

# **Moving Goods Safely 3**

Evaluation report

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The Moving Goods Safely 3 (MGS3) intervention took place during 2007 and 2008, and targeted risks associated with the movement of goods in the logistics, warehousing, road haulage and goods delivery sectors. It was delivered through inspections and audits carried out by Health and Safety Executive (HSE) and local authority (LA) inspectors and was designed to be a supply chain initiative.

This report presents the findings of an evaluation carried out during 2008/09, and after the intervention had ceased. It considers:

- the activities of HSE inspectors who delivered the intervention and the reaction amongst employers and workers in the pilot area to the service;
- the extent to which the MGS3 intervention made an impact on targeted firms, and the relative effectiveness of its main models of delivery; and
- whether there was evidence of a 'multiplier effect' up and down supply chains.

The report also identifies some barriers to effectiveness and presents learning points for consideration when designing future interventions of this type.

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# **CONTENTS**

Ex	recutive Summary	V
1	Background	1
	1.1 Chapter Summary	1
	1.2 Drivers of the Initiative	1
	1.3 MGS3 Objectives	1
	1.4 The Moving Goods Safely 3 Initiative	2
2	Evaluation Approach	4
	2.1 Chapter Summary	4
	2.2 Evaluation Aims and Objectives	4
	2.3 Interviews with Inspectors	5
	2.4 Dutyholder Survey	6
	<ul><li>2.5 Site Visits and Dutyholder Interviews</li><li>2.6 Suppliers and Contractors</li></ul>	12 12
	<ul><li>2.6 Suppliers and Contractors</li><li>2.7 Survey of Workers</li></ul>	13
	2.8 Interviews with Workers	14
	2.9 Limitations of the Evaluation	14
3	Delivery	16
	3.1 Chapter Summary	16
	3.2 Preparing Inspectors to Deliver the Intervention	16
	3.3 Format of Inspections	18
	3.4 Risk Areas Covered	20
	3.5 Specific Issues Addressed in Inspections	21
	3.6 Joint Working	26
	3.7 Issues Specific to LA Work	27
	3.8 Acceptability of the Service	28
4	Effectiveness	31
	4.1 Chapter Summary	31
	4.2 Enforcement Activities	31
	4.3 Implementation of Recommendations	32
	4.4 Details of the Improvements Made	38
	4.5 Improvements to Health and Safety Awareness	41
	<ul><li>4.6 Changing On-site Behaviour</li><li>4.7 Added Value of MGS3</li></ul>	42
	<ul><li>4.7 Added Value of MGS3</li><li>4.8 Impact on Sickness Absence and Workplace Accidents</li></ul>	43 46
	4.9 Multiplier Effects	47
	4.10 Wider Views Regarding Impact	49
5	Barriers to Progress	52
	5.1 Chapter Summary	52
	5.2 The Nature of MGS3	52
	5.3 The Nature of the Sectors	56

6	Con	clusions	62
	6.1 6.2	Were the Objectives of the Intervention Achieved? Which Parts of the MGS3 Campaign Worked Well and in Which	62
		Circumstances?	62
	6.3	What Were the Barriers to Effectiveness?	63
	6.4	Was There a 'Multiplier Effect'?	64
	6.5	Learning Points	65
Аp	pend	ix 1: Response Rates to Surveys	67
Аp	pend	ix 2: Dutyholder Survey	68
Аp	pend	ix 3: Worker Survey	131
Аp	pend	ix 4: Regression Model Used to Compare Treatment and	
	Con	nparator Groups	138

# **EXECUTIVE SUMMARY**

#### INTRODUCTION

Moving Goods Safely 3 (MGS3) built on earlier interventions (MGS1 and 2) and was linked to a communication campaign (Falls from Vehicles). It took place during 2007 and 2008, and targeted risks associated with the movement of goods in the logistics, warehousing, road haulage and goods delivery sectors through inspections and audits carried out by Health and Safety Executive (HSE) and local authority (LA) inspectors.

This report presents the findings of an evaluation carried out during 2008/09, and after the intervention had ceased.

#### THE MGS3 INTERVENTION

MGS3 was designed to be a supply chain initiative aimed at reducing injury and ill-health through a number of different work streams focussed on:

- third-party logistics (3PLs) providers
- pallet networks in the Midlands
- road haulage and warehousing
- manufacturing supply chains (ie builders' merchants, steel stockholders, concrete products, bricks and timber roof trusses)
- a 'Falls from Vehicles' campaign (evaluated separately).

Within these sectors, employers were targeted using a number of different mechanisms, including:

- using Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) data to identify premises where an accident had recently been reported
- major players in the sector (eg the 3PL stream)
- in an ad hoc manner by individual inspectors drawing on their knowledge of local/regional firms.

Selected employers were then visited by either a HSE or LA inspector, or had a joint visit carried out in the form of an inspection (lasting up to half a day) or an audit (lasting several days and involving visits to various sites up and down a particular supply chain, emanating from the original employer).

The main focus of visits was on the three risk areas of:

- loading and unloading vehicles
- vehicle movement and parking
- appropriate use of equipment (eg forklift trucks).

In addition, visits generally examined generic health and safety management systems, and other issues specific to particular sub-sectors (eg asbestos removal, use of spray booths) as appropriate.

#### THIS EVALUATION

In order to understand the extent to which the MGS3 intervention had made an impact on targeted firms, and the relative effectiveness of different elements of it, HSE commissioned the Institute for Employment Studies (IES) to carry out an evaluation. This consisted of a number of elements, involving inspectors, dutyholders and their workforce, and suppliers/contractors linked to the targeted firms. The intention was to measure, as far as possible, the extent to which MGS3 had succeeded in changing behaviours linked to reductions in injuries and ill-health in the longer term.

In more detail, the evaluation components included:

- 49 interviews with LA and HSE inspectors
- a survey of 751 staff from 379 dutyholders (including those involved in MGS3 and a comparator group)
- 25 site visits to inspected dutyholders and five additional in-depth telephone interviews with dutyholders
- interviews with 23 suppliers associated with employers taking part in the survey and site visits
- a paper-based survey of workers administered on site during site visits
- in-depth telephone interviews with 27 workers identified through the worker survey.

There were no baseline data available to the evaluation, so a true impact assessment was not possible. The evaluation was also primarily limited to considering the activities of HSE inspectors, as systematic records of the dutyholders visited by LA inspectors were not available. The evaluation therefore provides an overview of the types of impacts that MGS3 made, and examples of these, but only for a proportion of the employers involved.

#### **EFFECTS OF THE INTERVENTION**

MGS3 was generally well received by employers who found the recommendations, in the main, practical and beneficial. Over two-thirds (68 per cent) of employers had implemented most or all of the recommendations given to them by inspectors. The most common changes were made in relation to vehicle movement and parking (60 per cent of dutyholders receiving recommendations in this area made changes as a result), followed by the loading and unloading of goods (51 per cent of those receiving recommendations on this made changes). Where recommendations were not acted upon, this tended to be because the specific advice was felt to be impractical (eg due to space restrictions); dutyholders prioritised other, more urgent, matters first; or because employers simply did not feel that the scale of risk warranted the recommended action.

Staff within inspected firms were more likely than the comparator group to feel that changes had been made on vehicle movements and parking and the appropriate use of equipment over the last 12 months (ie since MGS3). Workers on inspected sites also felt that conditions had either stayed the same or improved with regard to risk management on their work sites. However, without baseline information, and given differences in the characteristics of inspected and not inspected premises, it is difficult to state with confidence the extent that MGS3 was responsible for these changes.

There was a range of examples given by dutyholders of the practical changes they had made on their sites. Some examples of the most visible/common changes, provided during site visits, were:

- the introduction of demarcation lines for segregating vehicle and pedestrian movement or better use of signage
- changes to site layout (particularly on smaller sites)
- better management of visiting drivers (eg the introduction of rules preventing drivers from becoming involved in loading and unloading)
- improved communication with workers.

Employers were asked to consider what the 'added value' of their involvement in MGS3 was, over and above what would have happened without it, and over half (54 per cent) felt that they had made changes more quickly than they would have done normally, and one-fifth (20 per cent) had introduced additional changes. However, just over one-fifth (22 per cent) felt that they would have taken the same action even without MGS3. The main drivers for change identified by survey respondents other than MGS3 for their industry were internal reviews/management (30 per cent) and accidents (22 per cent), although a relatively high proportion (29 per cent) were unable to say.

The evaluation found no links between receiving a MGS3 visit and reduced absence or accident rates, although it is difficult to draw any firm conclusions on this without baseline data that allow prior rates to be factored in alongside firm characteristics (which in themselves affect these rates differently across inspected and not inspected premises). There was also little evidence of a 'multiplier effect' up and down supply chains following inspections. The little evidence available on audits did, however, suggest that these may have been more successful in this regard.

#### BARRIERS TO THE INTERVENTION

There were a number of aspects of MGS3 that had a bearing on its potential to make an impact on the dutyholders involved. These included the following:

- The selection of larger, more well-developed companies (several with rigorous internal quality assurance standards) for inspection, meaning that the potential for improving standards was limited.
- Difficulties in fully inspecting loading and unloading procedures (due to difficulties timing inspections with deliveries), meaning that inspectors' observations of these procedures was limited, as was their ability to offer advice in this area.
- A lack of specific, measurable, targets for the intervention established at the outset, meaning that establishing its 'success' becomes difficult.

As might be expected for an intervention comprising several work streams targeted at a relatively small number of companies, there was some difficulty in establishing useable indicators of impact. The nature of the targeted sectors also presented challenges as there appears to have been a range of internal and sectoral drivers of good practice in health and safety, independent of MGS3, affecting dutyholder policies and procedures in this these sectors. Therefore, it was difficult to disentangle the effect of the intervention from these other influences.

One important goal of the intervention was to investigate whether there had been a 'multiplier effect' (ie the exchange of good practice between sites and this resulting in improvements throughout a distribution chain). Within HSE sectors targeted by the intervention there was already a high level of co-operation within some supply chains, often driven by larger organisations and commercial concerns. The failure to identify a multiplier effect as a result of MGS3 may therefore be attributable to a lack of spontaneous sharing of good practice between sites that is not linked to commercial imperatives, and/or a limited amount of time spent by inspectors in pushing forward changes themselves across different elements of supply chains (aside from in audits). The audit approach allowed inspectors a more direct access to supply chains, and therefore had greater potential to influence activities on multiple sites.

#### **CONCLUSIONS**

# Were the objectives of the intervention achieved?

MGS3 visits were focussed, as intended, on the principal areas of risk associated with the transportation of goods (ie site layout, use of vehicles and equipment, and management of visiting drivers and loading/unloading practices). Most employers had made a change in their approach to risk management in at least one of these three areas, although most employers felt that their visit had speeded up rather than instigated change.

There was no evidence that accident and ill-health rates had been affected by these changes within the evaluation period.

There was effective joint working between LA and HSE inspectors, and those involved felt well prepared and briefed on the intervention.

#### Which parts of the MGS3 campaign worked well and in which circumstances?

Employers responded well to the service. However, the way in which employers were targeted for inspection meant that employers with better existing standards were more likely to have been involved. The potential for MGS3 to further improve standards may therefore have been limited by a 'ceiling effect', and many employers felt that the inspections acted to confirm that they were already doing the right thing. LA inspections, however, appear to have resulted in a greater proportion of smaller employers being targeted, based on their local knowledge of employers.

The available data on audits suggest that they were more suitable than single inspections in pushing forward changes across a supply chain as audits often involved inspectors making contact with a range of different companies and achieving a more detailed understanding of practice across these.

#### What were the barriers to effectiveness?

There appears to have been an ongoing commitment to change within the industries targeted by MGS3. Thus, the intervention was operating in a fluid, rather than static, environment. It is therefore difficult to determine, with confidence, whether any changes occurring within inspected employers were due to the efforts of regulators or other factors.

The nature of deliveries is that they occur at all times of the day and night, depending on the nature of the goods being transported. It was therefore challenging for inspectors involved in MGS3 to adequately observe loading and unloading, as inspections mostly occurred during

office hours and could occur without any contact with visiting drivers. This is a potential barrier to the initiative's potential to impact directly on driver behaviour.

There was only limited management information available on what actually constituted the intervention. This acts as a barrier to effective evaluation and, in this case, particularly affected our ability to assess the impact of LA work. For inspectors, assessing whether their inputs resulted in changes was almost impossible as they did not conduct follow-up visits as part of MGS3.

#### Was there a 'multiplier effect'?

There was little evidence of a multiplier effect stimulated by MGS3. However, there was significant evidence that supply chains are strong in the targeted sectors and that commercial decision making is already affected by health and safety standards.

# **Learning points for policy makers**

More informed, or more strategic, targeting could have maximised the potential impact of the intervention. In future, selection strategies could more usefully be guided by local knowledge among HSE (and LA) inspectors so that the intervention is delivered where it is most needed. The degree of self-regulation that operates within a company should be a factor in considering resource intensive interventions, such as MGS3 audits, in order to avoid 'deadweight'.

It is important for HSE policy makers to gain a better understanding of the commercial environment that the logistics, warehousing, road haulage and goods delivery sectors operate within and to target frontline interventions towards employers who are less likely to be influenced by alternative drivers of health and safety improvement.

# When designing future interventions, evaluation requirements should be considered

The selection criteria for companies targeted by the MGS3 intervention were (i) not always explicit, and (ii) (with regard to some work streams) all encompassing (ie of a particular sector or employer-type). This hindered identification of an appropriate comparison group. The evaluation of future interventions might benefit from a design that makes comparison with the counterfactual (ie what would have happened in the absence of the intervention) more easily achievable.

The availability of baseline data generally allows more robust evaluation of impact. HSE could consider assessing the starting position of employers more systematically so 'before' and 'after' scenarios can be more easily compared.

A range of measures could be introduced to help specify the outcomes of frontline interventions of this type.

Re-visits carried out on a systematic basis would allow better determination of outputs: in the event of resource constraints preventing HSE inspectors from undertaking this task, alternative staff could be considered, such as Health and Safety Advisers or local authority health and safety enforcers. These professionals could be employed at an intermediary stage of evaluation to assess at site level whether (a sample of) inspections were 'successful' in objective terms.

Recording formats could be introduced that record inspection inputs (such as number and type of recommendations) and any known outputs (improvements made) in more detail to assist HSE in evaluating the impact of inspections.

Targets need to be set that will allow evaluators (and policy makers themselves) to better determine the extent to which an intervention has been successful, and the extent to which desirable outcomes have been met. The potential of interventions to be evaluated should be considered before their inception. Basically, if HSE needs to know whether something worked, interventions need to be designed so that this is possible. Specific and measurable intermediate outcomes need to be identified, given the difficulty of capturing final (health/accident) outcomes in a short evaluation time frame.

Given the apparent effectiveness of audits in addressing supply chain issues, wider application of this delivery model could be considered.

Policy makers should consider the gains to be made when adopting the audit approach and then investigate the cost implications of applying it on a wider basis. There appears to be a strong case for using the audit approach in relation to smaller companies who (potentially) have less sophisticated health and safety (H&S) management systems than 'big players' in the industry. There was a view among dutyholders and inspectors that 'poorer performers' would have benefited from this approach more than the 16 'top' 3PL providers targeted by the intervention. There appears to be scope for targeting audit interventions more strategically in future. Wider application of audits could also address the evaluation findings that suggest 'multiplier effects' do not occur spontaneously. This format allows inspectors to address supply chain issues directly and is not reliant on the dutyholders to instigate a 'multiplier effect' on their own initiative.

# Learning points for inspectors

- Inspectors should consider inspecting transportation issues at times when drivers are present and loading/unloading is occurring. This may require late-night or early-morning visits.
- Health and safety concerns of drivers appear to be qualitatively different from those of site-based staff. It is important for inspectors to gain an understanding of risk perception in this population, and if necessary work with other relevant agencies (eg the Highways Agency, Department of Transport) to address concerns outside HSE's jurisdiction.
- In order to engage with larger numbers of drivers, it may be fruitful for HSE to consider targeting drivers at roadside locations such as motorway facilities and ferry ports. This may be a more reliable way of reaching these workers than visiting individual sites.
- The 'intelligence' that HGV drivers are able to provide about MGS target sectors needs to be considered when targeting specific sites in distribution chains. Peripatetic workers are in a position to observe health and safety standards at different sites and inform inspectors of poorer performers.
- Local authority inspectors' local knowledge could be harnessed to identify distribution chains likely to benefit from HSE intervention. This could be used in conjunction with RIDDOR data to facilitate better targeting.

# 1 BACKGROUND

This chapter provides an overview of the Moving Goods Safety 3 (MGS3) initiative, setting out its aims and objectives as well as a brief background to this work.

#### 1.1 CHAPTER SUMMARY

MGS3 was a project involving targeted workplace inspections performed by a partnership of the Health and Safety Executive (HSE) and several local authorities (LAs). This chapter provides an overview of this initiative. It focussed on the movement of goods in the logistics, warehousing, road haulage and goods delivery sectors. Although a single initiative, there were a number of different strands targeting different parts of these sectors. The aims of the initiative were to reduce injury and ill-health in the targeted sectors.

#### 1.2 DRIVERS OF THE INITIATIVE

MGS3 builds on two previous interventions. Moving Goods Safely 1 (MGS1) involved targeted interventions in London, and a subsequent project called Moving Goods Safely 2 (MGS2) operated at a national level. The lessons learnt from MGS1, together with those from other local projects, were used to develop and roll out the MSG2 project. MGS2 ended in summer 2007. The next phase of work, MGS3, was delivered in the second half of 2007/08. It was linked to the Workplace Transport Programme 'Falls from Vehicles' campaign.

MGS3 was essentially a supply chain initiative aimed at reducing injury and ill-health arising from the movement of goods in the logistics, warehousing, road haulage and goods delivery sectors. In 2007/08 an element of work also focussed on specific 'manufacturing to construction' supply chains; for LAs this provided opportunities to target builders' merchants and steel stockholders.

