

# **Proposals for managing workplace transport risk – a route map.**

**Consultative Document.**

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## SUMMARY

This Consultative Document (CD) sets out the Health and Safety Commission's (HSC) proposals for managing workplace transport risk in Great Britain by means of a route map providing clear directions from topic headings identified by stakeholders to existing regulations and to guidance.

The route map is intended to help managers understand and control workplace transport risks. It sets out the four key areas to be looked at as part of the risk assessment:

- Site layout and design
- Vehicle selection and maintenance
- Personnel matters
- Management responsibilities

The route map describes the basics of what employers need to do to manage the work safely for these areas. It also gives suggestions for practical improvements in these areas. The route map will provide a framework in which employers and workers can understand the role of the existing workplace transport related regulations and guidance. This will provide the basis for an easy system of reference. When the route map is published it will be accompanied by supporting guidance giving advice on how to meet the requirements it sets out. The guidance is not included in this consultation document because much of it already exists and has been published, for example HSG136; it is not our intention to duplicate or replace good useful guidance. Instead we will be providing clear links from the route map to the existing guidance and filling in any gaps with new guidance.

The workplace transport route map will apply to **all** sectors of industry.

The HSC intends that the proposed route map achieves the objectives of practicality and proportionality. If it does not, or if there are problems of practical application that have not been identified, the HSC would like to hear from you in response to this consultation exercise.

Included in the Consultative Document are a number of key questions, on which we seek your comments.

You can access an electronic version of the questionnaire via the Health & Safety Executive (HSE) website. Alternatively, you can download a copy of the questionnaire from the website, which you can submit via the website.

**Further details on responding to this consultation are given on page 7.**

All responses will be acknowledged, and a summary of the main issues raised will be produced once the consultation period has been completed.

## **HSE STATEMENT ON OPENNESS**

The HSC tries to make its consultation procedure as thorough and open as possible. Responses to this Consultative Document will be lodged in the HSE's Knowledge Centre after the close of the consultation period where they can be inspected by members of the public or may be copied to them on payment of the appropriate fee to cover costs.

Responses to this Consultative Document are invited on the basis that anyone submitting them agrees to their being dealt with in this way. Responses, or part of them, will be withheld from the Knowledge Centre only at the express request of the person making them (under the Code of Practice on Access to Government Information; Environmental Information Regulations 1992 and the Data Protection Act 1998). In such cases a note will be put in the index to the responses identifying those who have commented and have asked that their views, or part of them, be treated as confidential.

## **INTRODUCTION TO THE CONSULTATION PROCESS**

1. HSC believes that consulting with stakeholders ensures an open and transparent approach to decision-making, which is essential if policies and decisions are to have widespread ownership and reflect the needs and aspirations of the people they will affect. The Commission then decides on the best way forward, based on an interpretation and analysis of the results of the exercise.
2. This Consultative Document sets out the HSC's proposals for a route map for workplace transport. The consultation period will run from **5 June 2006** and will close on **22 September 2006**. This Consultative Document includes a number of key questions on which we are seeking a response, and these are set out in the questionnaire on pages 30-38.
3. Responding to this consultation gives you a real opportunity to influence the way in which these proposals are taken forward. You can help make our analysis easier by filling in the questionnaire on-line or downloading a copy of the questionnaire from our website and returning your response to us via the website. However, responses by post to the address at the end of this introduction are still most welcome.
4. This consultation is a genuine request for your views – because of the wide-ranging application of the proposals we need as much information as possible to make them relevant and workable in the real world. Your comments are important and this is an opportunity for you to influence the outcome if you think we haven't got something quite right.

### **What we would like you to do**

5. Please tell us what you think about these proposals. Let us have your comments by **22 September 2006**. Responses can be made directly online at the HSE website:

**[www.hse.gov.uk/workplacetransport/](http://www.hse.gov.uk/workplacetransport/)**

6. We have also made an electronic version of the questionnaire in Word format. This is available from the website. This version may be completed offline and returned via the website.
7. Using the online response facility or Word version of the questionnaire will allow us to analyse your responses as accurately and as quickly as possible. By whatever means you reply, please do not feel limited by the questionnaire; we will welcome any comment you wish to make, in whatever form. For example, you may have comments on the cost and benefits set out in the Regulatory Impact Assessment.
8. Please remember that it would be helpful if you could set out your reply so that we can see easily which proposal or part of a proposal you are commenting on.

