Standard mark that is equivalent to BS
6	N reg. from 1 February 1996 to present	14. OE marking (see Table 2) or 15. If fitted as a replacement prior to 1 February 1997, name or trade mark and part number of the silencer manufacturer. 16. BS AU 193a: 1990/T3 or 17. An International Standard mark that is equivalent to BS
*Note - Some silencers may be marked 'Pre 1985 MC only'. This requirement is enforceable only at point of sale and not when a machine is in use (see Table 4 below).		

Table 3: Marking requirements for silencers/exhaust systems at Point of Sale	
All replacement silencers/exhaust systems offered for sale must be marked:	
1.	OE marking (see Table 2) or
2.	BS AU 193/T2 or
3.	BS AU 193a:1990/T2 or
4.	BS AU 193a:1990/T3 or
5.	An International Standard mark that is equivalent to BS or
6.	NOT FOR ROAD USE or
7.	PRE 1985 MC ONLY, unless
8.	sold for scrap.
<p>Note: Packaging or labels for replacement silencers must contain the name, trade name or trademark and the address of the manufacturer of the silencer or exhaust system. Instructions as to maintenance and as to methods of fitting to certain models must also be provided in certain circumstances.</p>	

Table 4: Noise Limits for Motorcycles (for Information only)				
Item	Date of first use	Mopeds	Motor cycles	Reference
1	Pre 1 April 1983	No requirement	No requirement	
2	1 April 1983 to 31 March 1991	74dB(A)	Up to 80cc = 79 dB(A) 81 - 125cc = 81 dB(A) 126 - 350cc = 84 dB(A) 351 - 500cc = 86 dB(A) Over 500cc = 87 dB(A)	C&U Schedule 7A and directive 78/1015/EEC
3	1 April 1991 to present*	75 dB(A)	Up to 80cc = 78 81 - 175cc = 80 Over 175cc = 83	C&U Schedule 7A and directive 87/56/EEC
*NB: these limit values will be tightened from 2003				

Contents

Interim Report of the Advisory group on Motorcycling (*Adobe Acrobat 19KB*)

Integration and Traffic Management (*Adobe Acrobat 9KB*)

Environment and Fiscal (*Adobe Acrobat 11KB*)

Vehicle Safety and Security (*Adobe Acrobat 8KB*)

Research (*Adobe Acrobat 7KB*)

Statistics (*Adobe Acrobat 8KB*)

Next steps (*Adobe Acrobat 4KB*)

Annex A - Advisory Group on Motorcycling (*Adobe Acrobat 6KB*)

Annex B - Local Authority Initiatives: Summary of Results 2000-2005/6 (*Adobe Acrobat 7KB*)

Annex C - Powered two wheelers - fleet profile (*Adobe Acrobat 7KB*)

Annex D - Powered two wheelers - emission profile (*Adobe Acrobat 11KB*)

Annex E - The MCI Guide to Moped and Motorcycle Exhaust System Markings (*Adobe Acrobat 20KB*)

. Viewers with visual difficulties may find it useful to investigate services provided to improve the accessibility of Acrobat documents -- <http://access.adobe.com/>