Traditionally, one obstacle to effective inspection of supply chains has been the frequent change in enforcement demarcation (between HSE and LAs). To address this issue, joint HSE/LA interventions were a key component of MGS.<sup>2</sup>

#### 1.3 MGS3 OBJECTIVES

The MGS3 initiative had two main objectives:

1. Contribute to the Public Service Agreement (PSA) target of reducing fatal and major injuries and ill-health caused by the transport and distribution of goods. These include being struck by a vehicle, falling (principally from vehicles), loading and unloading (with its related musculoskeletal disorders such as those caused by manual handling), being hit by a load or falling from a vehicle, and slips and trips (on vehicles or in and around goods dispatch and delivery areas) related hazards.<sup>3</sup>

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See Moving Goods Safely Initiative, Phase 1 Evaluation (SOFS/06/05), HSL, 2006 and Sector Information Minute (SIM) 05/2006/03 and Local Authority Circular (LAC) 85/12 for further details of these initiatives

<sup>&</sup>lt;sup>2</sup> See www.HSE.gov.uk/lau/lacs/85-13.htm for further details on the background to MGS3

Details on: www.HSE.gov.uk/aboutus/plans/sr2004.htm

2. Promote and seek compliance with Health and Safety Guidance in Retail and Wholesale Warehouses.<sup>1</sup>

#### 1.4 THE MOVING GOODS SAFELY 3 INITIATIVE

The main operations of MGS3 were:

- joint inspection visits and audits by HSE and LAs in targeted multi-site and peripatetic firms
- inspection visits and audits by HSE in targeted firms, of which some were audits
- inspection visits by LAs in targeted firms.

In addition, a range of promotional activities took place.

#### 1.4.1 Targeting

The MGS3 project was a 'supply chain initiative' aimed at reducing injury and ill-health arising from the movement of goods in the logistics, road haulage and goods delivery sectors. It extended to warehousing, retail and wholesale distribution, and home delivery. There was also some focus on 'manufacturing to construction' supply chains. In summary, the different work streams focussed on the following:

- third-party logistics (3PL) providers
- pallet networks (HSE Midlands Division only)
- road haulage and warehousing (nationally, those HSE and LA staff who cover these industries)
- manufacturing supply chains (nationally, those HSE and LA staff covering builders' merchants, steel stockholders, concrete products, bricks and timber roof trusses)
- 'Falls from Vehicles' campaign, including vehicle manufacturer visits.

Analysis of Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) accident statistics and the Labour Force Survey (LFS) led to the identification of key high-risk sectors and key occupational risks for injuries and ill-health. The primary sectors were road haulage, warehousing and 'other' transport agencies, and the 'manufacturing to construction' supply chain.

#### 1.4.2 Use of inspections and audits

The project targeted several companies in different sectors of economic activity. HSE selected a sample of companies from an original register and the list of targeted companies

See www.HSE.gov.uk/warehousing/index.htm for further details.

A supply chain refers to the distribution channel of a product, from manufacturing to delivery to end user. It is essentially a network created amongst the different companies producing, handling, distributing and selling a specific product. However, the term 'supply chain' is used loosely in this project. For example, it does not refer to a particular product but to a set of products and does not include all stages of manufacturing but some.

was finalised in July 2007. Inspections began in October 2007 and the initial visits were completed at the end of March 2008 with some follow-up visits completed by June 2008. The interventions were concentrated on the distribution of white goods (electrical), furniture, and food and drink (which were the same goods targeted by MGS2). The workers involved in the targeted activities were mainly delivery drivers, warehouse workers and other workers involved in the distribution or receipt of goods.

Inspections to organisations involved visits, some of which were unannounced. There were two types of inspections: visits and audits. Inspection visits generally lasted a few hours while audits could last several days and were inherently more thorough.

# 1.4.3 Joint LA and HSE working

Traditionally, one obstacle to effective inspection of supply chains has been the frequent change in enforcement demarcation between HSE and LAs. To address this issue, joint HSE/LA interventions were a key component of the project. However, not all inspections were carried out jointly by HSE and LAs mainly because of financial constraints, and HSE and LAs undertook some inspections in isolation.

There are regulatory and legal reasons why LAs and HSE inspections conduct enforcement activities independently.<sup>1</sup> Local authorities enforce health and safety law in workplaces allocated to them – including offices, shops, retail and wholesale distribution centres, and leisure, hotel and catering premises. In total, 410 local authorities in Scotland, Wales and England have responsibility for the enforcement of health and safety legislation in 1.4 million workplaces.

It is likely that when following good(s) within the supply chain, the good(s) will cross enforcement allocation, eg from manufacturer (HSE's enforcement domain) to distribution depot (LA's enforcement domain) to retail outlet (LA's enforcement domain) or home delivery (HSE's enforcement domain). HSE and LA staff worked together to reflect the changing enforcement allocation that takes place in a supply chain.

#### 1.4.4 Promotional activities

The MGS3 project was accompanied by a communication campaign and several stakeholder events. The publicity campaign was aimed at raising awareness of the risks of falls from road-going vehicles. The campaign focussed on controlling risks from falls from vehicles and included full page advertising in the trade press and mailshots to a target audience comprising vehicle specifiers (who order the vehicles and specify which features they would like) and transport managers. As well as locally arranged events organised by each of HSE's Field Operations Directorate (FOD) Divisions, a number of national stakeholder events were organised by other intermediaries. These events included Traffic Commissioner (TC) seminars, Freight Transport Association (FTA) Transport Manager seminars, FTA free briefings and Vehicle Operator Standards Agency (VOSA) Driver Vehicle Operator (DVO) seminars. The events were intended to promulgate messages regarding transport and general health and safety that were tied into the communications campaign.

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<sup>&#</sup>x27;...LAs and HSE are responsible for the enforcement of health and safety in Great Britain under the general direction of the Health and Safety Commission (HSC). LAs and HSE work in partnership to secure HSC's objectives....' in www.HSE.gov.uk/lau/

# 2 EVALUATION APPROACH

This chapter presents the objectives set for the evaluation and an overview of the different evaluation components. It also discusses the limitations of the evaluation approach and what this means for the interpretation of the data.

#### 2.1 CHAPTER SUMMARY

HSE commissioned an evaluation of MGS3, which aimed to assess the impact on targeted firms and assess the relative effectiveness of different elements (eg HSE versus LA inspections).

The evaluation had a number of different elements. These were:

- 49 interviews with LA and HSE inspectors
- a survey of 379 dutyholders, including those involved in MGS3 and a comparator group
- 25 site visits to inspected dutyholders and five additional in-depth telephone interviews with dutyholders
- interviews with 23 suppliers associated with employers taking part in the survey and site visits
- a paper-based survey of workers administered on site during site visits
- in-depth telephone interviews with 27 workers identified through the worker survey.

There were a number of factors limiting the evaluation, including elements of its design and operation, which make it difficult to determine its precise impact. However, the evaluation does provide an indication of the types of changes implemented within participating dutyholders that are linked to the intervention.

# 2.2 EVALUATION AIMS AND OBJECTIVES

The evaluation was set the following aims:

- Assess the impact that the MGS3 project had on the group of targeted firms in securing the necessary changes to management practices and worker behaviour that will lead to a reduction in major and minor injuries and ill-health caused by the transport of goods evidenced through qualitative as well as quantitative analysis.
- Analyse the relative effectiveness of different interventions (LA and HSE acting jointly or separately, inspection visits and audits, inspections of firms in one sector as opposed to others). Consideration should be given to how certain companies are selected for inspection over others and the effect this has upon outcomes and achievements.

The objectives of the evaluation were to:

- 1. Identify indicators and criteria to show whether the objectives of the project have been achieved.
- 2. Determine the extent to which the project has achieved its goals of implementing behaviours which are expected to result in a reduction in injuries and ill-health arising from the movement of goods.

- 3. Identify what worked, which parts of the MGS3 campaign worked well and what has not worked well, for whom, in what circumstances and why.
- 4. Examine the effectiveness of the interventions, including any additional impact of the communication campaigns and related inspection activity not already captured in previous evaluations, relative to the objectives set for the MGS3 project.
- 5. Explore the barriers experienced by drivers, managers and health and safety professionals in reducing injuries and ill-health in the moving of goods, and which of these HSE can influence.
- 6. Provide an overview of dutyholders' perceptions of HSE and local authority Environmental Health Inspectors (EHOs) working together.
- 7. Assess if there has been a 'multiplier effect'. 1

#### 2.3 INTERVIEWS WITH INSPECTORS

The first phase of the evaluation was qualitative and involved interviews with LA and HSE inspectors who had conducted MGS3 inspections. The purpose of these interviews was to gather the knowledge of inspectors about how the intervention was practically implemented. This was then used to develop indicators of success and clarify the criteria to be used in the evaluation to demonstrate whether the objectives of the project had been achieved. In doing so. Consequently this part of the evaluation served to address the first of the evaluation's objectives.

#### 2.3.1 Sample construction

HSE inspectors were selected from a list of field staff from across England and Wales who had carried out inspections as part of the MGS3 initiative. The evaluation focussed on inspectors who had been most active in the initiative by targeting HSE inspectors who were recorded as having carried out three or more MGS3 inspections.

Due to a lack of central records within LAs, LA inspectors who had carried out MGS3 inspections were identified during the interviews with HSE inspectors, or via intermediary contacts such as HSE partnership managers and regional co-ordinators in areas where MGS3 work streams had been rolled out. Due to the use of a 'snowballing' approach to sampling (ie where the sample builds in an iterative manner through other contacts involved in the research exercise), it was not possible to target LA inspectors (who were Environmental Health Officers or EHOs) in specific regions. Participation in the evaluation was voluntary.

In total, 30 in-depth telephone interviews were conducted with HSE inspectors across England and Wales, and an additional 19 in-depth LA inspectors across England and Wales. A focus group discussion, involving nine LA inspectors, based within the same partnership region, was also undertaken.

A 'multiplier effect' can be defined as follows: for example, if there are three companies in a distribution chain (A, B and C) where A sells to B, which in turn sells to C, an inspection visit to company B is hypothesised to have an impact on the companies 'upstream' (A) and 'downstream' (C). There will be an impact on the company targeted and on those companies from which it buys goods and to which it supplies in the distribution chain. A multiplier effect is defined as the impact that an inspection visit has on the companies upstream (suppliers) and downstream (clients).

# 2.3.2 Interview topics

The inspector interviews explored the following:

- Process elements of the intervention, such as set-up meetings and training provided.
- The nature of activities undertaken by worksites involved in MGS3.
- The material covered in inspections and audits, and distinctions between the two types of intervention.
- Indicators of success or otherwise of the intervention, from the inspector perspective.
- Reactions from inspectors to the intervention, including their perceptions of its effectiveness and impact and how the roles of the different bodies worked in practice.
- Reactions of dutyholders and workers to the interventions as assessed by the inspector during the visit.

Through the Corporate Operational Information System<sup>1</sup> (COIN) HSE was able to provide the research team with details of dutyholders that HSE inspectors had visited (on average, approximately four per inspector). These lists served as prompts and were particularly useful in circumstances where inspectors had worked on similar initiatives but where their recall may have been affected by their participation in similar initiatives (eg MGS2).

#### 2.4 DUTYHOLDER SURVEY

In order to address a number of evaluation objectives where dutyholder input was required, a dutyholder survey was conducted. A copy of the dutyholder survey is provided as Appendix 2.

#### 2.4.1 Sample construction

The research team were provided with a list of all dutyholders that were recorded as having received a MGS3 visit on HSE's COIN system. Similar records of dutyholders receiving a visit from a local authority inspector were not available. The dutyholder survey of those participating in MGS3 is therefore limited to organisations receiving an inspection or audit by HSE. All of these dutyholders were contacted to take part. The aim was to interview dutyholders approximately one year after the intervention.

In order to establish a form of counterfactual scenario (ie what would have happened in the absence of the intervention), a comparable group of dutyholders that were not inspected as part of the MGS3 initiative was also surveyed. The aim was to obtain a sample of dutyholders that was broadly similar to the MGS3 intervention group in terms of size and sector. The comparator group consisted of dutyholders from within the key sectors covered by MGS3, and were taken from an Experian database. Dutyholders were randomly sampled, but quotas were introduced to ensure similar proportions in both the group of inspected dutyholders and the comparator group with regard to sector and size. Since information on size and sector was missing in HSE data, organisations for the comparator group were selected once a significant number of those dutyholders that had been visited as part of the MGS3 initiative had been surveyed.

This is a database completed by HSE inspectors to document their activities, including inspection and other work with dutyholders.

The survey of both the inspected and not inspected companies involved at least one interview with a staff member at management level. Amongst inspected companies, where available, a named contact (the name held as the main contact in HSE records) was the first point of reference. Where this information was not available, and when conducting interviews with the comparator group, a request was made to speak to the person with responsibility for health and safety. Interviews with additional contacts within organisations (eg operational managers, HR managers, any on-site health and safety professionals) were also sought to obtain a broader picture of practice within the organisations.

The achieved sample for the survey includes 153 organisations that had received HSE inspections through MGS3 (the 'inspected' group), and 226 organisations that had not been inspected as part of the MGS3 initiative (the 'not inspected' or 'comparison' group). The survey was undertaken by Databuild by telephone during March and April 2009, and each interview lasted around 15 minutes.

#### 2.4.2 Response rates

In total, 750 interviews were achieved. These can be broken down as follows:

- 153 main contacts and an additional 147 contacts from within the treatment group
- 226 main contacts and 225 additional respondents from the comparator group.

The response rates are the 'adjusted response rates' and are calculated by removing dutyholders who are not available or are unusable (eg the business number is no longer available), and therefore give a more accurate picture of the proportion of dutyholders actually approached to take part in the evaluation that chose to do so. These rates for the different surveys are provided in Table 2.1, and were:

- 71 per cent for the main contacts from inspected premises
- 69 per cent for the additional contacts from inspected premises
- 49 per cent for the main contacts from the comparator group
- 84 per cent for the additional contacts amongst the comparator group.

This response rate excludes contacts where the number was unobtainable, the contact was unknown at the number or had left the company or where the business had closed down. This is referred to as the 'adjusted response rate', rather than the raw response rate.

Table 2.1: Details of response rates for dutyholder survey

	Treatment: main respondent	Treatment: extra respondent	Control: main respondent	Control: extra respondent
Total sample in survey	26 <sup>1</sup>	213	701	286
Completed interviews	153	147	226	225
Total deadwood <sup>2</sup>	47	1	$236^{3}$	19
Total refusals	18	4	33	8
Total ineffective other <sup>4</sup>	16	8	28	11
Response rate				
a) Number of completed interviews/total sample	58%	69%	32%	79%
b) Number of completed interviews/ total sample, except deadwood	71%	69%	49%	84%

<sup>&</sup>lt;sup>1</sup> Post-pilot. <sup>2</sup> Deadwood includes contacts where the number was unobtainable, the contact was unknown at the number or had left the company, the business had closed down, or there were duplicated records. <sup>3</sup> This includes 35 records which were unusable because that size/sector quota had been filled. <sup>4</sup> Ineffective other includes contacts where it was not possible to identify the appropriate respondent, or this contact was unavailable during the fieldwork period.

Source: IES/Databuild survey of dutyholders, 2009

# 2.4.3 Characteristics of participating dutyholders and respondents

The characteristics of the survey sample differ from those of the UK population of comparable industries due to the specific targeting of sub-sectors by the MGS3 initiative. This has also resulted in differences between the size profiles of the survey samples and the UK population of comparable industries (90 per cent of dutyholders in the manufacturing, wholesale/retail and transport/storage/communication industries have fewer than 50 employees, for example, whereas the comparable figure for the survey sample is only 50 per cent<sup>1</sup>).

#### Differences between inspected and non-inspected dutyholders

The process by which HSE selected premises for inspection was non-random (eg it was biased towards companies known to HSE or via other criteria such as membership of specialist pallet networks) and in some instances was influenced by records of reported incidents (this criteria is made explicit in regard to the 'Manufacturing supply chains' work stream).<sup>2</sup> This was explored further in the inspector interviews and is discussed in more detail in Chapter 5.

SME Statistics for the UK and Regions 2008 (see http://stats.berr.gov.uk/ed/sme)

See www.HSE.gov.uk/lau/lacs/85-13.htm

There were other factors that affected the selection of dutyholders for inspection and some of these led to difficulties in replicating the characteristics of the inspected sample in the comparator group. These included the following:

- The 16 largest 3PL organisations were selected for the '3PL Providers' work stream. Therefore, by definition, it was not possible to find a matched group based on size for this part of the industry.
- The 'Pallet Network' intervention involved inspection of all ten UK pallet hubs, all based in the Midlands. Due to this inclusive approach, premises of this type could not be included in the comparator group.
- In cases where inspectors were provided with inaccurate information about dutyholders (or contact details for dutyholders that they felt were unsuitable), selection occurred on a relatively informal basis (eg using local knowledge and contacts).
- The 'road haulage and warehousing' work stream involved targeting dutyholders in relevant sectors 'not visited during MGS2'. In the absence of data regarding MGS2, it was not possible to apply this criterion to the comparator group.
- In general, companies with larger premises and those with a national profile (ie with more than one work site) were more likely to have been targeted by MGS inspections and audits. It was not possible (or planned) to replicate this using our survey sampling methodology.

As a result of these criteria being applied as part of MGS3, it was difficult to provide a comparator group which effectively matched the inspected group and this is reflected in the characteristics of the achieved samples (see Table 2.2). Inspected dutyholders were more likely to be medium and large firms than the comparator group. This difference remained significant when also controlling for other business characteristics such as industrial sector, years company has been in operation, region where sites operate, and whether operating at multiple sites or not. There was also a greater likelihood that Welsh dutyholders were part of the treatment group (region was not controlled for in the selection of dutyholders).

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Using a probit regression analysis (see Appendix 4 for the results of the regression).