## **BACKGROUND TO THE PROPOSALS FOR MANAGING WORKPLACE TRANSPORT RISK**

9. The programme on Workplace Transport is part of HSE's Fit for Work, Fit for Life, Fit for Tomorrow Strategic Delivery Programme (Fit3) that aims to deliver a 5% reduction in the incidence rate of work-related fatal and major injuries from workplace transport accidents by the end of the 2007/2008 financial year, against a 2004/05 baseline.
10. In the longer term, the HSE aims to deliver a 10% reduction in the incidence of work-related fatal and major injuries by 2010 in line with the *Revitalising Health and Safety* targets, from the 1999/2000 baseline.
11. In deciding the best way to set about the task, the programme on workplace transport commissioned and collected research into the causes of workplace transport accidents and ways of preventing them. It also looked at specific projects involving industry groups or individual employers aimed at tackling specific problem areas. Information about this and other work of the programme on Workplace Transport is available on the HSE website at:

[www.hse.gov.uk/workplacetransport/](http://www.hse.gov.uk/workplacetransport/)

12. The information the programme uncovered led us initially to think about introducing more stringent training for drivers. However, our stakeholders told us that this was not enough. They told us that this, and simply revising or refocusing the regulations would not do enough to address the real issue: the culture surrounding working with vehicles.
13. The findings of other research revealed that though training is essential to provide the individual with the necessary skills, the way in which individuals choose to perform a task is more likely to be influenced by attitudes and beliefs.
14. This reinforced what our stakeholders had talked about: that a way of changing the culture in organisations is required.
15. So, HSE has explored other ways forward. We examined the approaches adopted by some overseas administrations. For example, we considered the dual legislative/standards approach imposed by the United States authorities, but we thought this was too prescriptive. We also considered the high level standards promoted by the Australian State governments, but found these do not provide the type of guidance our stakeholders are asking for.
16. While we were doing this work, our HSE colleagues looking at workplace stress were developing a set of management standards to help employers and workers to deal with the problem of stress in the workplace. Taking into account their successful approach, we investigated whether developing a similar framework for our existing regulations and guidance in

the form of a route map for Workplace Transport would be the best way forward.

17. As a first step we tested this view in regional workshops (Birmingham, Cardiff, Falkirk, Langley Park, Co Durham, London, Newcastle, Nottingham and Warrington) with external stakeholders to develop the proposals. These were based on a pilot exercise in the Midlands facilitated by the Transport Research Laboratory (TRL). These workshops were hugely popular and we are indebted to the many stakeholders who gave their time and shared their views so willingly and honestly. Although the anonymity of the participants has been maintained we know that we reached stakeholders from all sectors, and that the people who attended covered the whole spectrum of our stakeholders: workers; drivers; trade unionists; Local Authority officials; trainers; safety managers; employers and academics. We listened closely to their opinions. The results of these recent workshops have guided our thoughts about the number and type of these proposals. Further details of the workshops can be found on the HSE website at:

[www.hse.gov.uk/workplacetransport](http://www.hse.gov.uk/workplacetransport)

18. We now believe that a route map will provide an easy to understand and readily accessible framework of current legislation, guidance and agreed good practice. It will also set out alternative ways to comply, where these exist, which should be particularly useful for Small and Medium Sized Enterprises (SME's) who have many demands on their limited time and resources. The proposals at present are a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented. We are asking for your comments on the proposed topic headings and the states to be achieved set out in this consultative document. Once these are agreed the pointers to guidance at a more detailed level will be put in place, and these will ultimately provide directions to detailed descriptions of minimum acceptable performance.

19. It is not our intention to use these proposals to extend current legal requirements in any way. Benchmark safety standards representing the minimum standards inspectors will expect to see in each area of workplace transport risk are being tested by inspectors in the course of the workplace transport programme directed inspections for 2006/07. These benchmarks will be published alongside the route map following this consultation.

20. The full list of proposals is set out at Annex A (page 11).

## **CONTACTS FOR RESPONSES AND ENQUIRIES**

### **Online Responses**

21. Please register and visit the Managing Workplace Transport – a route map consultation pages using the links at <http://consultations.hse.gov.uk/>

22. There is a direct link to the Managing Workplace Transport – a route map consultation home page:  
<http://consultations.hse.gov.uk/inovem/consult.ti/wptms/>

### **Word Format Responses**

23. A downloadable version of the questionnaire in Word format is available from <http://consultations.hse.gov.uk/>

24. Direct link to the Managing Workplace Transport – a route map document download page:  
<http://consultations.hse.gov.uk/inovem/consult.ti/wptms/listdocuments>

25. Once completed offline, your response should be returned via the website <http://consultations.hse.gov.uk/>

Direct link to the consultation upload page:

<http://consultations.hse.gov.uk/inovem/consult.ti/wptms/respond>

### **Other Enquiries**

26. If you have any queries on this consultation document or any points that require assistance or clarification, please contact in the first instance:

**Carol Spence**  
**8NW Rose Court,**  
**2 Southwark Bridge**  
**London**  
**SE1 9HS**  
**Tel: 020 7 717 6127**  
**E-mail: [carol.spence@hse.gsi.gov.uk](mailto:carol.spence@hse.gsi.gov.uk)**

## **HSE STATEMENT ON CONFIDENTIALITY**

If you reply to this consultation document in a personal capacity, rather than as a post holder of an organisation, you should be aware that the information you provide may constitute 'personal data' in the terms of the Data Protection Act 1998. For the purposes of this Act, HSE is the 'data controller' and will process the data for health, safety and environmental purposes. HSE may disclose this data to any person or organisation for the purposes for which it was collected, or where the Act allows disclosure. You have the right to ask for a copy of the data and to ask for inaccurate data to be corrected.