Table 2.2: Characteristics of inspected organisation and comparison group

Industrial sector		Inspected group % N = 153	Comparison group % N = 222	All dutyholders % N = 375
	Manufacturing/Primary	37	30	33
	Logistic/Haulage	49	47	48
	Warehousing/Retail/Other	14	23	19
Size of site*		Inspected group % N=153	Comparison group % N = 221	All dutyholders % N = 374
	0-49 employees	51	64	59
	50+ employees	49	36	41
Size of whole organisation*		Inspected group % N = 142	Comparison group % N = 196	All dutyholders % N = 338
	Micro (0-9 employees)	11	23	18
	Small (10-49 employees)	28	35	32
	Medium (50-249)	35	17	25
	Large (250+ employees)	27	25	26

<sup>\*</sup> T-test significant at 1 per cent level.

Source: IES and Databuild survey of dutyholders 2009

# Job title of respondents

In both the inspected and non-inspected groups, as described earlier, both a main contact and other contacts were interviewed. The job titles of all respondents are presented in Table 2.3. As this demonstrates, there are differences in the profile of main and extra contacts. The main contact group has a far higher proportion of senior-level management and managers with a specific health and safety responsibility than is the case for the extra contacts. In contrast, the extra contact group consists almost exclusively of operational managers or non-managerial staff. The survey has therefore provided two different viewpoints on health and safety practice, as was its aim.

Table 2.3: Survey respondents' job titles

	Main-contacts % N = 383	Extra-contacts % N = 368
Specific H&S responsibilities	26	9
Company director/owner	28	7
Floor manager/supervisor	27	36
Other manager	13	27
Other non-manager	7	21

Source: IES and Databuild survey of dutyholders 2009

#### Dutyholder attitudes towards workplace health

Dutyholders were asked to state whether they agreed or disagreed with five statements about workplace health in order to gauge whether there were any measurable attitudinal differences between the two groups. The results are presented in Table 2.4. Inspected and non-inspected dutyholders had similar attitudes in relation to three of the statements, but differed in a statistically significant way in relation to two, with the inspected group having more positive attitudes towards workplace health in both cases. These differences held when other factors were held constant in the analysis.<sup>1</sup>

The two groups differed on the following statements:

- Inspected dutyholders are more likely to feel that it is a dutyholder's responsibility to help workers in looking after their own health.
- Inspected dutyholders are more likely to disagree that it is difficult to find the financial resources needed for health and welfare services.

This result suggests that, in addition to being larger on average, the inspected dutyholders are potentially better resourced and more engaged with workplace health issues than the comparator group.

Table 2.4: Response of dutyholders to range of attitude statements about workplace health

Disagree	۸r	ctrong	<b>1</b> 77	dicagree
DISAPTEE	OI.	SHOHY	ıν	UISAPTEE

	Inspected dutyholders % N = 153	Comparison group N = 226
It is not up to dutyholders to help workers look after their own health *	95	87
Workload and other pressures make it difficult for your organisation to deal with health and welfare issues	85	77
It can be difficult to find the money needed for health and welfare services given other priorities *	74	58
It can be difficult to work out where to go to get advice about how to look after or improve the health or welfare of staff	92	87
Your organisation isn't always sure what it needs to do to look after or improve the health and welfare of staff	82	77

<sup>\*</sup> T-test significant at 5 per cent level.

Source: IES and Databuild survey of dutyholders 2009

Using a logistic regression analysis (see Appendix 4 for the results of the regression).

#### 2.5 SITE VISITS AND DUTYHOLDER INTERVIEWS

In order to obtain a comprehensive picture of the impact of MGS3 in practical terms, the research team carried out a number of visits to the work sites of inspected dutyholders. A comprehensive discussion guide was developed in consultation with HSE to allow further exploration of issues identified in the survey and also to gain general views on the MGS3 intervention. A question in the telephone survey asked whether dutyholders would be willing to participate further (78 per cent indicated they would consent to a site visit); a sample of 25 dutyholders was drawn from those who agreed. The recruitment process was directed by flexible quotas to ensure broad representation of sites inspected with respect to size, region and sector.

Researchers aimed to speak to managers with some knowledge or involvement in the MGS3 inspection/audit, (usually the 'main contact' who had responded to the dutyholder telephone survey). Interviews were also pursued with extra contacts who had responded to the telephone survey, as were interviews with any other key staff with health and safety responsibilities. Where possible, interviews would also take place with other staff who were able to provide views on health and safety issues. Usually these were individuals with responsibility for managing workers and/or traffic movement on the site. For safety reasons researchers were unable to tour the whole site, so relied on verbal accounts of health and safety practice and any changes made to this following MGS3 visits.

Five additional interviews were carried out over the telephone with the main contacts of other dutyholders. A total of 30 dutyholders were therefore involved in this evaluation component.

#### 2.6 SUPPLIERS AND CONTRACTORS

In order to explore the 'multiplier effect' with regard to the intervention, interviews were carried out with businesses within the same supply chain as dutyholders participating in the dutyholder survey. During the telephone survey, dutyholders were asked to provide the contact details of businesses that they delivered to, their suppliers, or agencies providing drivers who regularly visited their site. Dutyholders were asked again for this information during the set-up phase for the site visits, and contact details of 40 suppliers and contractors were obtained in total. The research team focussed mainly on pursuing contacts from the dutyholders that had been visited, but contacts obtained during both the survey and visits were utilised.

A total of 23 suppliers/contractors were interviewed. Eight suppliers/contractors were local to the site of the main dutyholder and were visited on the same or an adjacent day to the main dutyholder visit. Where the supplier/contractor was in a different geographical area, interviews took place over the telephone (15 telephone interviews were conducted).

A discussion guide was developed with HSE that explored the supplier/contractor relationship with the main dutyholder and whether there had been any changes in the way they worked as a result of the intervention. It also allowed some exploration of the way the industry worked more generally.

In practice, only a relatively small proportion of supplier/contractors identified by dutyholders were willing to contribute to the evaluation. Also, due to prevailing economic conditions, several suppliers (mostly SMEs) had closed down or merged with other companies by the time a researcher attempted to contact them.

#### 2.7 SURVEY OF WORKERS

A self-completion questionnaire was developed with HSE for use with workers in the premises visited during site visits. The questionnaire was designed to assess behavioural and attitudinal changes amongst workers. The questionnaire covered risk areas of central interest to the intervention and was designed to be applicable to drivers as well as site-based warehouse staff and employees involved in loading/unloading processes. One hundred and seventy-six employee questionnaires were completed and returned.

A reading age assessment<sup>1</sup> was conducted on the questionnaire (which was assessed to be 13.9 years, and therefore acceptable for a survey of this type) and a small cognitive piloting exercise was conducted with the target group. The questionnaire was also translated into Polish, and both English and Polish language versions were made available during site visits. A copy of the English language version of the questionnaire is provided as Appendix 3.

In advance of site visits, consent was sought from the main dutyholder contact to distribute questionnaires to employees. A small incentive (a £2 lottery scratch card) was offered to employees completing the survey in recognition of the fact that most were obliged to use breaks or their own time to complete it. Permission was sought from each dutyholder to display a poster alerting workers to the purpose of our visit in communal areas accessible to all staff prior to the visit date.

Where possible, the survey was distributed to (and collected from) workers during the site visit. However, this was not always practical. Drivers were frequently out on the road and visits did not always coincide with breaks in warehouse workers'/forklift truck drivers' shifts. In these circumstances, a manager or worker representative was asked to distribute questionnaires and workers were provided with reply-paid envelopes so that they could be returned directly to the research team.

While the achieved sample was 176 workers, only those who were working on that site for a year or longer and who would, thus, have been exposed to the pre- as well as to the post-health and safety conditions of the site, were retained for further analysis. The final usable sample therefore consisted of 141 employees, of which 93 per cent were an employee at this workplace and seven per cent were the employee of a subcontractor. The average age of the sample was 42 years (mean=41.71; std=11.66) with the youngest employee being 17 and the oldest 66 years old. Ninety-two per cent were British. Their job titles are detailed in Table 2.5.

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Conducted by the Plain Language Commission. A readability assessment measures key statistics of text – often the number of words, syllables and sentences – and combines them using a formula to give a numerical score. Readability tests have limitations, but can be a useful general guide to how easy a document is to read and understand. The commission advised that text for adults should normally be pitched at an age level of 14 to 15 years, or slightly lower if the adults concerned have weak reading skills.

Table 2.5: Job titles of respondents to employee survey

	No. of employees	% of sample
Lorry driver	33	24
Dispatch clerk	3	2
Loading/unloading vehicles	11	8
Warehouse worker	10	7
Order picker	3	2
Warehouse supervisor	8	6
Forklift driver	12	9
On-site maintenance worker	5	4
Administrative and office staff	9	7
Manager, supervisor, leader, director	11	8
Other	33	24
Total	138	100

Source: IES/Databuild survey of dutyholders 2009

#### 2.8 INTERVIEWS WITH WORKERS

Telephone interviews took place with 27 workers based at a subgroup of sites visited by researchers. Workers were recruited via the worker questionnaire: a section requested volunteers for interview and asked for their first name and a telephone contact number. Mobile telephone numbers were requested to facilitate contact with peripatetic workers. An incentive of £20 was offered in acknowledgement of the fact that most workers would be giving up their free time to participate in interviews.

Two discussion guides were developed, one each for drivers and site-based staff. These allowed further exploration of any issues or changes reported in individual workers' questionnaire responses and, with respect to drivers, explored the variation in health and safety procedures and behaviours at different sites.

#### 2.9 LIMITATIONS OF THE EVALUATION

Before moving onto the results of the evaluation, some limitations of both the methods and results are discussed. The main issue affecting the evaluation is that it was not always possible to establish whether changes made by dutyholders and workers were as a result of the MGS3 intervention, or other things.

Other limitations included the following:

- There were difficulties for inspectors in separating out their activities related to MGS3 from those related to MGS2, so there was some conflation of inspector experiences of the two initiatives.
- There was a lag between the MGS3 intervention and contact with the research team. As a consequence it was not always possible to speak to the person or persons who were present during the inspection, and respondent recall of the impact of the intervention could therefore be limited.

- There was a lack of any baseline data against which the post-intervention results could be compared, again meaning that it is difficult to draw definitive conclusions about the impact of the initiative from the available data.
- The selection of dutyholders for inspection was non-random, affecting the utility of any comparator group.
- A self-selecting group of dutyholders participated in the site visits, provided supplier/contractor details and allowed the research team access to their workforce (of those who initially volunteered for site visits, only a subset were willing to accommodate researchers within the evaluation time frame). This could mean that the most engaged dutyholders, or those with the highest standards of health and safety, became involved rather than a cross-section of dutyholders. Similarly, the supply chain contacts participating are likely to be seen as 'good' suppliers or contractors by the dutyholders that provided their contact details to the evaluation team. This is a common problem for research involving dutyholders where participation is voluntary.
- There was a possibility of social desirability bias¹ occurring during the surveys and interviews (again a common issue for social policy research). In this case the effect would be for workers and dutyholders to provide a more positive view of the health and safety practices at their worksite than would be the case with an objective assessment.

It is also worth noting that the evaluation results only reflect dutyholder experiences of the audit model of delivery to a limited extent. Contact details for only four of the 16 employers who received audits were included in the management information provided to the evaluation. Although all of these participated in the telephone survey, the low numbers prevented meaningful comparisons from being drawn regarding the effectiveness of the two delivery formats. Qualitative data regarding audits is limited to data obtained from one site visit coupled with information (regarding format of audits, issues encountered on site and recommendations made) obtained from the audit reports that HSE made available to the evaluation.

The evaluation is therefore best viewed as providing an indication of the potential effects of the intervention, and views from a range of perspectives on why and how this was achieved, as well as offering insights into the health and safety practices of the industries concerned in more general terms. It does not provide a quantitative impact assessment.

Social desirability bias is the tendency of respondents to reply in a manner that will be viewed favourably by others. This will generally take the form of over reporting good behaviour or under reporting bad behaviour.

# 3 DELIVERY

This chapter focuses on the inputs of MGS3 in terms of planning, implementation and delivery and presents relevant data obtained from frontline HSE/LA inspectors and other key HSE personnel working with the logistics, warehousing, road haulage and goods delivery sectors. It also provides an overview of the content of inspections and audits, and examines differences between these two principal modes of delivery. It does not cover the communications campaigns or consider each of the individual strands or the intervention separately as these were the subject of other evaluative work.

As part of its focus on inputs, the chapter addresses the extent to which the approach taken by inspectors was (i) wholly focussed on the key areas of MGS3, and (ii) consistent in content. The multi-stream nature of MGS3 and implications of this for delivery of the intervention is therefore considered. It also examines how HSE worked with LAs to deliver the intervention.

#### 3.1 CHAPTER SUMMARY

Inspectors felt that they were well briefed and prepared to deliver the intervention, although their precise interpretation of its aims depended on which of the strands they were involved in, and whether they had participated in MGS2. The way that information was recorded on the delivery of the intervention was variable across HSE inspectors, and no systematic recording by LA inspectors took place.

The format of inspections was dependent on the individual approach of inspectors. Some were carried out without warning, while others (including all audits) were arranged with the dutyholder in advance. Some inspectors preferred to raise MGS3 topics as part of ongoing contact with dutyholders, while others preferred to undertake a specific 'MGS3' inspection. Inspections typically lasted less than half a day, while audits (which only took place amongst 16 third-party logistics providers) were more in-depth, taking place over a number of days.

The main risk areas covered within MGS3 were site layout, management of visiting drivers and their vehicles, and loading/unloading practices. There was also a supply chain focus where possible, although it was only the audits that involved visits to companies up and down the supply chain.

There were some barriers to joint LA and HSE working (eg co-ordinating activities, differences in approach to paperwork), but where good relationships did exist, a combined approach was valued by inspectors from both organisations. Dutyholders had a largely favourable reaction to the initiative, with most of the recommendations seen as practical and useful.

# 3.2 PREPARING INSPECTORS TO DELIVER THE INTERVENTION

The preparation for an initiative can have a bearing on its success. Inspectors from both HSE and LA were asked to discuss the information they were provided with prior to starting work with dutyholders.

# 3.2.1 Understanding of the aims of MGS3

An important aspect in the delivery of a multi-faceted intervention delivered by a wide range of individuals is ensuring that everyone understands what they are aiming to achieve. During interviews, therefore, inspectors were asked about the period including the roll out of MGS3.

Most felt that they had been adequately briefed on the rationale, main aims and objectives of the intervention. However, inspectors also used very general terms to describe these aims (eg 'it looked at the transportation of goods'), suggesting that they may in fact have lacked a more detailed understanding of precisely which risks and processes the initiative was directed at.

It was clear that inspectors had picked up on the supply chain theme of MGS3, as reference to this aspect of the initiative was made in most accounts. Encouraging more effective communication about health and safety up and down the supply chain was seen to be a key objective by inspectors.

'People seem to be very insular and although they might get a problem with something that somebody up or down the supply chain is doing they don't seem to think of contacting them sometimes to sort it out. I would hope that MGS would have improved that.'

(HSE inspector)

Some inspectors were principally familiar with the strand of the initiative they had worked on, identifying more readily with the name of this strand than with MGS3 as a co-ordinated initiative. As a result, they could appear somewhat 'off-message' when asked about the aims of MGS3. In particular, inspectors who had worked on the 'Falls from Vehicles' campaign tended to have a narrower conception of MGS3: they were less able to differentiate between that particular work strand and the initiative as a whole than inspectors from other strands.

'It [MGS3] was with an aim to getting manufacturers and suppliers to provide better access to vehicles.'

(HSE inspector)

Inevitably, inspectors saw MGS3 as just one of a number of initiatives that they had been required to implement in the last two years and, one year on, were not able to be explicit about the aims of the programmes (nor aims of work strands they had no personal experience of) in a detailed way.

#### 3.2.2 Training and preparation

There was widespread agreement among HSE inspectors that the preparation they had received was sufficient to deliver the MGS3 inspections effectively, although views among LA inspectors were more variable. There was a feeling that the breadth of experience many had acquired as a general inspector was preparation in itself and that the material they were required to cover in MGS3 was novel in its focus rather than its content. Unsurprisingly, LA and HSE inspectors who had been involved in the delivery of MGS1 and MGS2 felt particularly well-equipped to deliver MGS3.

There was praise for the quality of guidance materials and positive feedback on the supply chain inspection (SCI) protocol from LA inspectors. The materials made available to HSE inspectors were felt to represent an improvement on those offered in relation to MGS2. Some HSE inspectors had attended a three-day Workplace Transport Health and Safety course that was also viewed as helpful preparation, although it was not clear whether this had been offered in relation to MGS2 or MGS3.

# 3.2.3 Recording and management systems

A number of HSE inspectors felt there was a lack of clarity with regard to the recording of MGS3 visits. They were not always confident that they had coded visits appropriately,

especially where elements of the MGS3 protocol had been incorporated into inspections carried out for some other reason. This lack of consistency in the way that individual inspectors coded inspections resulted in a perception amongst them that information based on COIN data would not provide a reliable indication of the inputs of the initiative.

Inspectors also experienced difficulties in their recording of audits where visits to several sites were involved, particularly where these belonged to the same company. It was suggested that a system was needed which would flag up prior contact with a company to inspectors planning future visits. Under the present system, inspectors in a different region would not be aware of a company's involvement in an audit instigated in a different region, even when changes had been actioned at a national level.

#### 3.3 FORMAT OF INSPECTIONS

Although this report frequently refers to MGS3 as though it were a single intervention, the means by which its objectives were delivered varied according to the number of work strands. This section provides a brief overview of the content/format of inspections and audits, which were the two main delivery mechanisms for MGS3.

# 3.3.1 Inspections

MGS3 inspections differed from more routine inspections in terms of emphasis (although several inspectors pointed out that any inspection on premises whose principal activity was distribution would be expected to have a focus on the movement of goods).

Inevitably, aspects of MGS3 inspections were dictated by inspectors' individual judgement. For example, some inspectors gave dutyholders advance warning of their visit while others chose not to. The decision on whether to make an appointment or call in 'on spec' was related to a variety of factors, such as the inspector's own schedule, the distance they would need to travel to reach a given location, and perceptions about the likely availability of the person the inspector would need to speak to.

'The more time and resource you're going to spend on an intervention and the bigger the organisation, the more likely it is you'll do it by prior arrangement... generally it's a matter of using your professional judgement and discretion as to whether or not you'll do an appointment.'

(HSE inspector)

From the perspective of dutyholders, the predictability of an inspector turning up at their site varied significantly according to their prior record of contact with HSE. For example, in some cases, inspectors would arrange a MGS3 inspection so that it tied in with a visit to follow up an earlier incident. In these cases, whether the inspector had made an appointment or not, there was an expectation from dutyholders that they would receive a visit at some stage from HSE in relation to the incident. There was a view from inspectors that it was desirable to 'kill two birds' as much as they could by running dual-purpose visits to make effective use of resources. However, one consequence of this was that dutyholders were not aware that they had been targeted as part of a national initiative and often attributed the presence of the inspector solely to a prior incident on the site. Also, in some cases where visits had been coded to the initiative, inspectors had attempted to deliver the objectives of MGS3 within the context of a general inspection. This was more common in relation to sites where the movement of goods was not the main activity.

Where inspections were carried out with the sole purpose of fulfilling the aims of the initiative (and this was normally the case), they included many elements of a standard

inspection (eg a tour of the site, an in-depth discussion with the dutyholder, and scrutiny of relevant paperwork). There was a view amongst the majority of inspectors that the main difference between a MGS3 visit and a 'normal' site visit was its emphasis on the dutyholder supply chain. Many inspectors also highlighted the importance of speaking to a range of individuals on site as a key element of the initiative.

'So we would do a site visit ... that would normally take an hour or two and then we'd spend the rest of the day interviewing people: site managers, warehouse men ... on a normal site visit you don't normally interview anybody, you just turn up and deal with what you see in front of you.'

(HSE inspector)

Most inspectors aimed to speak to lorry drivers directly, but this was often not possible due to their work patterns: drivers would often leave depots very early in the morning and return late at night, whereas inspectors tended to visit during core work hours. In general, it was easier for inspectors to speak directly to workers who had a site-based role, such as transport and warehouse supervisors. The duration of inspections was typically between two hours and half a day, although this varied according to the main activities on site and site size.

#### **3.3.2** Audits

An audit-based, large-scale intervention was applied to 16 third-party logistics (3PL) providers, which enabled supply chain issues to be fully addressed in some depth. Each audit was of approximately a week's duration and involved the input of a team of HSE/LA inspectors (HSE resource allocation for this work assumed each intervention would require 15 inspector contact days<sup>1</sup>).

Audits were comprised of some combination of:

- multiple visits to the main site
- visits to other sites belonging to the same company
- visits to sites of suppliers or subcontractors
- observation of delivery runs (inspectors would accompany drivers).

The exact nature of the delivery model was decided on a case by case basis according to the circumstances specific to each 3PL provider and staff availability. The staffing of each component generally involved some element of joint working and also reflected changing enforcement responsibilities across the supply chains in question.<sup>2</sup>

In contrast to inspections, audits were always pre-arranged in consultation with the dutyholder, often involving an initial meeting with senior management to establish the format of the audit and its aims. As well as their supply chain focus, another critical element was their focus on the principles set out in Successful Health and Safety Management HSG65.<sup>3</sup> The format of the audits also presented an opportunity for in-depth discussion with staff at all levels and full exploration of the relationships between the companies in question.

www.HSE.gov.uk/foi/internalops/sectors/cactus/5\_07\_01.pdf

For example, goods might be transferred from manufacturer (HSE responsibility) to distribution depot (LA responsibility) to retail outlet (LA responsibility).

<sup>&</sup>lt;sup>3</sup> This is a format for inspecting management infrastructure in large organisations in relation to health and safety.

#### 3.4 RISK AREAS COVERED

Inspections and audits aimed to cover the same principal areas of risk: site layout, management of visiting drivers and their vehicles, and loading/unloading practices. The nature of the actual risk areas covered by inspectors was investigated during the evaluation from the perspective of both inspectors and dutyholders visited as part of MGS3.

HSE and LA inspectors tended to be influenced, in terms of the content of visits, by the nature of the specific work strand they were implementing. So, for example, inspectors who had been implementing the 'Falls from Vehicles' campaign were more likely to report instigating detailed discussions with dutyholders about access to trailers or supply of specialist footwear; in these cases relatively less attention was given to site layout. Similarly, there was a tendency for inspectors who had worked on the pallet work hub strand to focus on issues concerning large palletised loads, and there was less likely to be discussion of risks presented by moving small containers (such as manual handling). Nevertheless, inspectors confirmed that they sought to cover all MGS topics on each visit and, where applicable, had provided guidance in relation to all of the major MGS3 risk areas.

From the perspective of dutyholders, as demonstrated by the survey results, a different picture emerged (Figure 3.1). A high proportion of dutyholders (74 per cent) recalled having discussed vehicle movement and parking, but only half felt that the visit had covered loading and unloading of vehicles, for example. Just under a quarter (24 per cent) of dutyholders recalled having discussed all three of the core MGS3 issues during their visit (Figure 3.2), and a small minority (eight per cent) did not recall discussing any of the three key issues. The remainder discussed one or two issues.

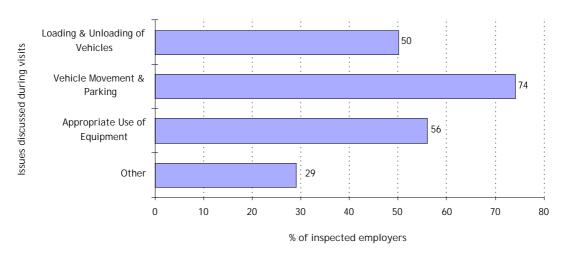


Figure 3.1: Issues discussed during inspection/audit

The figure is based on the responses of the main contact to a multiple response question at each of 153 inspected dutyholders.

Source: IES/Databuild survey of inspected dutyholders 2009

None 8%
24%
One 26%
Two

Figure 3.2: Number of core MGS3 areas discussed during inspection/audits

The figure is based on the responses of the main contact at each of 153 inspected dutyholders.

42%

Source: IES/Databuild survey of dutyholders 2009

A number of factors may underlie the discrepancy between what inspectors recall as having been the focus of discussions and the recall of dutyholders on the same issue, for example:

- There was a delay of a year (or more) between the timing of MGS3 intervention and subsequent evaluation: this may have affected dutyholders' recall of the contents of the inspection. This delay also increases the likelihood that staff who had been involved in the inspector visit had left the company.
- Not all survey respondents had direct contact with the inspector during the inspection: even if a 'typical' MGS3 visit was undertaken, their awareness of the topics covered may have been limited to issues which appeared in minutes of meetings or staff briefings.
- Dutyholders are likely to have better recall of issues with which they are already engaged, or which have direct, immediate, relevance to them (eg an issue raised in relation to a reported incident), rather than the more generic advice delivered as part of the overall intervention.
- The assignment of issues to the various MGS risk areas is somewhat arbitrary, for example discussions surrounding forklift trucks could arguably be assigned to any of the three areas defined by the survey.

# 3.5 SPECIFIC ISSUES ADDRESSED IN INSPECTIONS

The way in which the MGS3 intervention was delivered clearly differed depending on the particular work stream, the approach of the individual inspector involved and the circumstances of the dutyholder. However, there are themes which emerge. This section outlines in more detail the issues commonly cited by HSE and LA inspectors in their accounts of visits and those raised by dutyholders as areas of discussion. Actions resulting from inspections will be discussed in Chapter 4.

#### 3.5.1 Vehicle movement and parking

The intervention addressed several aspects of site layout including: signage and road markings, use of one-way systems, lighting, quality of road surfaces, and security of storage areas. Dutyholders reported discussions and recommendations in relation to this risk area more than any other. One possible reason for this is that site layout could be assessed by inspectors without the actual presence of delivery vehicles on site. It was therefore not subject to the observational limitations (ie drivers not being on site during visits) affecting other aspects of the intervention. Dutyholders confirmed that site layout was a strong focus of most visits.

Vehicle reversing and measures to minimise this were a particular focus, commonly the use of one-way systems and drive-through unloading areas. Recommendations typically centred on improving signage and lighting, painting road markings for vehicle movement, and measures to segregate pedestrians and vehicles. In many cases, on HSE-enforced sites the actions suggested were fairly minor and a matter of improving the current facilities rather than overhauling them completely (eg improving the visibility of existing markings/road signs).

There was a view amongst inspectors involved in joint visits (ie involving HSE and LA inspectors) that site layout standards were substantially lower at LA-enforced premises. Where deliveries only occurred at certain times of day (this was especially common in retail), there was a tendency for dutyholders to overlook the risks to workers (or members of the public) presented by goods vehicles. Site accessibility was also an issue, particularly on small sites, and the presence of obstacles or sharp turns which could cause large vehicles to veer off-balance was common.

'The route into the warehouse was very torturous and they had to go over a drainage gully where they had a metal plate which basically wasn't big enough for the truck, and at one point it veered sideways.'

(LA inspector)

Several LA inspectors observed that the sites they inspected had poor-quality road surfaces, adding to the risk of goods on poorly loaded vehicles shifting. This did not tend to be an issue in HSE-enforced premises where, in the main, the transportation of goods was a main activity and road maintenance considered a basic necessity.

#### 3.5.2 Management of drivers and their vehicles

The focus on peripatetic workers was generally viewed as a defining feature of the MGS3 intervention by both LA and HSE inspectors, although this aspect of the intervention appeared to receive more attention from LA than from HSE inspectors. Inspectors felt that this type of worker could easily be overlooked in a conventional site inspection and that the supply chain approach of MGS3 enabled inspectors to target drivers and agency workers (including foreign workers) who might otherwise be missed. A number of HSE and LA inspectors adjusted their working schedules specifically to enable them to visit when drivers would be making deliveries. Some visits, particularly to larger sites, led to inspectors strategically 'doubling up' to ensure that they gathered views on site management issues, such as access to vehicles, from lorry drivers as well as from managers and other on-site staff at appropriate times.

The specific issues dealt with included inadequate risk control procedures (eg in relation to the hitching/unhitching of trailers), and a lack of clarity regarding the role of the driver/on-site staff in unloading vehicles. Roles and responsibilities tended to be better defined in

larger companies where it was more common for drivers to be directed to refreshment and toilet facilities on arrival, thereby removing them from the unloading process.

An important line of enquiry in LA inspections was establishing the procedures that were in place in the event of a load appearing unsafe or unstable on arrival. Establishing what happened in practice could be problematic unless the inspector was actually there to witness a delivery. They were generally reliant on the accounts of dutyholders; several inspectors commented that because of this it was a difficult area to enforce.

'[Dutyholders] say, "No we don't get on the back of the vehicles – that is up to the person who is delivering," and you say, "What about if you have a delivery and you are desperate for the stock and you open the back door, some of the stock has moved. Are you going to let that driver do it himself even though he is not your employee or are you going to assist?" They um and ah but in reality they will assist.'

(LA inspector)

Inspectors generally experienced only limited success speaking to drivers in person about these issues. Drivers tended to be out on the roads during the day, leaving and returning to site outside conventional working hours. The audit format enabled inspectors to speak to drivers more easily, especially when it could be arranged for them to accompany drivers on delivery runs.

#### 3.5.3 Loading/unloading of vehicles

The wide array of sectors targeted by MGS3 meant that there was substantial variation in the nature of goods being moved and, hence, the issues that arose during inspections/audits. In the main, larger palletised goods tended to be handled by HSE-enforced premises, while LA-inspected sites were more likely to handle smaller loads that could be carried in delivery vans. The more regional nature of goods transferred to and from LA-enforced premises was largely responsible for this. For example, goods might arrive at a warehouse (ie the premises targeted by MGS3) for unpacking into smaller loads for subsequent redistribution to retail outlets. As a consequence of units being smaller, manual handling tended to be a more significant issue in these premises.

There was a greater tendency for poor practice on loading/unloading to exist on LA-enforced sites. For example, there were several reports of smaller companies stacking loose goods without using pallets and with apparently little regard for the situation awaiting unloaders at the destination site (ie the risk that the person opening the doors might be struck, or trapped, by falling goods).

'One of those [retail premises], their method of packing the vehicles seemed to be to throw everything into the back and then close the doors and so you had people climbing over everything and the vehicle distended by the amount of goods inside.'

(LA inspector)

#### 3.5.4 Appropriate use of equipment

Although the remit of MGS3 included a range of specialist kit used to move and load goods (eg gantries, vehicle turntables, mechanical belts, lifting cradles), accounts provided by inspectors and dutyholders on the content of inspections predominantly focussed on more ubiquitous equipment such as forklift trucks and personal protective equipment (PPE).

On small sites where no delivery vehicles were present, lift trucks were often a main focus of the inspection. The main themes addressed were driver training, lift trucks maintenance and certification: the latter was cited by HSE and LA regulators alike and enforcement actions were frequently invoked in this area. The use of lock-off systems was also a recurring theme.

On sites where comparatively small loads were moved around, the safe use of trolleys, barrows and roll cages was discussed. It was typical for the dutyholder and inspectors to have a lengthy conversation in relation to this (as well as demonstrations) as inspectors needed to gain a good understanding of operational aspects of the business before giving advice.

'[We talked about] the way material is moved around the bottom end of the factory. We have six-metre stillages which have plates of aluminium on it on wheeled dollies and they either travel with the overhead crane or are pushed on the dollies.'

(Branch health and safety manager, national building materials supplier)

Appropriate clothing and other PPE such as safety shoes and ear defenders were routinely addressed – in some cases workers were found to be wearing jackets that were waterproof but not reflective. Other equipment featuring in recommendations and discussions included shelving and racking systems within warehouses, ramps (for vehicle and building access), and the use of safety harnesses when working at height.

#### 3.5.5 Use of vehicles

A significant portion of HSE and LA inspectors cited falls from vehicles as a major focus of their inspection. Inspections would focus on general access to vehicles (eg cabs, trailers, flatbeds, fifth-wheel areas), with discussions on the use of control measures such as harnesses, ladders and grab bars, making recommendations where necessary. Issues such as non-slip flooring in areas susceptible to water/oil contamination were also addressed. Where possible, inspectors would discuss these issues with drivers directly.

A number of inspectors addressed vehicle-purchasing behaviour in relation to falls from vehicles. For example, some dutyholders were not aware that drivers used to three-step cab exits could be at risk if provided with a new two-step model.

'It also can be the fact that they have got standard vehicles and then all of a sudden some bright spark gets to buy a new cab... and they are coming down from the cab, use the three steps there and they go for the step that is not there and they fall.'

(LA inspector)

One of the main issues for inspectors was identifying exactly the types of vehicles dutyholders were dealing with (and what kind of loads) during inspections carried out at times when vehicles were not present. In these circumstances, inspectors would try and build up a picture of activity through questioning various members of on-site staff.

#### 3.5.6 Health and safety management systems

There was a widespread view among HSE inspectors that management systems and associated paperwork was generally of a good standard amongst targeted dutyholders, especially within larger organisations. All inspections addressed health and safety management systems, although this typically formed a brief part of the inspection.

'They looked briefly through the health and safety policy and risk assessments, sample method statements. That was it. No real comments. We just left them with them in the room.'

(Responsible welding co-ordinator, small manufacturing company)

However, some recommendations were still made in this area and these typically centred on updating health and safety policies and risk assessment procedures. Some inspectors noted a tendency for dutyholders to approach risk assessment as a 'tick-box exercise' and not give the issue sufficient thought and attention. For example, one haulage company had old risk assessment documents originating from another site which had been updated by simply changing the name at the top.

Audits allowed more in-depth analysis of management systems and a more rigorous approach. Examples of areas addressed in recommendations to 3PL providers included:

- provision of training and induction to new staff
- inclusion of health and safety as a regular agenda item at board meetings
- documentation of health and safety performance in annual reports.

Audits also allowed inspectors to gain a wider view of health and safety management as they could observe how management systems were implemented at different sites belonging to the same dutyholder. For example, there was an observation that there could be too much centralisation of function amongst organisations with several premises, meaning that there was less health and safety competency at smaller sites with less rigorous controls and standards as a result.

## 3.5.7 Supply chain focus

In line with the supply chain theme of the MGS3 intervention, inspectors encouraged dutyholders to put measures in place to protect their employees working at other sites, and highlighted the importance of working with suppliers and contractors to maintain health and safety standards across the supply chain.

'I would try to encourage them to talk to their suppliers and customers to join it up a bit. I was using examples where bigger companies have modified their vehicles or customers have altered what they require for ... to try and open their minds to liaising with the other companies.'

(HSE inspector)

The audits enabled inspectors to gain an understanding of the dutyholder distribution chain and therefore make explicit recommendations about working arrangements with other contractors, such as:

- the provision of information to drivers instructing them to leave vehicles during loading/unloading and telling them where to go during this time
- the introduction of contractual health and safety standards or performance agreements between a 3PL provider and their clients
- the provision of health and safety briefings to on-site and/or visiting workers
- the introduction of driver audits at collection and delivery sites.

#### 3.5.8 Other

In general, inspectors' accounts of the content of their inspections were consistent with HSE guidance provided for the intervention and encompassed all activities involved in the transfer and storage of materials. However, there was inevitably some variation in approach and MGS3 objectives formed a larger component of some inspections than others.

Dutyholders reported that a number of 'other' issues unrelated to moving goods were raised during inspections. Examples provided from survey respondents included management of asbestos, use of spray booths, use of machine guards, and slips and trips prevention.