## **DETAILS OF WHOM TO CONTACT IF YOU WISH TO COMPLAIN**

If you are not satisfied with the way in which this consultation exercise has been conducted you can complain by contacting the line manager of the persons named in this consultation document to whom comments on the proposals are to be sent. In this instance, the person to contact is:

**Dr Elizabeth Gibby**  
**Director**  
**Injuries Reduction Programme**  
**Health and Safety Executive**  
**2 Southwark Bridge**  
**London**  
**SE1 9HS**  
**Tel: 0207 717 6338**  
e-mail [liz.gibby@hse.gsi.gov.uk](mailto:liz.gibby@hse.gsi.gov.uk)

We aim to reply to all complaints within 10 working days. If you are not satisfied with the outcome of your complaint, you can raise the matter with the Chief Executive of HSE – Geoffrey Podger, at the same address. You can also write to ask your MP to take the case up with us. Your MP may refer the matter to the Parliamentary Commissioner for Administration (the Ombudsman) who will investigate your complaint.

## **ANNEX A:**

### **Managing Workplace Transport Risk – a route map <sup>1</sup>**

#### **Introduction**

1. In most workplaces things have to be done to prevent or control the dangers (risks).
2. The starting point should always be to try to get rid of risks altogether. For workplace transport this could be only allowing vehicles access to certain parts of the site or at certain times of the day. If restrictions like this are not possible, the next step is to think about other ways to protect everyone who uses the site. For example thinking about putting in barriers to keep vehicles and pedestrians apart.
3. The route map is intended to help those in charge of workplaces and vehicles decide what sort of things to think about and put into place. They cover the following areas:
  - Site layout and design
  - Vehicle selection and maintenance
  - Personnel matters
  - Management responsibilities

#### **Definition**

4. Workplace transport covers any vehicle that is used in a work setting. It specifically excludes transport on the public highway, air, rail or water transport, and specialised transport used in underground mining.

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<sup>1</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

## 1. Site Layout and Design<sup>2</sup>

Where transport has to be used, it is important that vehicles and pedestrians are able to work safely.

### **The proposals:-**

- where possible the site is arranged so that vehicle movements are eliminated or kept to a minimum
- the site shall be constructed and set out in such a way to make it safe for the people and vehicles using it

### **What should be happening / states to be achieved:**

- traffic routes, preferably one-way, should be planned, signposted and, where possible, kept separate from doors, gates and routes for pedestrians;
- where vehicles and pedestrians use the same routes they should be separated, with appropriate crossing points clearly marked and signposted where necessary;
- traffic routes should avoid sharp bends and passing close to vulnerable items, e.g. fuel pipes;
- road and route junctions should be kept to a minimum with well signposted warnings of any potential obstructions/hazards being given, e.g. limited headroom;
- traffic entrances should be wide enough, ideally to allow 2 vehicles to pass each other;
- speed limits appropriate to the site should be set and clearly signposted;
- sufficient and safe parking areas should be provided for all vehicles using the site;
- clearly marked loading bays should, as far as possible, be situated in safe locations;
- wherever possible, roads etc. should be constructed of tarmac, concrete or other suitable material and provide a stable surface for vehicle movements and operations;
- all roads and areas (including temporary worksites) where traffic movements take place should be adequately lit;
- where signposts etc. are used they should be constructed to Highway Code standards.

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<sup>2</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

## 2. Vehicle selection and maintenance<sup>3</sup>

Employers and duty holders must make sure that all vehicles being used are right for the job. They must also make sure that they are maintained and inspected properly.

### **The proposals:-**

- when choosing vehicles employers and others must make sure that they are safe and allowed to be used in Great Britain.
- employers must make sure that vehicles can do the job that's required of them;
- vehicles are chosen that are safe to maintain.

### **What should be happening / states to be achieved:**

- vehicles should be stable whatever job they are doing;
- drivers should be able to get in and out of the cab safely and easily;
- drivers should be able to get to any parts of the vehicle they need to reach safely and easily;
- drivers should have as much all round vision from their cabs as possible;
- horns, lights and other devices should be fitted when considered necessary;
- vehicles should have seats, and seat belts or other restraints, that are safe and comfortable and meet the needs of the job;
- people should be protected against coming into contact with dangerous parts of the vehicle;
- vehicles should be suitable for any loads they carry. They should have suitable strongpoints to make sure that loads are carried securely;
- vehicles should provide protection from bad weather, extremes of temperature, dirt, dust and fumes, etc.;
- if needed vehicles should have roll protection and restraints to prevent injury should the vehicle overturn;
- it should be possible to prevent vehicles from moving, for example, by applying brakes and removing the keys;
- where fitted, tyres, lights and indicators etc. should be checked at the start of every shift.

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<sup>3</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

### 3. Personnel

#### 3.1 Competence<sup>4</sup>

To make sure that workers have the skills and knowledge to do their jobs safely.

##### **The proposals:**

- workers need to be trained, preferably to recognised standards;
- worker ability to drive safely needs to be assessed regularly;
- refresher training should be given if it is considered appropriate;
- the level of supervision will depend on ability.

##### **What should be happening / states to be achieved:**

- the ability of a worker should be assessed before they are allowed to drive. Training should be offered where appropriate;
- the information on certificates and qualifications etc. held by new workers should be checked with the issuing authority to make sure they are valid;
- employers should encourage workers to take and pass the appropriate qualifications;
- there needs to be a policy on checking ability. The policy should say when and how often checking should take place. The same should apply to refresher training;
- training should always be thought about before any changes in the workplace are made. Training may be needed because there are new vehicles or a change in how the work is done. It could also be required because a worker has become disabled;
- there should always be some sort of supervision. Skill and knowledge can deteriorate over time if good practice is not reinforced.

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<sup>4</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

### 3.2 Fitness to Drive<sup>5</sup>

Aimed at ensuring that drivers/operators are fully fit to be driving/operating machinery, and that they understand their legal duties in respect of fitness to drive.

#### **The proposals:-**

- medical fitness standards for all drivers are established and clearly understood by employers/employees/self employed;
- systems are in place to ensure that agreed fitness standards of individuals are maintained;
- systems are in place locally to respond to changing needs of individuals.

#### **What should be happening/states to be achieved:**

- medical (physical and mental) fitness standards should be drawn up using the guidance provided by HSE and if necessary with advice from an occupational health practitioner;
- an assessment should be made of all new employees before starting work to ensure that these standards are met initially;
- ensure that the standards are maintained throughout the period of employment by management systems which include periodic fitness assessments, monitoring sick absences, and line management supervision;
- a policy should be developed in consultation with staff on the use of drugs and alcohol; this should include evidence that random testing has been considered. The policy statement should include systems for the self reporting of use of prescription and 'off the shelf' medication;
- employers should ensure that fitness levels of the driver are matched to appropriate driving tasks;
- care should be taken to ensure that people with disabilities are not unnecessarily disadvantaged;
- employees should be given safety information about the products they use or may encounter during the course of their work, particularly if the products are hazardous;
- employees should know the locations of, and be given sufficient information to, operate any safety equipment they may be required to use during the course of their work, e.g. first aid kit, evacuation chairs etc.

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<sup>5</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

### 3.3 Visiting and Agency Drivers/Operators<sup>6</sup>

To make sure that visiting and agency drivers are trained and qualified to do their jobs and to make sure that they are fit to drive and understand what they have to do under health and safety law.

#### **The proposals:-**

- the drivers know what to do and are qualified to drive/operate the vehicles they have been given to do the work;
- the drivers are fit to drive and that the required levels of fitness are maintained.

#### **What should be happening/states to be achieved:**

- certificates etc. held by new drivers should be checked to make sure that their qualifications are valid;
- the ability of a worker should be assessed before they are allowed to drive. Training should be offered where appropriate;
- all new workers should have fitness assessments before they are offered work. This is to make sure that they are given jobs that they are capable of doing;
- drivers should know what they have to do under health and safety law;
- drivers should know what the safety signs and signals are;
- drivers should know enough English so that they can work safely;
- drivers should be given health and safety information. If they have difficulty understanding English this should be in their own language.

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<sup>6</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

## **4. Management Responsibilities**

### **4.1 Management and risk assessment<sup>7</sup>**

**To ensure that duty holders know what hazards/risks are in their workplaces and that they act to prevent or control them.**

**The proposals that:**

- duty holders should carry out and monitor risk assessments;
- everyone knows what they have to do and does it.

**What should be happening / states to be achieved:**

- everyone should be encouraged to improve health and safety.
- workers should not accept unsafe practices;
- controls identified in the risk assessment are introduced and monitored by employers in liaison with the workforce;
- any contract should spell out the need for workers to act safely. It should also clearly spell out the penalties for those who do not act safely;
- health and safety requirements are identified at the contract stage. These should be communicated to all those involved, including agency and contract drivers;
- checks should be made to make sure that agency, contract workers and delivery drivers all meet safety requirements;
- duty holders should know what action to take when workers fail to work safely;
- health and safety should always be thought about before any changes are made in the workplace. The changes may be because there are new vehicles or a change in how the work is done. It could also be required because someone has become disabled.

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<sup>7</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

## 4.2 Communication<sup>8</sup>

### **Aimed at ensuring that:**

- duty holders involve workers (or safety representatives) in making decisions about health and safety;
- health and safety information is up to date and given out regularly;
- there is co-operation when a workplace is shared to make sure that all are kept safe.

### **The proposals:-**

- workers receive information about how to work safely;
- workers and duty holders co-operate on matters of health and safety.

### **What should be happening / states to be achieved:**

- risk assessments should show what information is needed and when;
- accident reports should be looked at to show what went wrong and where things could be improved;
- workers should be asked for their views;
- duty holders and workers should co-operate about working safely;
- workers should know what they have to do under health and safety law;
- workers should have the information they need to work safely, including information about the products they use or may come across during their work, particularly if the products may be dangerous;
- young, new and disabled workers may need extra help and information;
- workers may also need additional advice about recognising their physical limitations as they get older.