'We looked at slips and trips, we looked at work at height, we looked at asbestos, we looked at muscular skeletal disorders, manual handling, the sort of key priority topics that we normally look at but the vehicle movements was one of the topics.'

(LA inspector)

Dutyholder reports matched the accounts of inspectors who, regardless of their regulatory background, stressed that they would always be alert to other issues on site outside the MGS3 remit. Because of the 'one-off' nature of MGS3 inspections, it was felt important to address as much as possible while on each site. This was emphasised particularly in relation to sites on which the main activity was manufacturing: it was felt, once the MGS3 areas had been covered, that inspection of these activities merited extra time on site.

### 3.6 JOINT WORKING

Partnership working was a stated aim of all MGS3 work streams (with the exception of the pallet networks intervention) and the evaluation allowed some exploration of the success of this aim through interviews conducted with HSE inspectors and their LA counterparts.

HSE inspectors were generally positive about the involvement of the LA authorities, and in many cases, joint working was seen as an essential component in influencing each element of the distribution chain. Joint working was felt to be particularly valuable because of the complexity of HSE and LA inspectors' respective responsibilities in relation to the logistics, warehousing, road haulage and goods delivery sectors.

'Road haulage is one of the most useful times to have a joint visit because quite often the enforcement regulations are so confusing you don't really know who's going to be inspector until you both get in and start asking questions, so it's quite useful to have an LA and HSE inspector there because you never really know who's the correct enforcing authority.'

(HSE inspector)

There were considerable differences in practice between and within regions with regard to the co-ordination of joint inspections and it was not always possible for HSE inspectors to work with LAs due to logistics and time constraints. Participation from LAs was inconsistent and in some cases it was easier for HSE inspectors to proceed with planned visits (in some cases to LA-enforced premises) without them. There was an overall consensus that co-ordinating activities between HSE and LAs could be problematic and that joint working required a level of planning that was not always possible.

'I think the co-ordination between different HSE and local authorities, that's the biggest challenge. Once you cross the boundary of the local office, that requires some co-ordination and that is perhaps we fell down locally with that co-ordination and resourcing.'

(HSE inspector)

In some cases, although good intentions were stated at early briefing meetings, these were not followed through. Exchanging paperwork within planned time frames was viewed as particularly challenging and there was a feeling among HSE staff that LA priorities were not always compatible with their own.

'I am a great believer in working with local authorities but unfortunately local authority priorities are not the same as ours. The chap I deal with is an EHO who does health and safety and food safety and he has a target from the Food Standards Agency but not a target from me; his priority is to the Food Standards Agency and I come a very far second best. If we are going to have successful joint working partnerships, then we need to have some call on their time.'

(HSE inspector)

The impact of various barriers to joint working appeared to be highly dependent on local factors. Where joint working had been successful, it appeared that good working relationships were already in place, often as a result of work conducted on MGS2. Many of the views expressed with regard to MGS3 in relation to joint working appear to be consistent with issues highlighted in HSE's evaluation of MGS2.

From the perspective of LA inspectors, the backup from HSE on this project was highly valued primarily in terms of increasing influence on dutyholders and knowledge sharing. The status of MGS3 as a national initiative was seen as a key factor in its success. There was a view that dutyholders perceived greater fairness of approach when informed that the visit was part of a large project, and inspectors felt that this was an important factor in overcoming resistance or scepticism.

'Commonly what happens is the attitude you get is nobody else has asked us for this. Because there was widespread partnership working on this case, they haven't been able to rely on that excuse.'

(LA inspector)

#### 3.7 ISSUES SPECIFIC TO LA WORK

It is important to note that a full understanding of the level at which local authorities were involved in this intervention (in terms of numbers of inspectors and sites inspected) is beyond the scope of the current evaluation, principally due to a lack of management data regarding LA input.

It was possible, however, to identify specific aspects of the work of LAs which were different from that of HSE. In accordance with HSE's Enforcing Authority Regulations, LA personnel did not generally undertake inspections of sites where transportation of goods or manufacturing was the main activity, unless partnered by a HSE inspector (as part of the joint working component of the initiative). Therefore, collectively, LA inspectors' experience of major transportation hubs was relatively limited and their accounts of MGS3 visits focussed on organisations whose main activity was storage, wholesale and/or retail.

There was also general agreement that a wider range of different sized sites was visited by LA inspectors in comparison to those inspected by HSE inspectors. A significant minority of small operators feature in local authority lists of MGS3 targeted premises.

'[There was] a lot of emphasis on those sorts of workplaces where they have got maybe seven or eight people in a warehouse, two on forklift trucks and the rest wandering around.'

(LA inspector)

Due to the predominance of warehousing premises inspected by LA inspectors, the interface between storage and delivery was a principal area of concern. There was a view that companies paid less attention to safety once a load was broken down into its constituent parts for sales.

In several cases LA inspectors reported combining the objectives of multiple initiatives or projects in one visit. This appeared to be a resource-saving strategy when officers were juggling competing priorities within a limited time frame.

'The actual sort of movement of goods, we didn't look at it as a separate thing, we built it into other projects.'

(LA inspector)

Like other frontline initiatives, the MGS3 initiative presented a potential opportunity to engage with an increased number of dutyholders. Contact with dutyholders was seen as a significant outcome in its own right by local authority inspectors and considered more important, in terms of indicating overall success of the intervention, than statistics regarding enforcement notices.

#### 3.8 ACCEPTABILITY OF THE SERVICE

Another important aspect of delivery is the extent to which those targeted by an initiative found it to be acceptable. Dutyholders' (largely favourable) reactions to the service they received from HSE are summarised below.

#### 3.8.1 General views on MGS3

The dutyholder survey asked dutyholders involved in MGS3 if the intervention could have been improved in any way, and 90 per cent felt that it could not. This suggests that the visits and audits were generally acceptable to dutyholders in terms of their content and format.

Dutyholders were also asked to rate the recommendations they had received in terms of the practicality of implementing them and the degree to which the changes they had made were beneficial (see Table 3.1). Responses were sought in relation to each of the main risk areas addressed by MGS3 as well as 'other' risk areas. Dutyholder ratings of practicality and perceived benefit of recommendations were fairly consistent across categories: ratings ranged between 'good' and 'very good' for all areas. However, it is interesting to note that 'practicality' ratings for recommendations made in regard to 'Loading and unloading goods' are lower than scores obtained for the other risk areas. This could possibly reflect the specialist knowledge held by individual companies about the nature of loads they transported: a wide array of goods types was encountered on MGS3 sites and it may have been more challenging for inspectors to identify workable solutions to loading/unloading issues than more generic issues such as poor site layout.

Table 3.1: Dutyholders' rating of recommendations

	Recommendations were practical (Mean, where 5	Recommendations were beneficial indicates 'very')	No. of responses on which score are based
Loading & unloading of goods	4.10	4.38	51
Vehicle movement & parking	4.35	4.40	60
Appropriate use of equipment	4.41	4.24	47
Other	4.42	4.30	75

Source: IES/Databuild survey of dutyholders, 2009

Interviews with dutyholders also confirmed that inspections and audits were positively received. In many cases, dutyholders reported an experience that was 'less painful' than expected: the approach of MGS3 inspectors was generally regarded as helpful rather than punitive and dutyholders were encouraged by the degree to which HSE inspectors worked with them to identify practical solutions. Dutyholders were, in general, better disposed towards making changes if the approach of inspectors was collaborative rather than confrontational.

'It's easy for both parties. If they turn up and they're working with us and we're working with them they're not up against a wall. If they are willing to listen we can change it.'

(Manager, medium-sized haulage company)

The difference between dutyholders' expectations and the actual experience of the inspection was common to several accounts. On the whole, dutyholders felt that inspectors had a good understanding of the nature of their business and the challenges associated with controlling risk. As might be expected, some of the most positive reports were from health and safety professionals who, on the whole, felt that recommendations were reasonable and achievable. There were a number of comments about the importance of being given sufficient time to implement changes; this could make a list of objectives seem more palatable and more realistic.

'To be honest, it was all pretty useful because it was done so constructively, you know, I think we all were expecting a bit of a kicking from it and that didn't really happen which I thought was quite refreshing and really pleasing. So I was pleased that we got a sensible amount of time to put in place the measures that we had to put in ... so we had a clear set of goals and a clear set of objectives that we had to achieve... I thought that was really good and I was pretty impressed with the way the whole thing was conducted.'

(Branch health and safety representative, national logistics company)

Dutyholders were more likely to comment on physical changes to the workplace than health and safety management changes when asked for views on changes they had found valuable. This may reflect the visibility (and hence, easier recall) of changes to site layout or equipment relative to administrative or procedural changes. It is also seems likely that physical changes were judged 'better' as it was easier to envisage the accidents they might have prevented.

'The actual physical change and procedure in the loading bay. It's very easy to fall off an edge like that. The procedure now in place and the physical barriers work very well. They have a procedure in place the guys themselves believe in and follow up. It works. Rather than having some management decision where it's passed down the line and paid lip service to, it's a physical barrier and procedure that they follow up 95 per cent of the time.'

(Branch health and safety manager, national building materials supplier)

The largely favourable reaction to the service presented here may be a reflection of a generally positive attitude to health and safety among HSE-enforced sectors targeted by the intervention, and by the criteria HSE used to select individual premises. The possible biases arising from the various criteria used to target dutyholders are discussed fully in Chapter 5. It is also important to be aware that only a sub-section of dutyholders in the target population volunteered for further interview, and the self-selected nature of this sub-sample needs to be considered when interpreting the above findings.

### 3.8.2 Views specific to audits

Views on audits were qualitatively different from views on inspections, as dutyholders would typically describe them in terms of a 'free extra' or as a valuable opportunity to flag up weaknesses within the company's health and safety management. This generally positive view may stem from the nature of companies that were targeted by audits. The low number of audited dutyholders willing to participate in the interviews/site visits limits the representativeness of findings in relation to this population.

Like dutyholders receiving inspections, there was an initial resistance to the prospect of the audit. There was additional concern about the extended period that inspectors would spend on the premises and the inconvenience involved. However, the overall verdict was that the experience had been of benefit.

'At the time the view was it was a nuisance. The reality is that actually it was no different to any other audit or inspection we have and it was a new set of eyes and ears on site from a certain skill sector very much interested in health and safety. It was really a free audit or consultancy and highlighted areas we probably lacked.'

(Operations manager, 3PL provider)

There was a feeling that the audit had drawn attention to some areas of health and safety that had previously been overlooked, particularly in regard to working with contractors and controlling risks to drivers delivering to other sites. Another perceived benefit was that HSE advice had added weight to requests made to management to fund planned improvements. Dutyholders also welcomed the opportunity to 'educate' HSE and LA inspectors about the nature of their business and saw the audit as a two-way process. Recommendations were, in general, viewed in a positive light, especially those arising from the audit's disciplined approach to reviewing health and safety management systems.

'We were fairly robust previously and we are better for it now and the site's infrastructure has improved accordingly.'

(Operations manager, 3PL provider)

As with the data presented regarding acceptability of inspections, the opinion across all dutyholders receiving audits cannot be discerned from the findings presented here. Dutyholders receiving audits were interviewed as part of this evaluation and may not have shared the same views as those who did not volunteer, and the influence of self-selection needs to be considered when reflecting on these findings.

# 4 EFFECTIVENESS

This chapter is designed to meet the evaluation objective of assessing the extent to which the MGS3 project has achieved its goals and sets out evidence indicating which risk areas and behaviours the campaign was successful in addressing. It also addresses the acceptability of the intervention to its users and comments on whether there has been a 'multiplier effect' (although this topic is discussed more fully in subsequent chapters).

#### 4.1 CHAPTER SUMMARY

According to the dutyholder survey results:

- Just over 40 per cent of inspected dutyholders made changes in at least one of the MGS3 target risk areas: the majority of improvements were made to site layout and vehicle access.
- The main influence of the intervention appears to have been to speed up planned changes: more than three-quarters of dutyholders who had implemented recommended improvements on their site reported that they would have taken the same action regardless of the intervention.
- There were no significant differences between the dutyholders who received the intervention and those that did not when sickness absence and accident data were compared.

These results need to be viewed in the light of the criteria used to select dutyholders who received the intervention, and also an apparent commitment towards good practice within HSE-enforced sectors targeted by the intervention. In the absence of baseline data, it is also difficult to quantify the extent of impact. Also, to properly assess the potential long-term impact of MGS3 on work-related incidents and injuries, a longer follow-up period may have been needed.

#### 4.2 ENFORCEMENT ACTIVITIES

It was not possible to identify the number and type of enforcement actions resulting from the MGS3 intervention (in isolation from other initiatives and enforcement drives operating over the same period) from centrally held data. A limited amount of information regarding enforcement action was, however, obtained from interviews held with inspectors and dutyholders.

The most common subject of enforcement actions was a lack of segregation of vehicles and pedestrians and/or site layout. LA inspectors were more likely to have taken enforcement actions due to risks to the public, reflecting the nature of the premises they visited (eg retail and wholesale premises, often with customer car parks and walkways close to delivery areas). Both HSE and LA inspectors reported the under-use of one-way systems and this frequently featured in recommendations and enforcement notices.

The audits carried out on 3PL providers involved all aspects of the supply chain and meant that issues which might not have been uncovered during usual inspection activity were revealed. An example of the results of these audits is provided as Case study 1. Similarly, in larger companies operating across multiple sites there was potential for an enforcement notice at one site to prompt changes on others. One example is that, as a result of an enforcement notice at a large haulage company, action was taken to remove pedestrians from the floor on a nationwide basis.

### Case study 1: Benefits of a supply chain approach

One audit of a medium-sized 3PL provider employing a mix of drivers and warehouse operatives resulted in three improvement notices being served.

A HSE inspector involved travelled with one of the company's drivers and therefore observed deliveries and the movement of goods off site as well as at the main work site. The inspector felt that the dutyholder was not taking sufficient action to control risks to his driver at one particular delivery point. The site was on a roadside and surrounded by heavy traffic, and the delivery involved reversing a 20-foot rigid vehicle down a side street while employees tried to stop buses and cars on main and side roads.

The main problems were that the vehicle was felt to be inappropriate to the job: it was curtain sided and the load had to be unloaded in the middle of the road because of the positioning of the pallet, and there was also concern that the palletised load required manual unwrapping. The improvement notice placed a requirement on the dutyholder to prepare delivery plans for all drivers, with due attention to time of delivery (avoiding busy times) and the suitability and size of the vehicle used in the delivery.

### 4.3 IMPLEMENTATION OF RECOMMENDATIONS

The main activity of inspectors on site was not actually enforcement activities, but providing recommendations for dutyholders to follow in order to improve health and safety conditions on their sites. An important issue in determining the effectiveness of the MGS3 intervention is therefore understanding whether, and how, these recommendations were implemented.

### 4.3.1 Extent of overall change

The dutyholder survey asked respondents from inspected premises whether they had acted on inspector recommendations made during their inspection/audit (Figure 4.1). Over two-thirds of dutyholders (68 per cent) had acted on most or all of the recommendations.

None of them/no recommendations made 28%

Some/a few of them 3%

Most of them 22%

Figure 4.1: Extent to which dutyholders acted on the recommendations provided by inspectors during MGS3 visits

The figure is based on the responses of the main contacts at 153 inspected premises. *Source: IES/Databuild survey of dutyholders, 2009* 

### 4.3.2 Changes to specific risk areas

Dutyholders were also asked about their response to recommendations on different areas of risks. Table 4.1 provides the proportions of dutyholders being given recommendations and the proportion implementing changes as a result, against the three main areas of risk targeted by MGS3.

The most common discussions with inspectors concerned vehicle movement and parking (74 per cent of inspected premises recalled discussions about these topics), followed by the appropriate use of equipment (56 per cent had discussed this, and mostly the discussions focussed on appropriate use of forklift trucks) and then loading and unloading of goods (50 per cent). A further 29 per cent of dutyholders had discussed at least one other issue with inspectors, reflecting the need to adapt the precise nature of the inspection to the premises in question (eg paint spraying, use of woodworking machinery and control of asbestos).

Table 4.1: Improvements to premises made as result of discussions/ recommendations

	Proportion that had discussed the issue with inspectors		the p	owing a discussion, roportion that had made changes
Issue	(%)	No. of responses on which % based	(%)	No. of responses on which % based
Loading and unloading of goods	50	77	51	39
Vehicle movement and parking	74	113	60	68
Appropriate use of equipment	56	86	48	41
Other	29	44	75	33

This table is based on the responses to a multiple response question to which dutyholders could reply by listing as many recommendations as applied to them.

Source: IES/Databuild survey of dutyholders 2009

Having had a discussion with an inspector about one of the three main MGS3 topics, the area where dutyholders were most likely to be make changes was again vehicle movement and parking (60 per cent of dutyholders receiving recommendations on this made changes as a result). However, it is interesting to note that a large proportion (75 per cent) of those receiving advice about something other than these three risks had made changes. Inspectors were therefore encouraging changes in a range of areas specific to the individual dutyholder.

Overall, the area where inspectors appear to have made the greatest impact is on vehicle movement and parking. Forty-four per cent of dutyholders visited as part of MGS3 had made some form of change to the way that this was organised on site. There had also been changes in other areas: 25 per cent of dutyholders had made changes to the way they loaded and unloaded goods, and 27 per cent had made changes to their use of equipment as a result of the initiative.

### 4.3.3 Why recommendations were not acted upon

Those dutyholders that indicated they had been given recommendations but had not subsequently acted on them were asked why this was so. In an overwhelming majority of cases (between 89 and 95 per cent of dutyholders, depending on the risk category), the reason given by dutyholders was that they were already doing the right thing.

It should be noted that the survey questions were originally designed to distinguish between 'discussions' with inspectors and 'recommendations' made by inspectors. However, piloting revealed that respondents were unable to make this distinction. The questions were therefore adjusted to focus on recommendations. This has some implications for the interpretation of these findings. It is possible that a discussion initiated by an inspector may have confirmed dutyholders' perception that they were 'doing the right thing already'; a recommendation, however, would have meant that an inspector believed that change was necessary. If dutyholders are actually indicating that, following a discussion, they did not make changes, this could represent an appropriate response.

Interviews with dutyholders during site visits suggested that there was, however, a range of other factors involved in not making changes. The main additional issues were:

■ The impracticality of the advice given. Inspectors accepted that, in some cases, dutyholders were simply not able to implement changes (eg not being able to implement one-way systems due to space restrictions on smaller sites, even where vehicle reversing had been identified by inspectors as a problem). Additional problems could occur when dutyholders did not actually own the premises on which they operated, where the actions they could take were limited either by the response of a landlord or their head office. Case study 2 (later in this section) provides a further example on this.

'[The inspector] made some recommendations we spoke to our landlords about, we discussed them with health and safety nationally and I think we eventually agreed that there wasn't a huge amount we could do in terms of putting designated pathways across the place ... we didn't end up putting a pathway down.'

(Branch health and safety representative, large logistics company)

■ The need to prioritise from multiple recommendations. Where a wide range of recommendations had been made (this was particularly common following 3PL audits), dutyholders were not always in a position to implement every change at once. Despite the fact that the MGS3 intervention pre-dated the evaluation fieldwork by at least 12 months, some companies were still phasing in changes. Changes that were simple to make tended to be implemented first, while those that were more laborious (such as writing delivery plans on a site-by-site basis) had stalled.

'We put together an action plan with tasks and set about doing that. Basically [we] completed them all and the only ongoing issue is the delivery plans for vehicles going to other sites and you know that is a long, long process doing that.'

(Manager, 3PL provider)

■ Making a judgement that the risks were insufficient to warrant taking action. This was particularly common on sites where vehicle movements were relatively infrequent. Dutyholders could be reluctant to make changes to the layout of the site to decrease a risk they perceived as an issue for only a limited portion of the day.

'We only get two or three large vehicles coming in every day, so it's unlikely that anyone's going to be here when one of those is around, or certainly members of the public who wouldn't know it was going to be there, but yeah, it was a sensible sound suggestion.'

(Manager, small haulage company)

■ The costs of making changes. No dutyholders stated explicitly that they had not made changes because of the costs involved. However, cost was sometimes a consideration in what changes took place. It was evident that cost was less of a barrier to larger companies, and this type of firm had often spent large sums in making improvements. Smaller companies, in contrast, were more concerned about costs.

'The improvements were not difficult to carry out. They required investment. We probably spent in the region of £15,000 to do new barriers, changing the lights. It's an inherently low-margin industry, and the costs we've undertaken ... that was the only difficulty ... to get approval to spend.'

(Operations manager, large haulage company)

'We've gone to a professional company and it cost about a couple of thousand pounds to do the driveway through both warehouses, together with the box sections together with the walkways and we had that re-done again at the beginning of this year, so two years on we need to keep doing it. The yard 12 months on since we did that needs to be done this year again.'

(Operations manager, pallet hub)

## Case study 2: Recommendations not acted upon

A HSE inspector visited a distribution company where warehouse workers were accustomed to unloading baskets manually from the trolley used to transport them. This required a 'jolting' type manoeuvre and the inspector recommended the use of a mechanical 'basketeer' device to avert this. However, in practice the workers found that using the device involved a similarly awkward manoeuvre and that it slowed them down. The change also increased the likelihood of stacks of baskets toppling over. Consequently, with the approval of their supervisor, workers persisted with the method they were used to.

## 4.3.4 Extent of change observed by staff

The focus of this chapter so far has been on the views of the main contact involved with the inspection or audit. However, the survey also took a broader view by involving other staff. The purpose of this was to determine whether the changes made on site had been observed in a wider sense by other staff. This also allows a direct comparison between the views of staff within the inspected and not inspected sites, which is not possible for the main contacts. 

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Table 4.2 demonstrates that more staff working at inspected premises felt that changes had been made in relation to all three target areas of MGS3 than did main contacts. Further analysis of this data reveals that these differences are significant for two of the three areas. Staff from inspected premises were significantly more likely to feel that changes had been made in relation to vehicle movement and parking and the correct use of equipment than their counterparts from premises where a MGS3 inspection or audit had not taken place.

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The inspected group were asked only about changes they had made following a direct recommendation by an inspector. In contrast, the comparator group were asked about all changes they had made over the same time frame. A direct comparison of these results would therefore underestimate the changes made by the inspected sample, as they are likely to have made changes outside of the areas covered by the inspection. This problem does not apply to the extra contacts as respondents in both the inspected and comparator group were asked the same question about changes made within the same one-year time frame as a whole within the firm, without specific reference to the inspection

Table 4.2: Proportion of extra-contacts stating that action was taken in MGS3 areas

Proportion stating that 'changes were made' (%)

	Inspected dutyholders	Comparison group
Action taken in:	N=147	N = 221
Loading and unloading	41	32
Vehicle movements and parking*	67	51
Appropriate use of equipment*	52	35
Other areas of H&S	19	25

<sup>\*</sup> Significant difference at 1 per cent level in t-test.

Source: IES/Databuild survey of dutyholders 2009

While this is an apparently encouraging finding in terms of the impact of the initiative, it should be noted that there are differences between the characteristics of firms in the inspected and comparison groups that, in and of themselves, could have led to this result. In particular, the fact that inspected premises were, on average, larger and tended to be already 'known' to HSE, for example, may have affected the extent to which these dutyholders were already making changes independent of MGS3 activities.

Overall, from the employees' perspective, the health and safety provision in the inspected sites either stayed the same or improved during the one-year period after a MGS3 inspection had taken place; only a handful of employees saw a deterioration during this period (see Table 4.3). It is not possible to state with confidence that these improvements are related to the MGS3 campaign, although it is a positive result in a broader sense that workers believe their working conditions are improving. However, it is possible that workers want to present their dutyholder in a positive light and are therefore providing overly positive responses. The anonymous return of the surveys (ie in a sealed postage-paid envelope straight back to the research team) was, however, designed to minimise this type of bias as far as possible.

Table 4.3: Worker view of changes to health and safety within the year following a MGS3 inspection

		View on conditions			No. of responses on	No. of missing
		% Improved	% Same	% Got worse	which % based	responses
Layout of the work	Separation of workers on foot from moving vehicles	55	45	-	137	4
site	Lighting and visibility	38	62	-	138	3
	Warning signs	59	41	-	140	1
	Tidiness of the site	57	43	-	141	0
	State of the floors	34	62	4	141	0
	Storage of items	42	56	1	137	4
Safety rules	Rules about safety	54	45	1	140	1
	Briefings for workers about safety rules	46	52	1	140	1
	Briefings for visitors about safety rules	42	58	-	111	29
Supervision and	Supervision on safety	43	57	-	141	0
accident reporting	Reporting procedures for serious accidents	39	61	-	135	6
	Reporting procedures for minor accidents	32	67	1	137	4
Safety behaviour	Other workers' safety behaviour	48	52	-	141	-
	Visitors' safety behaviour	33	65	2	132	9
	Own safety behaviour	51	49	-	141	-
	Access to the rest areas	28	71	1	139	2
	Access to the toilets	26	74	0	140	1
Equipment,	High-visibility clothing worn	58	42	1	132	9
vehicles and protective clothing	Old equipment is replaced	40	52	8	124	17

Source: IES survey of workers, 2009

#### 4.4 DETAILS OF THE IMPROVEMENTS MADE

The dutyholder survey demonstrated that a fair proportion of businesses had made changes following discussions with inspectors held as part of the MGS3 initiative. Site visits to dutyholder premises and interviews with managers and staff allowed the research team to gain more detailed insights into what these changes actually meant in practice. In addition, interviews with subcontractors associated with these companies were undertaken. The outcomes of these discussions form the basis of this section, along with the views of the inspectors interviewed.

## 4.4.1 Vehicle movement and parking

As previously discussed, changes related to vehicle movement and parking were the most common following inspections/audits. These changes were often evident during site visits: several dutyholders were able to point out new road markings or signs that had been introduced following the inspection.

'He recommended that we put a line down for them to stop at, because what was happening they were stopping on the stop sign where they should stop at a line, so we put that in. He then recommended that we have road markings, which you'll see we've now done, but the road markings are equivalent to what you would see on the highway, so they're highway standard road markings, arrows and that sort of thing.'

(Operations manager, pallet hub)

The most common visible changes were demarcation lines for segregating vehicle and pedestrian movement. Most changes had not normally required significant expenditure and in some cases dutyholders had simply repainted or cleaned existing signage and markings. Other changes included the introduction of one-way systems and revisions to the layout at site entrance points, which served to improve site security as well as improve traffic flow around the site.

'The only access on site now is through this traffic system and they have to present themselves to the "Goods in" to get on site.'

(Operations manager, large haulage company)

It was more usual to see changes of this type in smaller premises, and HSE inspectors reported that the existing awareness of site layout issues was more extensive on larger sites. This was felt to be related to the fact that a number of national companies were on industry body groups which served to raise baseline standards.

These changes do appear to have been noticed by sub-contractors. Changes to site layout were often noted by subcontractors interviewed by the research team, particularly those that visited the main dutyholder's site frequently. One subcontractor remarked that a local hauliers site was now 'all arrows' and generally more uncluttered and more professional in its layout than it had been before.

## 4.4.2 Management of visiting drivers and their vehicles

Both LA and HSE inspectors reported positive changes that had been implemented at sites with respect to management of visiting drivers. In several cases there was concern that drivers were left to 'wander around' the site while their vehicles were being loaded/unloaded because there were no clear instructions telling them where to go. In these circumstances, simple procedural changes at the time of arrival could be all that was required. One haulage company, for example, had implemented a rule that prevented loading or unloading of lorries until the driver had handed in his keys.

'Now when they arrive they hand over the keys and go to the assembly point where they can have a cup of tea and wait until they are loaded up. They don't get their keys back until the wagon is ready to roll. It's got rid of the hazard.'

(HSE inspector)

There was a general feeling that larger companies were conscious of liability issues and therefore had greater awareness of the requirements of visiting drivers. Nevertheless, there were some reports of MGS3 inspections resulting in major changes in site layout at companies with a national profile. This included the provision of facilities specifically for visiting drivers at a large carmanufacturing site.

'At [company name] we got them to rearrange the loading bay. They put in a little block where there's a restroom and toilets so drivers don't just sit in the wagon or wander around. They have a point where they assemble.'

(HSE inspector)

During site visits it was more difficult to identify changes of this type. Also, as the intervention was designed around only one contact point (ie there was no built-in follow-up work in the planning of the intervention), it was difficult for inspectors to state with certainty which sites had implemented changes unless they had some form of additional or ongoing contact. While the management of visiting drivers appeared to have been widely discussed during visits, there were few examples of the dutyholders involved in site visits making changes of this type. In a number of cases, arrangements had been put in place regarding driver management, but this had been done independently of (and prior to) MGS3 inputs.

# 4.4.3 Loading/unloading of goods

The dutyholder survey also suggested that loading and unloading goods received attention during inspections, yet on the basis of the site visits and inspector's accounts, it was difficult to identify practical examples of actual changes.

There were isolated examples of major safety improvements implemented as a consequence of a MGS3 inspection. For instance, at a large building materials supplier, workers were exposed to an unprotected edge when the loading bay was in use. In response to a recommendation from an inspector, a system of removable barriers was put in place to keep workers well away from the edge.

'The forklift truck is integral to the whole working of the loading bay: three to four barriers are set up along the loading bay. The door is kept down. The barriers are removed and then the load the forklift brings in makes up the missing parts of the barrier which then allows the guys to go towards the load without getting near the edge.'

(Branch health and safety manager, national building materials supplier)

On the whole, dutyholders were able to comply with recommendations by revising and improving existing systems rather than implementing completely new ones. In one large haulage company a traffic light system had been installed to indicate to drivers of LGVs when loading from the warehouse bays was completed; the intention was that the light was red when the loading bay door was open. However, due to poor design, the light was green unless the door was fully open to the top. This resulted in a green light (wrongly) being displayed during loading. In this case, the dutyholder was able to avert a prohibition notice by redesigning the system so that the light displayed red unless the door fully closed.

## 4.4.4 Appropriate use of vehicles and equipment

Changing the way that equipment was used on site was another area which the MGS3 initiative was designed to address. These changes generally involved controlling the movement of forklift trucks and putting procedures in place to prevent them being moved or used by unauthorised staff.

There was little evidence of larger vehicles being replaced or adapted, despite the 'falls from vehicles' focus of many of the inspections. One small haulage company, however, had put extra bars around the side of a flat bed lorry to prevent falls. Several sites had adopted high-visibility clothing and other PPE such as high-specification protective footwear as a result of the intervention.

'We got a couple of recommendations. One was to look at supplying the drivers with a ladder to help them get on and off the trailers .... Now all of our trailers are equipped with the pins, so we instruct our drivers through the risk assessment. We tell them if they're climbing on and off the trailers they need to put a pin in place just to use it as an aid for helping them get on and off the trailers, so they've got something to hold onto rather than just putting their hands, you know, on the back of the trailer. So that was the system we had in place and [HSE Inspector's] recommendation was we should supply them with a small ladder to help them get on and off. So we've done that.'

(Manager, large haulage company)

### 4.4.5 Other practical changes

In addition to the three priority areas for MGS3 inspections, the initiative led to other changes taking place on site.

### Health and safety management systems

A number of dutyholders discussed having made significant changes in the way that they managed health and safety in a more general sense on site. It was particularly common for dutyholders to report that inspectors had raised concerns about the rigour of risk assessment procedures and some reported carrying out revisions or updates to their risk assessment procedures as a result. This was particularly true in relation to the movement of traffic on the site.

'[The risk assessment] for vehicle reversing wasn't as up to date as it could be. They are reviewed as and when they need to be reviewed ... we changed it slightly... it's now revision B.'

(Responsible welding co-ordinator, small manufacturing company)

Amongst the smaller premises, routine procedures were often formalised and put in writing after their inspection.

'There was a procedure put in as part of the recommendations – the management of the loading bay area – and there is a written procedure on the loading bay area. I believe the guys were explained how the procedure worked.'

(Branch health and safety manager, national building materials supplier)

## Communication with workers

Several dutyholders improved their employee communications systems on the recommendation of inspectors. For example, one haulage company introduced a scheduled drivers' debrief following their MGS inspection: at the end of each day drivers would meet with the transport manager to discuss the issues they had encountered at (or moving between) other sites. If concerns were raised during the session, the transport manager would either address these with a contact at the relevant

contractor or, when appropriate, instruct the driver directly. Another outcome included formalisation of accident reporting systems and the introduction of weekly accidents reports.

Another example relates to the induction of visiting drivers within a pallet hub. A system was introduced where drivers were required to display a sign on their vehicle (supplied at the gatehouse) as a record of their induction. The same site also introduced a banksman training course to enable staff to safely guide in vehicles; prior to inspection untrained staff had performed this role (exposed to the potential danger of reversing vehicles) on an informal basis.

#### 4.5 IMPROVEMENTS TO HEALTH AND SAFETY AWARENESS

HSE inspectors were generally in agreement that the desired outcomes of the MGS3 extended beyond the direct effects of recommendations and enforcement action and that the initiative served to influence dutyholders by increasing their knowledge and awareness about health and safety issues.

The dutyholder survey suggests that the majority (75 per cent) of dutyholders did, to some degree, have their view of health and safety affected by the MGS3 inspection/audit they received (as presented in Figure 4.2). However, only eight per cent felt that their view had changed 'a great deal'.

A great deal
8%

A fair amount 29%

Not very much 38%

Figure 4.2: Extent to which inspection/audit changed dutyholder view of health and safety

The figure is based on the responses of the main contacts at 153 inspected premises.

Source: IES/Databuild survey of dutyholders 2009

The dutyholder survey also asked dutyholders, from both the inspected and not inspected premises, for their views on levels of awareness and understanding amongst managers and workers (Table 4.4). The groups did not differ with respect to perception of either manager or employee awareness and understanding.

Main contacts from the control and the intervention dutyholder groups were also asked whether levels of awareness and understanding within their organisation had 'improved', 'stayed the same' or 'got worse'. The question was posed to explore changes within the last year/since the time of the MGS3 inspection/audit. Relative to the treatment group, significantly more of the dutyholders from the control group believed that employee awareness and understanding had improved in the last year. The groups did not differ with respect to perception of manager awareness and understanding.

Table 4.4: Dutyholder perceptions of awareness and understanding of health and safety issues

	Proportion of dutyholders stating 'levels are high'		_	f dutyholders have improved'
	Inspected dutyholders (%) N = 153	Comparison group (%) N = 222	group (%) dutyholders gro	
Employees' awareness and understanding of on-site health and safety issues	87	80	51	63*
Managers' awareness and understanding of on-site health and safety issues	90	87	48	56

<sup>\*</sup> Significant difference at 1 per cent level in t-test.

Source: IES/Databuild survey of dutyholders 2009

These findings are consistent with the qualitative data indicating generally high standards of health and safety awareness and understanding in the targeted sectors. The finding that perceived employee awareness had increased over the last year in the comparison group may indicate there was more scope for improvement within the organisations which were not targeted by MGS3. A number of dutyholders who were interviewed as part of the evaluation felt that there was a general trend towards heightened health and safety awareness within their company, and felt that the scope for MGS3 to have made a high impact on this was limited.

'So I think attitudes definitely have changed but that has been driven more by us than the visit.'

(Operations manager, large 3PL)

#### 4.6 CHANGING ON-SITE BEHAVIOUR

The dutyholder survey was used to explore whether dutyholders who received the MGS3 intervention had in place better health and safety procedures than the comparison group (Table 4.5). A greater proportion of dutyholders receiving the intervention than in the not inspected group had in place a variety of examples of good practice (eg in terms of staff involvement and risk assessments), but none of the differences were shown to be statistically significant.