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<sup>8</sup> This is a mixture of existing regulatory requirements and good practice which will need to be signposted before the route map is implemented

## **ANNEX B : INITIAL REGULATORY IMPACT ASSESSMENT (Pre consultation)**

### **PURPOSE AND INTENDED EFFECT**

#### **Issue**

1. The Workplace Transport Route Map provides a framework for a suite of guidance aimed at improving competence in operators and supervisors. It also sets benchmarks, which describe safe practice. Its aim is to reduce the number of accidents by influencing attitudes and beliefs, i.e. the way in which individuals choose to perform a task. Workplace Transport remains the second highest killer of workers in GB industry and research has revealed that a way of changing the safety culture in organisations is required.

#### **Objectives**

2. Introducing the Route Map is intended to reduce accidents occurring as a result of workplace transport operations by addressing all aspects of work involving both vehicles and the pedestrians in the vicinity of those vehicles, including the way the work is planned, organised and managed. To do this the Route Map specifically covers:
  - training & competence
  - visiting & agency drivers
  - fitness to drive
  - information provision
  - risk assessment and management responsibilities
  - workplace layout
  - involvement and guidance

#### **Options considered**

3. At its meeting in February 2004, the HSC asked HSE to consider non-regulatory approaches to this issue.

#### **Option 1: Do nothing**

This is difficult to defend given the numbers of deaths and injuries caused by Workplace Transport. We do not believe that other steps alone to reduce these numbers, such as targeted enforcement, will be effective without the Route Map.

#### **Option 2: Introduce new regulations specific to workplace transport**

The HSC has already considered this option in detail and decided it was too expensive and too burdensome for industry, and would not necessarily on its own, deliver further reduction in deaths and injuries.

**Option 3: Impose the dual legislative/standards approach imposed by the United States authorities.**

This is too prescriptive for the existing regulatory approach favoured in GB and estimates suggest it would be prohibitively costly to small businesses.

**Option 4: Impose high-level standards like those promoted by the Australian State governments.**

These do not provide the level of guidance requested by our stakeholders currently managing workplace transport risk and would do nothing to solve the 'not knowing where to start' problems experienced by our small business consultees.

**Option 5: A Route Map to managing the risks for workplace transport**

We believe this is the best way forward. The Route Map will provide the overarching framework and benchmarks for which we have been asked, and provide clear routes into the more detailed guidance on alternative ways to manage the risks that are being developed, and will be linked to the post – consultation Route Map. During the initial round of stakeholder consultation delegates were asked for their opinions on the proposals. These ranged from general acceptance of the principle to overwhelming support for the concept and direction HSE was taking with managing the workplace transport risks.

**Background information and assumptions**

4. Information about the costs and benefits of the Workplace Transport Route Map has been obtained from stakeholder workshops and from within HSE. Information about earnings has been taken from the Annual Survey of Hours and Earnings, published by the Office for National Statistics (ONS). Data on the number of workplace transport accidents is taken from HSE sources and information on the number of workers employed in the relevant occupations comes from the Labour Force Survey (LFS), published by the ONS. Data on the number of organisations in Great Britain have been taken from figures published by the Small Business Service.
5. Some of the extra costs to organisations are opportunity costs that are reflected by the loss of output as a result of undertaking activities to meet with the guidance indicated by the Route Map, e.g. accredited lift truck training for a novice lift truck driver. It is assumed that the loss of output is approximately equal to the time spent on carrying out the new duties multiplied by average earnings (adding 30% for costs from superannuation and employers' national insurance contributions). In economic terms it has been assumed that the marginal cost of labour is equal to its average cost.

6. There are approximately 4.3 million enterprises in Great Britain.<sup>9</sup> Of these around 1.2 million have employees. The Route Map is likely to affect these two groups of enterprises in different ways, so the two populations are considered differently. Although most enterprises have some workplace transport activities, we assume that 25% will not come within the scope of the Route Map.
7. The number of drivers who may be affected by some parts of the Route Map has been estimated to be around 2 million.
8. Both Costs and Benefits have been discounted in line with Treasury guidance. Costs have been discounted at a rate of 3.5% and health and safety benefits have been up rated by 2%, then discounted at 3.5%, giving an effective discount rate of 1.5%. Costs and benefits are calculated over a period of ten years and expressed in present value terms. All costs and benefits have been discounted back to a base year of 2005. The choice of base year does not affect the balance of costs and benefits, or the conclusions of this analysis.

## **BENEFITS**

### **Health and Safety Benefits**

9. In 2004/05 there were 70 fatalities to workers and members of the public caused by workplace transport accidents. There were also around 5000 serious injuries and 8000 minor injuries.<sup>10</sup> It is anticipated that some of the options presented here will result in the prevention of some of these accidents.
10. In order to present these possibilities in a way that can be meaningfully compared with the likely costs associated with the options, monetary values have been attached to each accident prevented. These figures represent an estimate of the implicit value given by society to the prevention of “average” accidents. This value includes the direct costs associated with an incident (for instance, medical treatment costs), the value of lost productive output and a measure of the subjective costs, often referred to as “pain, grief and suffering” incurred due to the incident. More information on this approach can be found on the Department for Transport website.<sup>11</sup>

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<sup>9</sup> The most recent statistics published by the Small Business Service (<http://www.sbs.gov.uk/>) are only given for the UK as a whole. In order to reach a figure for Great Britain, the most recent (2003) regional figures available for Northern Ireland have been subtracted from the most recent (2004) figures for the UK.