Table 4.5: Proportion of dutyholders adopting desirable health and safety practices within the workplace

	Dutyholders inspected % N=153	Comparison group % N=222
Staff highly involved in health and safety policies	63	57
Risk assessment regularly conducted	55	46
Risk assessment conducted by people formally trained	72	72
Risk assessment conducted by people with health and safety qualification	61	59

Source: IES/Databuild survey of dutyholders 2009

Dutyholders participating in the survey were also asked for their views on the standard of health and safety behaviour amongst managers and workers (Table 4.6). The groups did not differ with respect to judgement of either manager or employee on-site behaviour.

In order to explore changes within the last year/since the time of the MGS3 inspection/audit, dutyholders from the control and the intervention group were asked whether standards of on-site health and safety behaviour had 'improved', 'stayed the same' or 'got worse'. The groups did not differ with respect to perceptions of manager behaviour. However, relative to the treatment group, significantly more of the dutyholders from the control group believed that employee health and safety behaviour had improved in the last year.

Table 4.6: Dutyholder perceptions of health and safety behaviour

	Proportion of dutyholders rating behaviour as 'good/very good'		Proportion of dutyholders stating 'behaviour has improved'		
	Inspected dutyholders (%) N = 153	Comparison group (%) N = 222	Inspected dutyholders (%) N = 153	Comparison group (%) N = 220	
Employees' health and safety behaviour	80	76	37	52*	
Managers' health and safety behaviour	92	90	39	40	

<sup>\*</sup> Significant difference at 1 per cent level in t-test.

Source: IES/Databuild survey of dutyholders 2009

This set of results is analogous to the findings obtained in relation to health and safety awareness and understanding, in that current on-site behaviour was perceived as 'good' by both groups, yet perceived improvement among employees was more marked in the group of dutyholders who did not receive a MGS3 inspection. Again, this may indicate that the intervention group was performing well before receiving their inspection and continued to perform well in the period following it.

These findings may also indicate an underlying trend among the control group towards 'catching up' during the period the intervention was being delivered to the treatment group and/or the period following this. This apparent trend may be an artefact of the differences in profile of the inspected and comparator organisations and does not provide conclusive evidence about the impact of the intervention itself. The next section addresses more directly the added value of MGS3.

#### 4.7 ADDED VALUE OF MGS3

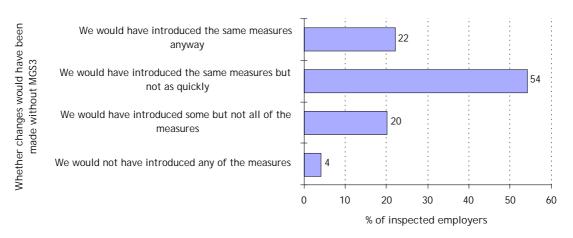
As highlighted in Chapter 2, the evaluation does not provide a full impact assessment. It is difficult without baseline data to be sure about the specific impact of any intervention over and above what would have occurred anyway (ie in the absence of MGS3). We are therefore reliant on the views of dutyholders on the issue.

#### 4.7.1 Whether action would have occurred without the intervention

One way to gain a better understanding of the 'additionality' of the intervention is to question dutyholders on their views regarding whether they would have taken the same action without the inspection or audit taking place. The dutyholder survey covered this and the results are presented in Figure 4.3. Around one in five dutyholders (22 per cent) felt that they would have introduced the same measures anyway, without a MGS3 intervention. Very few dutyholders (just four per cent)

were prepared to state that they would not have implemented any of the changes that they had without the MGS3 intervention. However, the majority of dutyholders felt that MGS3 had had some impact, indicating that they had implemented changes more quickly (54 per cent) or more extensively (20 per cent) than would have been the case without it.

Figure 4.3: Dutyholder views on whether receiving a MGS3 inspection/audit resulted in any additional actions



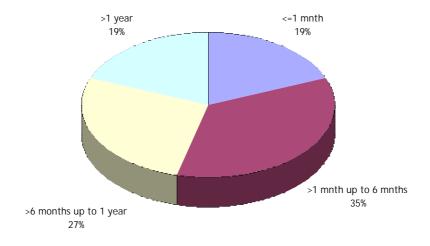
The figure is based on the responses of main contacts from 153 inspected premises.

Source: IES/Databuild survey of dutyholders 2009

### 4.7.2 How soon changes would have taken place without MGS3

Dutyholders who felt that they would have introduced the same measure, but not as quickly, without MGS3 were asked how long it would have taken to have made the health and safety improvements that took place following a MGS3 inspection/audit (Figure 4.4). The majority of dutyholders (81 per cent) felt that they would have made the same changes within a year.

Figure 4.4: Time that dutyholders predict it would have taken them to make health and safety improvements had MGS3 not taken place



The figure is based on the responses of main contacts from 63 inspected premises (those who felt that they would have implemented the same change, but more quickly, without MGS3, and could also specify how quickly this would have happened – a further 19 dutyholders were unable to say).

Source: IES/Databuild survey of dutyholders 2009

## 4.7.3 Factors stimulating change (other than MGS3)

An additional question was included in the survey to determine what would have driven forward change in the absence of MGS3. The majority of dutyholders (71 per cent of main contacts) felt that there were other motivating factors, and a breakdown of these is provided in Figure 4.5. The most common factor was some form of internal management pressure or review (mentioned by 30 per cent of dutyholders who felt that factors other than MGS3 would have prompted change). Interestingly, 22 per cent of dutyholders felt that it would take an accident to prompt change, and 29 per cent of dutyholders, even though they were sure that something would have prompted change, were unable to state what this would have been.

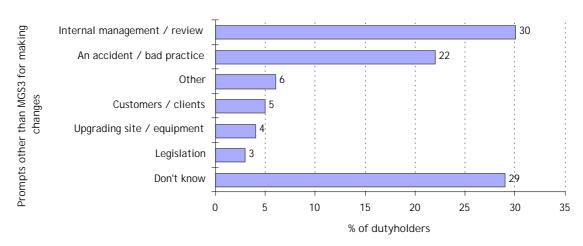


Figure 4.5: Drivers for health and safety improvements had inspection/audit not taken place

The figure is based on the responses of main contacts from 116 inspected premises (ie all dutyholders who felt that there were factors other than MGS3 which affected whether they made changes or not).

Source: IES/Databuild survey of dutyholders 2009

These results should be viewed within the context of the apparently high levels of internal health and safety regulation within some parts of the haulage industry (this is discussed further in Chapter 5). Thus, there will be, for some of the dutyholders surveyed, pressure to improve standards, which is linked to maintaining or improving the amount of business they can secure (as some dutyholders will only contract with suppliers who can demonstrate good health and safety standards). Also, it is worth referring to the selection criteria for the initiative, in that dutyholders with a recent history of accidents were more likely to be selected for inclusion than those not reporting accidents. This in itself may have prompted change (ie changes would have been made in order to remove the risk of a further accident even without a MGS visit or inspection), and could explain the relatively high proportion of dutyholders citing accidents as motivation for change.

There were a number of anecdotal reports, during interviews with dutyholders, of incidents which were thought to have influenced processes and behaviours, and it was difficult, even for health and safety professionals, to attribute change to a single causal factor.

'Every time I've introduced something the guys in there see the benefit and will take ownership of it quite quickly and follow it. They have an inbuilt ability to change and see the benefit of things. I would imagine [name of employee]'s accident has contributed to their focus on that area a lot. I don't know how much involvement HSE had with the guys on site.'

(Branch health and safety manager, national building materials supplier)

#### 4.8 IMPACT ON SICKNESS ABSENCE AND WORKPLACE ACCIDENTS

HSE's primary aim is to work with dutyholders to reduce levels of workplace ill-health and injury. With regard to MGS3, therefore, the long-term aim for the programme was to impact on levels of ill-health and accidents within the industries involved. It is therefore worth considering whether, even relatively soon after the MGS3 intervention (ie when the evaluation took place), any changes to these two outcomes can be measured. It should be noted, however, that identifying changes to workplace ill-health is consistently difficult for researchers due to a range of methodological and practical difficulties.<sup>1</sup>

The majority of dutyholders had a formal system in place for recording absence (76 per cent of the inspected group and 70 per cent of the comparator group, proportions which were not statistically different). This allowed the dutyholder survey to explore any changes which had occurred for this sub-sample<sup>2</sup> in the time period following the MGS3 inspection/audit, or the equivalent elapsed time for dutyholders in the comparator group. The results are presented in Table 4.7.

Table 4.7: Proportions of dutyholders experiencing a decrease in sickness absence and workplace accidents

	Dutyholders inspected N = 153	Dutyholders inspected % N = 153	Comparison group N = 222	Comparison group% N = 222	Overall N = 375	Overall % N = 375
Dutyholders experiencing decrease in sickness absence*	16	10	47	21	63	17
Dutyholders experiencing decrease in workplace accidents	34	22	61	27	95	25

<sup>\*</sup> Significant at 5 per cent level.

Source: IES/Databuild survey of dutyholders 2009

This demonstrates that ten per cent of dutyholders receiving a MGS3 intervention saw a reduction in sickness absence compared to 21 per cent of dutyholders in the control group. This trend is repeated for workplace accidents: 22 per cent of dutyholders receiving an inspection/audit reported a fall in workplace accidents in the period following the intervention, compared to 28 per cent of the control (although this difference was not statistically significant). The majority of sites in both groups reported that accident rates had remained constant (77 per cent and 69 per cent respectively; again this difference was not statistically significant).

The survey also asked whether dutyholders who were inspected reported lower sickness absence and accident rates than the control group one year or more following their inspection (ie at the time they were surveyed). No significant differences in current absence rates were found.

While these results at first appear counterintuitive (ie we might expect that contact with an inspector would improve the situation amongst inspected dutyholders if the initiative was

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For example, it can take many years for health outcomes to emerge following exposure to workplace health risks. Most evaluations are unable to track participants for a sufficient time to observe such change. In addition, dutyholders often hold inaccurate or incomplete records on sickness absence, which makes it difficult to measure change as the baseline position is not always clear.

Dutyholders often hold inaccurate or incomplete records on sickness absence, which makes it difficult to measure change as the baseline position is not always clear. By focussing on only those dutyholders who had formal absence monitoring systems in place, it is hoped that some of this uncertainty and error is removed.

successful), it must be placed in the context of other evaluation findings. The qualitative work suggests that many of the dutyholders inspected during MGS3 already had high levels of health and safety practice prior to the intervention. There is arguably less room for these dutyholders to make improvements than was the case for the comparator group. The lower levels of change are unlikely to indicate a negative outcome of the intervention. In addition, the achieved absence rates at the time of the survey indicate that, even though the comparator group had experienced greater reductions over the past year, this simply acted to bring them into line with the rates achieved by the inspected group, rather than resulting in lower rates of absence. This suggests that the baseline levels of absence for the comparator group may have been higher.

It is also worth noting that the selection criteria for the initiative involved inspectors selecting dutyholders that they were already aware of and/or dutyholders towards the larger end of the size spectrum for the industry. Similarly, this is likely to have resulted in better performers, in health and safety terms, being involved in the first place. If inspected premises represented, overall, better practice than would be the case in the industry as a whole, it is perhaps not surprising that the gains made amongst this group were fewer than those observed in a less developed group of dutyholders. The latter may have been making concerted efforts to attempt to 'catch up' with industry good practice, which the inspected group had already attained.

#### 4.9 MULTIPLIER EFFECTS

There was evidence from the accounts of dutyholders and their suppliers/contractors that companies in the same supply chain were able to influence each other and work together on health and safety issues. It was less clear whether the MGS3 inspections/audits had influenced these working relationships.

## 4.9.1 Extent of sub-contracting

A total of 103 dutyholders from across the inspected and comparator groups stated that they used subcontractors. Both groups were highly and equally likely to state that they required certain health and safety standards of their contractors (Table 4.8). Overall, 82 per cent of dutyholders working with sub-contractors considered sub-contractor standards. In addition, a high proportion of dutyholders (around 75 per cent of both the inspected and not inspected groups) informed their subcontractors about health and safety risks most or all of the time (Figure 4.6). The methods used to inform subcontractors tended to rely on passing on written instructions rather than any formal training, and this was the case for both inspected and not inspected dutyholders. Overall, 80 per cent of dutyholders with sub-contractors felt it was very or fairly important to know about their health and safety practices (statistically similar proportions of both the inspected and comparator groups felt this was the case).

Table 4.8: Dutyholders requiring certain health and safety standards from subcontractors by inspected and control groups

	Dutyholders inspected % N = 46	Control group % N = 57	Overall % N = 103
Yes	83	81	82
No	17	19	18

Source: IES/Databuild survey of dutyholders 2009

48 15 9 Inspected 54 9 Comparator 16 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ■ All the time ■ Most of the time ■ Some of the time ■ Not at all

Figure 4.6: Degree to which subcontractors are informed about possible health and safety risks

The figure is based on the responses of 46 inspected and 53 not inspected dutyholders.

Source: IES/Databuild survey of dutyholders 2009

### 4.9.2 Using MGS3 to influence the supply chain

Both LA and HSE inspectors were able to observe the nature of working relationships across the main MGS target sectors and there were several reports of good practice already in existence.

'The site I was at ... the driver there was making to climb on top of his vehicle and she said, "No, you're not doing it". She made him climb down, she rang up the firm and said, "I'm not accepting this delivery if your driver has to do all this", and sent it back.'

(HSE inspector)

Inspectors felt they had had some degree of success in encouraging dutyholders to influence other elements of their supply chain and there were some concrete examples of this. For example, one company (a major UK retailer) was reported to have introduced a site assessment scheme for its distributors as a direct result of the MGS3 intervention. In another case an inspector uncovered a scenario where a driver for a large haulage company was carrying out the role of banksman for a client on an ad hoc basis in the absence of necessary training and/or the knowledge of the haulier. As a result of interventions from the inspector, the haulier put measures in place to make the driver's role more explicit (through appropriate information and training) and improved their risk assessment processes for off-site work.

There was also evidence of dutyholders sharing good practice with other sites within the same company or franchise, although in many cases it was difficult for dutyholder representatives to be sure that improvements made on other sites had occurred as a result of their own (MGS driven) improvements or some other influence.

'We have a policy if something happens on any one site it's transmitted round all the other sites, especially sharing best practice. I know they have a similar set up in [town name] on one of their loading bays. I don't know whether that was as a direct response to what we did. We do share everything round the company.'

(Branch health and safety manager, national building materials supplier)

It was understandably difficult for inspectors to assess the extent to which the intervention had impacted on companies that had not been inspected. It was also difficult for dutyholders themselves to determine this. Audits, which focussed directly on elements of supply chains, led to changes instigated directly by a HSE/LA inspector along the supply chain rather than indirectly via the main dutyholder. Therefore the dutyholder was unable to comment on the nature of the transaction between the other parties.

'I know two locations they did follow up with those direct because they weren't happy with what they found.'

(Site manager, large haulage company)

Interviews with subcontractors failed to yield any identifiable changes that had occurred as a result of the effects of MGS3 being transferred through the supply chain. Instead, subcontractors and suppliers were readily able to describe modes of working together that had evolved over time, or standards that had been imposed on them by the main company independent of MGS3.

### 4.10 WIDER VIEWS REGARDING IMPACT

There was very little awareness that a MGS3 inspection had occurred among employees. Therefore, their observations in relation to aims of MGS3 provide only limited insights into the impact of the intervention, as they were unable to attribute the changes they had observed to a particular causal factor or influence. However, the findings presented here are informative in understanding how the (potential) outputs of MGS3 are experienced from their perspective.

# 4.10.1 Views regarding site improvements

A number of drivers commented on improvements to MGS3 sites, mostly in relation to layout, visibility and road surface. These observations were made by subcontractors visiting MGS3 target sites as well as direct employees. Changes to site access were also reported, such as new signing-in procedures or systems that restricted access at the gates.

Where there had been a previous accident on the premises, changes were attributed to that. For example, on one site extra bars had been placed around the side of a flat-bed lorry to prevent falls. Since there had been a fall from height in the past on the site, the worker who used the vehicle assumed the change was in reaction to that incident. A warehouse worker perceived that a fatality in the industry had been a driver for his company to take action.

'A couple of years ago there was an accident and somebody had been killed. From that incident it's now strict company policy to wear seatbelts on fork trucks. [The company] takes action if the area is deemed to fall in the category where [an incident] can happen.'

(Employee, large haulage company)

It was also common for workers to attribute changes to financial considerations such as increased insurance costs. In several cases there was a view that health and safety had improved notably over the last five years, but not so much when the last 18 months were considered in isolation. As shown in Case study 3, this view was held by contractors working for large companies as well as their direct employees.

Not all drivers had observed positive changes, and a number of negative comments were made regarding health and safety practices on various premises. For instance, layout of one site was described as 'cluttered and dangerous' while another had facilities for drivers that were regarded as unhygienic. Several drivers also registered dissatisfaction with sites they visited that were not included in the intervention. The issue of sites that were 'missed' by the intervention is discussed in some depth in Chapter 5.

### Case study 3: Observations of improvements before MGS3 intervention

Drivers working for two small subcontractors observed (independently) that health and safety standards had improved at a large 3PL provider's site over the last five years but felt that there had been no major changes over the last 12 months. The main employer was regarded as 'very professional' and incidents of all types were taken very seriously. For example, drivers had been disciplined in the past for not wearing high-visibility jackets or driving the wrong way around the site. The office manager at the site was described as 'diligent' and both subcontractors compared the site favourably with others they delivered to with regard to overall organisation and traffic management.

# 4.10.2 Views regarding health and safety management

A number of employees routinely attended compulsory health and safety meetings and briefings and/or toolbox talks, but these had generally been in place well before the time of the intervention. Most employees felt that health and safety communications on site were good and if an issue arose in the course of their work, there were sufficient opportunities to raise it. There was also a perception that any issues they raised would be addressed promptly.