<sup>10</sup> The accident statistics in this document have been adjusted to take account of the known under-reporting of accidents to HSE. More information can be found at <http://www.hse.gov.uk/statistics/overpic.htm>, particularly in the “Health and Safety Statistics 2004/05” publication

<sup>11</sup> [http://www.dft.gov.uk/stellent/groups/dft\\_rdsafety/documents/page/dft\\_rdsafety\\_610642.hcsp](http://www.dft.gov.uk/stellent/groups/dft_rdsafety/documents/page/dft_rdsafety_610642.hcsp)

Type of incident	Prevention Value
Fatalities	£1,450,000
Serious injuries	£40,000
Over-three-day injuries <sup>12</sup>	£6,000

**Table 1: Monetary values of the prevention of different types of incidents.**<sup>13</sup>

11. HSE research has also shown that the cost of equipment and structural damage as a result of workplace transport accidents can be significant. These costs have not been quantified, however.

12. It is not known exactly what proportion of accidents may be prevented if the Route Map is introduced and promoted. For the purposes of this RIA it is assumed that there will be between a ten and twenty percent reduction in the numbers of accidents due to workplace transport. The benefits generated, per year, from these scenarios are presented in Table 2.

Workplace Transport Accidents Prevented		
	10%	20%
Fatalities:	£10,100,000	£20,200,000
Serious injuries:	£21,000,000	£42,100,000
Over-3-Day injuries:	£4,300,000	£8,500,000
Total:	£35,000,000	£71,000,000

**Table 2: Yearly benefits from preventing accidents**

13. The present value of these benefits over the ten-year appraisal period is as follows. Given a 10% reduction in accidents the total benefit is £332 million, or £35 million as an annualised figure.<sup>14</sup> A 20% reduction in accidents would give a net benefit of £663 million (£71 million annualised).

## COSTS

14. A number of the requirements indicated by the Route Map are not expected to have a major cost impact on an individual organisation basis, as organisations that are already employing good practice are unlikely to have to do anything additional to comply. To address this, only a proportion of the total population of enterprises identified in paragraph 10 above are assumed to implement changes following the introduction of the Route Map. Two scenarios are considered, as the proportion of businesses affected is unknown. These scenarios are shown in table 3.

<sup>12</sup> This is a HSE category to indicate injuries where a worker is away from their job for over three days and is used as a proxy for a "minor" injury.

<sup>13</sup> The values for serious and "O3D" injuries are generated by uprating the figures given in "The Costs to Britain of workplace accidents and work-related ill health"

<sup>14</sup> Annual figures in this document have been calculated by dividing the present value of the cost or benefit by an annualisation factor. This transformation gives a figure which represents a yearly flow of funds which, when discounted over the appraisal period of 10 years, equals the present value. For this document the annualisation factors are 9.36 for benefits and 8.61 for costs.

(For illustrative purposes this table only considers employers, though a similar methodology is applied to the self-employed.)

	Scenario	
	Low	High
Proportion who read guidance:	30%	60%
Number who familiarise themselves:	324,451	648,902
Proportion of those who familiarise, who then act:	20%	50%
Proportion of total who act:	6%	30%
Total number who act:	64,890	324,451

**Table 3. Business compliance with Route Map directions (employers)**

15. Costs will appear large to a number of organisations, particularly SMEs, because of the widespread coverage of the Route Map. Extra costs will include some equipment supply, familiarisation, additional training, etc. These costs are considered below.

### **Business sectors affected**

16. The proposed Route Map will affect large, small and medium enterprises in all sectors, although not all to the same degree. Some organisations will be handling a large number of vehicle operations of varying degrees of difficulty while others will be handling intermittent or infrequent vehicle operations, also of varying degrees of difficulty.
17. In order to estimate the total costs of the Route Map, the costs across all industries have to be calculated. As this could impact on any industry if it contains a business using workplace transport, the numbers have been estimated, and assumptions made about changes in behaviour brought about by the Route Map.

### **Compliance Costs to Businesses**

#### **Familiarisation**

18. There will be a need for managers to familiarise themselves with the Route Map. We assume that small firms will need 2 hours to familiarise themselves with the Route Map framework and then short periods of time to refer to more detailed information on a need to know basis. Large firms will take a longer time because they are likely to have more complicated vehicle operations to manage. On average, across all enterprises we assume it takes managers 5 hours to familiarise themselves with the new Route Map.
19. Given an average wage for a manager of £16 per hour (including 30% for non-wage labour costs) and the populations set out in table 3 we calculate that the total cost of familiarisation for employers in the first year will be between £21 million and £42.1 million. For those enterprises without employees, the familiarisation cost will be between £53.6 million and £107.1 million. These are one-off costs. However, we assume that there is

a 10% level of turnover, which means that a proportion of these costs will be borne in each year of the appraisal period.

20. The total costs of familiarisation for all enterprises will be between £74.6 million and £149.3 million. This will occur within the first year of introduction, and is an implementation cost. As discussed above, 10% of these costs will be borne in each of the following years.

### **Training costs**

21. Industry was contacted to obtain average costs in the following areas:

- training & competence
- visiting & agency drivers
- fitness to drive
- information provision
- risk assessment and management responsibilities
- workplace layout
- involvement and guidance

22. While all of the 2.4 million workers who drive/operate vehicles extensively would not require formal training, it is the intention of the Route Map to indicate levels of training and competence to be achieved. For example, for lift trucks the expected minimum training standard would be complying with the lift truck Approved Code of Practice, preferably with the training being delivered by a HSC recognised lift truck training organisation. Industry sources suggest that a considerable number of workers would require additional training to meet the ACoP. Self-employed workers or those from smaller firms are generally known to be less likely to have received adequate training. However, they may interpret their experience sufficient to meet the “competence” requirement.

23. We assume that the proportion of employed drivers which undertake training following the introduction of the Route Map is the same as the proportion of enterprises which take action, as given in table 3. If the relevant training course costs £350 per worker (including the costs of the training course and lost productivity), the initial cost of training would be between £43.5 million and £217.6 million.

24. For the self-employed, we assume that the same proportion as for the employed will undertake a training course. The first-year costs are between £9.4 million and £46.8 million.

**We allow a recurring cost of 10% of these initial costs each year, to account for new personnel joining the industry, and refresher training if required. These costs (along with the initial costs) are policy costs.**

### **Agency Drivers**

25. The Route Map indicates that checks are made to ensure that visiting and agency drivers are suitably qualified. It is assumed that the self-employed do not make use of agency staff and that only half of employers use

agency staff. For the employers which take action, as given in table 3, we assume that setting up a management system in relation to visiting drivers costs £1000, that five checks on agency staff are carried out, on average, per year and that each check costs £50.

26. Under these assumptions, there will be total initial costs of between £33.4 million and £169 million. We assume that a proportion (10%) of these costs are incurred in each following year as enterprises revise existing systems or set up new ones. In addition to the costs of checking new agency drivers each year, the total recurring costs will be between £9.5 million and £47.3 million.

### **Fitness to Drive**

27. The Route Map proposes that all drivers should be assessed to ensure that they are medically fit to perform their duties. We assume that the same proportion of drivers, as the proportion of enterprises which make changes following the introduction of the Route Map (as per table 3), undertake medical examinations in the first year at a cost of £150 per check. This gives total first-year costs of between £18.7 million and £93.3 million. We assume that 10% of those drivers subsequently undertake the checks in each following year of the appraisal period.

### **Unquantified Costs**

28. In addition to the costs outlined above, there may be some further costs resulting from the Route Map. These include the costs of implementing changes to site layout, changes to vehicle maintenance and selection and additional management and risk assessment activities. These costs have not been quantified.

### **Total Costs**

29. The total first-year costs of the Route Map are estimated to be between £180 million and £676 million.
30. The present value of the costs outlined above, over the ten-year appraisal period, is estimated to be between £363.2 million and £1.42 billion. This can be expressed in annualised terms as between £42.2 million and £165.2 million, respectively.

### **Costs to HSE**

31. HSE inspectors will require training for familiarisation with the Route Map. Taking a weighted average of different inspectors wages across the different bands, we estimate the cost of an inspector's time to be £26.58 per hour. We further estimate that the initial familiarisation and training for 600 inspectors will take a day, due to the wide-ranging topics covered by the Route Map. This leads to an initial cost of £110,000 for the

familiarisation and training of all inspectors likely to be involved. This is an implementation cost.

32. Once the proposed Route Map is in place, it is expected to increase burdens on field operations from answering queries from industry. It is estimated that when the Route Map is first introduced, inspectors will spend the equivalent of 2 days of their time answering queries. For the 600 inspectors, the cost of this time is estimated at £223,000. It is estimated that for all the other staff that could be involved (i.e. policy team, Infoline, etc.), 70 staff hours would be spent answering queries in the first year. The cost of this time resource is estimated at around £2000 per year. We assume that the volume of enquiries will decrease substantially after the first year, so only 10% of the enquiry costs will repeat each year.
33. The Route Map serves to highlight existing requirements that should already be being enforced by HSE and Local Authority. The additional costs of enforcement are not likely to be significant given that the Route Map reinforces what current good practice recommends. They are, therefore, extremely difficult to estimate.
34. Total costs to HSE are likely to be in the region of £508,000 over ten years in present value terms (£59,000 annualised). This is an implementation cost.

### **Cost to Local Authorities**

35. Environmental health and technical officers, responsible for inspection in the local authority enforced sectors, are also going to need to familiarise themselves with the Route Map. There are 3,640 environmental health and technical officers, which translates into 1,070 full time equivalents. If we assume that each of the 3,640 officers spend a third of a day familiarising themselves with the Route Map, then this is equivalent to each of the full time equivalents spending a full day (the same as HSE inspectors).
36. The average annual wage is estimated by the Chartered Institute of Environmental Health at £24,678 for an Environmental Health Officers and £20,231 for Environmental Health Technicians. Assuming 220 working days per annum and a 7 hour working day, and that non-wage labour costs add a third to wage costs, the average adjusted hourly wage is approximately £21 per hour. Therefore, the initial cost of familiarisation is estimated at £120,000.
37. As with HSE inspectors, there will be an increased burden on environmental health and technical officers from answering queries from industry. It is estimated that when the Route Map are first introduced, the 1,070 full time equivalent officers will spend approximately 2 days of their time answering queries (which is equivalent to the time spent by HSE inspectors). Assuming the same wage cost as above, this is estimated at £240,000. We assume that the volume of enquiries will decrease substantially after the first year, so only 10% of the enquiry costs will repeat each year.

38. The total cost to local authorities of implementing the Route Map have been estimated at £360,000 in the first year, with ongoing costs of £36,000 per year. This is estimated at approximately £634,000 over ten years in present value terms, or £74,000 annualised.

### **Environmental Impacts**

39. No environmental impacts are expected from these proposals.

### **Total costs to society**

40. The total costs to society range from £364 million to £1.4 billion. Expressed in annualised terms these are £42 million and £165 million, respectively.
41. The majority of these costs are anticipated implementation costs. Whilst the costs appear high, it should be noted that the costs per year are between £24 million and £98 million. The main reasons why the aggregate costs appear high are the large coverage of the Route Map.

### **IMPACT ON SMALL AND MEDIUM SIZED BUSINESSES**

42. It is difficult to calculate the exact cost to small and medium businesses of improving their work sites in line with the Route Map, as each business is likely to be at a different stage of readiness. However, there are no costs likely to arise from this that would represent an unreasonable, or disproportionate, burden on small and medium sized businesses. This is because we recognise that there are some relatively cheap methods to achieve the desired result, for example painted lines to demarcate pedestrian and vehicle routes. This was confirmed via consultation with a number of small businesses.

### **COMPETITION ASSESSMENT**

43. The Workplace Transport Route Map will cover all industry sectors.
44. Each of the different industries affected will have different structures, but the effects of the Route Map on competition should be generic. That is, because the costs, when they occur, will be in proportion to the size of the firm, and apply to all existing and potential firms equally, the market structure and competition will not be affected.

### **COMPARISON OF COSTS AND BENEFITS**

45. The total cost of introducing the Route Map has been estimated at between £364 and £1.4 billion over ten years, in present (2005) values. The potential benefits, given between a 10% and 20% reduction in injuries from workplace transport accidents, have been estimated at between £332 million and £663 million in present value terms, over the appraisal period.

## **Uncertainties**

46. To a large extent, the cost of implementing the Workplace Transport Route Map will depend on how they are interpreted by industry. If industry is already employing best practice, there should be no additional costs. However, in some cases, the Route Map may highlight that current working practices are now unsuitable. If this is the case, there are likely to be significant costs. It is extremely uncertain to predict how industry will react and interpret this newly located information.

### ***Number of individuals driving Workplace Transport vehicles***

47. Due to the problems of estimating such a figure, the number of people driving workplace transport vehicles is uncertain. After consultation with representatives of the relevant industries we estimate the number of people driving vehicles in the workplace to be around 2 million. If the number of drivers is higher, the costs of implementing the Route Map will be higher, but the benefits will also be higher as a greater number of people should be protected from accidents.

### ***Other uncertainties***

48. The number of enterprises which will be affected by (and act upon) the guidance indicated by the Route Map is not known. To address this uncertainty, a range of values has been considered to try and encompass the likely effects.

49. The percentage reduction in Workplace Transport accidents is also uncertain. In the RIA we have assumed between a 10% and 20% reduction, but this is based on Priority Programme targets rather than specific evidence. It should also be noted that increased industry action is likely to prevent more accidents, thereby accruing higher levels of benefits, but also potentially causing higher costs.

## **ARRANGEMENTS FOR MONITORING AND EVALUATION**

50. These proposals will be subject to formal review by the Commission after 4 years. They will also be monitored by HSE during that period.

## **ENFORCEMENT AND SANCTIONS**

51. Depending on the industry sector concerned, the Route Map will be promoted and monitored by either the Health and Safety Executive or Local Authorities. The health and safety regulations underlying the Route Map are the Management of Health and Safety at Work Regulations 1999; The Workplace (Health Safety and Welfare) Regulations 1992; The Provision and Use of Work Equipment Regulations 1998; and the Lifting Operations and Lifting Equipment Regulations 1998.

52. Take up is expected to be high, due to the use of existing industry good practise and industry buy-in achieved through extensive networking and pre-consultation workshops.
53. Poor compliance will be identified by responding to queries raised, investigating accidents and incidents, and routine checks by inspectors. Inspectors may offer duty holders information and advice. Where appropriate enforcement action may be taken in accordance with the HSC Enforcement Policy Statement.
54. The Health and Safety at Work etc Act 1974, section 33 (as amended) sets out the offences and maximum penalties under health and safety legislation.
55. The impact of the Route Map will be assessed over time by monitoring reports of fatalities, injuries and near misses, which are submitted by duty holders.

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