'They ask if we have any issues that we want to bring up. In fairness, it's usually little things but every two weeks something will crop up and something will get done about it straightaway.'

(Warehouse operative, building materials supplier)

There was a perception among some dutyholders that the companies they worked for were now spending more on training, for example buying in specialist training providers rather than relying on in-house knowledge.

As with the changes noted above in relation to site improvements, employees were unable to say whether the MGS3 inspections had led to the changes they had observed or not. In many cases, employees were unable to specify when or why any changes of this type had been implemented. Some drivers for improvement were suggested, including changes in personnel or increased influence of trade union representatives.

## 4.10.3 Views regarding employee behaviour

There was a view among a number of employees that there had been an increase in awareness and adherence to health and safety rules by workers on site. Several felt that extra signs on site had had an impact (eg noise protection reminders and signs in no smoking areas) and that some had led to observable changes in behaviour, such as the wearing of high-visibility vests.

'I've noticed big changes in just being told to do stuff. Reminding us to wear high vis... there are signposts everywhere. All over the doors "Wear high vis".'

(Warehouse operative, large distribution company)

Some employees reported a general, wholesale, improvement in health and safety culture but there was a view that these changes were motivated by their dutyholder's desire to 'cover their back' rather than protect workers, hence an emphasis on paperwork. As with other reported changes, no explicit mention of HSE was made unless prompted by researchers.

'You're not allowed to leave your keys in [lift trucks]. We've all got a key fob... we've got to wear seatbelts. People have got written warnings for not wearing the seatbelts. They are good on things like that, what might be their fault. Things that are your fault they're not

bothered about... basically they cover themselves for everything that could be their fault. They make you sign everything that you've done training when all they give you is a piece of paper to read... "You understand that? Yes? Well sign it"... it covers them then.'

(Warehouse operative, large haulage company)

## 5 BARRIERS TO PROGRESS

This chapter primarily addresses the barriers to MGS3 in achieving its objectives and outcomes, and factors influencing the effectiveness of the intervention as a whole. It examines this from the perspective of both the MGS3 intervention itself and the industry it targeted.

#### 5.1 CHAPTER SUMMARY

There were a number of aspects of MGS3 that are related to its potential to make an impact on the dutyholders involved. These include:

- the selection of larger, more well-developed companies (on the whole) for inspection, meaning that the potential for improving standards was limited they were often already doing the right thing
- difficulties in fully inspecting loading and unloading procedures (due to the difficulties of timing inspections with deliveries), meaning that the inspector's observations of these procedures was limited, as was their ability to offer advice in this area
- a lack of specific, measurable, targets for the intervention established at the outset, meaning that establishing its 'success' becomes difficult.

Measuring the impact of a heterogeneous intervention, targeted at a relatively small number of companies (as was the case for MGS3), is always difficult, particularly if the anticipated effect sizes are small. However, in this case, the nature of the targeted sectors presented additional challenges. There already appears to have been a range of internal and sectoral drivers of good practice in health and safety, independent of MGS3, affecting dutyholder policies and procedures in these sectors. In addition, while supply chains can be a useful way to improve standards, within this industry a lot of work has already taken place through supply chains, often driven by larger organisations and commercial concerns. The ability of regulators to push forward additional change by visiting one site within a chain is therefore limited. The evidence also suggests that spontaneous actions through the supply chain (eg drivers passing on/expecting levels of good practice between sites and this resulting in changes) do not generally occur. These rely on more formal linkages. The audit approach does appear to have made more of an impact on supply chains, but it is more resource intensive than inspections and would require careful targeting to maximise its utility.

#### 5.2 THE NATURE OF MGS3

There were substantial resources allocated to the delivery of MGS3, but this evaluation found it difficult to identify any wholesale, tangible impact on participating dutyholders, although there were specific examples across different companies where there had been some effects of being inspected. It is, however, worth discussing whether the design and implementation of the programme had an effect on its potential to (i) make an impact or (ii) the evaluation's ability to measure it.

# 5.2.1 Targeting of 'easier to reach' companies

From the accounts of HSE inspectors and HSE policy personnel, the selection criteria for MGS3 appear to favour larger and well-established companies. Thus it is likely that the intervention included some of the dutyholders who are better equipped in health and safety management terms. This may not have been favourable to demonstrating 'distance travelled'.

The way in which dutyholders were selected varied, and issues with the selection processes included the following:

- The selection processes were not systematically recorded, meaning that it is not possible to assess the role that selection effects played in any systematic way.
- The selection processes involved a number of specific biases:
  - ☐ The 3PL intervention was specifically targeted at companies recognised as major UK players in the targeted sectors.

'We used an article that listed the top 50 logistics companies operating in the UK because we thought that's a trade journal with far better information and intelligence than we have.'

(HSE policy staff member)

□ Some inspectors used accident reports to select firms for inspection. There was some acknowledgement from HSE that selecting participants with a recently reported incident might bias selection towards companies who 'did things by the book' when accidents or near-misses occurred, rather than those most in need of guidance.

'What we did was we simply looked at what accident data we had reported to us [and] we ranked them according to who was reporting the most... it didn't mean that we knew that they were the worst companies, it just means that they might be reporting a lot of accidents because they knew about reporting.'

(HSE policy staff member)

- ☐ There was ad hoc selection of companies already known to inspectors, which could mean that the most visible providers were targeted.
- The selection processes involved premises where inspectors knew that there could be little expectation of making improvements (ie because the sites already had excellent health and safety in place), when there were no other local alternatives.

'The companies involved were fairly keen to engage with [the] HSE so we were pushing at an open door, particularly with the larger companies. They were keen to engage and share the guidance and issues we were talking about.'

(HSE inspector)

'Large competent company chosen for intervention – problems are with smaller undertakings.'

(HSE inspector, 3PL audit report)

## 5.2.2 Timing and content of inspections

There were further practical difficulties in the delivery of the intervention associated with certain characteristics of the targeted sectors. The arrival of vehicles for unloading/dispatch often did not coincide with the timing of an inspection, and some inspectors therefore had to deliver 'virtual inspections'. Deliveries can occur at any time in some parts of the targeted sectors but, with some exceptions, most inspections were confined to office hours.

The result was that inspectors were limited in terms of their ability to:

- observe loading/unloading practices
- check lighting, and access issues at night
- carry out vehicle inspections and/or assess the suitability of vehicles for loads or reducing falls from vehicles

• engage in discussion with drivers including those employed at the site (and therefore familiar with it) and those visiting.

'Unless you see something happening, you walk in and see it in front of your eyes, you can only take their word for what happens down the line or on a normal day-to-day basis. You can check forklift truck training, driver training records. You can check maintenance records; they're usually there. You can't tell if anyone is driving safely. You can only see what you see on the day.'

(HSE inspector)

There was also an issue amongst some dutyholders regarding whether the recommendations provided by inspectors were actually practical given the complex nature of the targeted sectors. For example, the recommendations to draw up delivery plans for sites frequently visited by drivers were viewed as unworkable. As a result, a number of dutyholders felt that HSE did not understand the nature of their work and this affected their willingness to follow the advice that they had been given.

'How does the customer activity agreement work if the driver turns up and says there isn't a safety plan in here so I won't deliver. You can imagine. He has to deliver. That's the biggest difficulty they've got. Delivery plans for the multitude of delivery points.'

(Site manager, large haulage company)

'The problem is the size and scope of the issue is immense. If you go to that key site it will have [a] hundred different destinations on the back of that and you cannot physically reach each and every site the product will be delivered to.'

(Manager, 3PL)

# 5.2.3 Measuring MGS3 inputs

The evaluation faced an initial problem due to the limited management information available on the inputs of the intervention, and a lack of systematic data recording by inspectors, particularly those from LAs. The evaluation, instead, relied upon the recall and notes held by inspectors to determine the nature of frontline activities conducted under the MGS3 banner. For the LA side of the intervention there were no central, or easily accessible, records of the dutyholders visited by LA inspectors. The precise nature of the involvement of LA inspectors was also not recorded for the intervention as a whole, and a number of different working arrangements were possible (eg in some cases they worked jointly with HSE on inspections/audits, whereas in other cases they worked independently).

It is worth noting, therefore, that the evidence on inputs is based solely on the view of a limited number of inspectors, and is likely to reflect the views of more engaged staff, given that these were the ones who were happy to volunteer their time to the research team. The evaluation had access to no quantifiable management data that identified the nature and extent of recommendations made or assessed the level of enforcement action taken across the intervention as a whole.

Dutyholders (to a limited extent) were able to comment on discussions and recommendations made, and actions taken as a result of their MGS3 visit, but are not always a reliable source of information. They may be subject to recall or social desirability bias, for example. Also, as demonstrated in Case study 4, from the dutyholder's perspective the distinction between discussions and recommendations was not always clear. The research team were only able to visit a limited number of inspected sites and in any case researchers were restricted to non-operational areas of the site. The evaluation involved conducting case study-type visits to premises that had been inspected, but was reliant on the accounts of dutyholders to determine the effectiveness of the intervention.

### Case study 4: Distinction between discussions and recommendations unclear

A HSE inspector raised concerns about the weight of loads that were routinely handled by a packing and dispatch company, weighing between 20 and 25kg. As a result of the inspection, the company changed their loading procedures, and a pump truck and loading platform were purchased and put into operation. However, in the employer's view, he had not made these changes as a result of 'recommendations'; instead he said he had decided to take action after 'a general conversation' about manual handling issues during the MGS3 visit and suggestions the inspector had made about possible solutions.

Audit reports were useful in providing in-depth information on inputs for the 3PL work stream, but only 16 of these audits were carried out. In addition, there was a lack of consistency in the format of the audit reports, with some written for a dutyholder, and some for a HSE 'audience'. It was also unclear whether there was any obligation for the dutyholder to comply with the recommendations in the audit report. A presumption of compliance is implicit in the tone of the reports but the research team was not able to assess the degree to which this prompted dutyholder action. Reports also contained a number of observations without any instruction or recommendations regarding remedial action (for example the one provided below).

'We discussed the covering of vehicle inspection pits when not in use. A suggestion was made that [the] pit netting system may be something that is worth further investigation.'

(HSE inspector, report following audit of 3PL provider premises)

In summary, it was difficult for the evaluation to directly map the inputs of MGS3 with any outcomes (ie changes to dutyholder and worker behaviours/attitudes) as a result of these issues.

# 5.2.4 Isolating impact

There were a number of specific factors relating to the design and implementation of MGS3 which affected the evaluation's ability to isolate the impact of this intervention.

#### These included:

■ An absence of information about the exposure of dutyholders to other interventions, particularly those with the same general aims operating within a similar time period (ie MGS2 and related communications campaign, Large Organisation Partnership Pilot¹ or other industry initiatives).

'The London pilot was still ongoing while we were doing MGS2, and while we were doing MGS2 we were starting work on MGS3, so they started to merge together and there was a lot of overlap .... I would say there's a very good chance that companies that were inspected in the London pilot were also inspected in MGS2 and MGS3.'

(HSE policy staff member)

- Some inspectors (particularly LA inspectors due to a lack of systematic record keeping) found it difficult to recall what activities had taken place under the MGS2 and the MGS3 banner.
- It was not possible to determine the extent to which the control group had been involved in similar, concurrent or previous, HSE transport-focussed interventions or were subject to other drivers for change.

The Large Organisations Partnership Pilot (LOPP) was a joint initiative, launched in October 2005, between HSE and the Local Authorities Co-ordinators of Regulatory Services (LACORS) to explore how engagement with large organisations (defined as having > 10,000 employees in the UK, with multi-site operations) could be improved.

- There were numerous strands involved in MGS3, each with a different emphasis and target group. 'Joining up' the streams, while useful in policy and resource terms, meant that dutyholders would have experienced a different MGS3 interaction according to a range of factors (eg region, mode of delivery (audit versus inspection), their sector and whether the inspector involved was from a LA, HSE or both).
- The targets identified by HSE against which the impacts identified by this evaluation could be compared focussed on final outcomes (ie ill-health and accident rates). This was possibly as a consequence of the multiplicity of delivery models and diversity of target dutyholders, but this makes it difficult to assess the effectiveness of the intervention. Considering how the initiative was expected to impact at an intermediate stage (eg in improving practice), and setting objectives related to this, would have been beneficial in evaluation terms.

Thus, MGS3 was a heterogeneous intervention that was difficult to evaluate effectively, particularly given the relatively small number of dutyholders involved. There were also no clear objectives against which progress could be assessed.

It could be useful to consider some of these factors in the early design phases of future interventions, to make them easier to evaluate, particularly in terms of impact. This should result in the provision of better information, particularly on cost effectiveness and cost benefit, to policy makers in determining how to deploy resources.

#### 5.3 THE NATURE OF THE SECTORS

A further consideration is the extent to which the characteristics of the targeted sectors act as a barrier to an intervention like MGS3 resulting in measurable improvements.

# 5.3.1 Existing good practice

It is difficult to describe a 'typical' MGS3 dutyholder, but a significant subset (particularly large haulage and logistics companies) appeared to have relatively sophisticated existing health and safety management infrastructures. These companies reported obtaining useful advice and guidance from MGS3 inspections/audits, but there was a feeling among inspectors that there was limited scope for improvement. Large national companies frequently employed a number of area/regional health and safety inspectors and managers. These would usually report to a senior operations manager. For these companies, health and safety would be a routine agenda item at company board level.

'I think the company's approach to health and safety is beyond HSE visit... I think safety is your primary goal ... it is at directorship level...what more can [HSE] do?'

(Operations manager, large haulage company)

Interviews with both inspectors and dutyholders suggest that this is an industry that includes dutyholders already highly engaged with HSE and other industry safety bodies. In addition, measures such as 'annual safety improvement plans' are already in operation at larger companies, signalling the existing commitment to achieving good practice. The implications of this are that it may be difficult to prompt changes as a regulator during contact with individual dutyholders (and even their supply chains) that have not occurred already as a result of actions at an industry level.

'I'm on the e-bulletin from HSE and I email that round key people. We've just won the BSC [British Safety Council] health and safety award for the tenth consecutive year.'

(Responsible welding co-ordinator, small manufacturing company)

Where sites formed part of a larger, national company, regional or area health and safety representatives tended to be a major source of advice, and changes tended to be implemented wholesale as a result of company directives rather than on a site-by-site basis. These

representatives would generally visit several times a year and complete full health and safety audits annually.

'My job is to support our licensees at a local level. We have over 100 so I go round the different sites. We do audits and checks and we try and promote best practice. I also am doing some work with HSE on load restraint ... as best practice comes through we try and cascade that through the network.'

(Health and safety support manager, national haulage company)

Health and safety information (apart from routine risk assessments) would be discussed at high level and transferred down the management chain. It was common for large sites to have monthly health and safety meetings to pass on relevant information and deal with site-specific health and safety issues. In some cases proactive meetings would be held every month to discuss 'innovative' health and safety systems and share best practice across the site or region.

Many companies were also able to demonstrate to HSE that they already had a good standard of communication with other companies that formed part of their distribution network. However, it was noted that smaller companies cannot necessarily influence larger companies whose work they depend on.

'Larger organisations seem quite happy to liaise with the haulage companies to say if this company comes on our site and doesn't obey our rules, he's never coming on again, but a little company can't really do that. They were struggling a bit as to how they could enforce their rules on to other people.'

(HSE inspector)

The employees involved in the worker survey also believe that standards are high on their work sites (Table 5.1). Ninety per cent or more felt that their site had good standards in relation to a wide range of different issues, including site layout, safety rules and behaviour, and access to facilities.

Table 5.1: Employees' perceived current state of H&S provision at work

	Work site has good health and safety practice (%)	No. of responses on which %s based	No. of missing responses
Layout of the work site			
Separation of workers on foot from moving vehicles	91	140	1
Lighting and visibility	96	140	1
Warning signs	99	140	1
Tidiness of the site	90	141	0
State of the floors	90	141	0
Storage of items	97	139	2
Safety rules			
Rules about safety	97	141	0
Briefings for workers about safety rules	90	140	1
Briefings for visitors about safety rules	93	122	19
Supervision and accident reporting			
Supervision on safety	94	140	1
Reporting procedures for serious accidents	97	137	4
Reporting procedures for minor accidents	96	137	4

	Work site has good health and safety practice (%)	No. of responses on which %s based	No. of missing responses
Safety behaviour			
Other workers' safety behaviour	98	141	0
Visitors' safety behaviour	93	135	6
Own safety behaviour	100	141	0
Rest areas			
Access to the rest areas	95	139	2
Access to the toilets	100	139	2
<b>Equipment, vehicles and protective clothing</b>			
Wears high visibility clothing when around	99	134	7
Old equipment is replaced	95	124	17

Source: IES survey of workers, 2009

Future initiatives targeting the logistics, warehousing, road haulage and goods delivery sectors may therefore need to consider how best to reach smaller contractors who are operating with less resources, and possibly less commitment to health and safety. The industry appears to include many contractors for whom health and safety is already a priority, and is therefore already being effectively managed. While there can always be improvement, the scale of the improvements made are likely to be smaller if better performers are targeted.

## 5.3.2 Hazard perception

Another issue is that there is a focus within the industry, particularly amongst drivers, that it is highway risks that are most dangerous, and that therefore these should receive the most attention. This can be to the detriment of other risk areas associated with the movement of goods.

Falls from vehicles, for example, are perceived to be a low risk when compared to the risk of a road traffic accident. Dutyholders and inspectors commented on the difficulty of changing perceptions/behaviour among seasoned drivers. This is particularly true amongst workers accustomed to climbing up on wagons or jumping down from cabs over a period of many years' work in the industry and who do not see the necessity to change these behaviours. Similarly, those involved in manufacturing viewed the main source of risks to them as machinery on the shop floor, rather than vehicles outside (and this was a view shared, to some extent, by inspectors).

'It's a long process to change. The driving workforce in the UK is an aged workforce. Most of the younger drivers tend to be European. The average age of a driver is 55 and tends to be a traditional industry. They're always the type who are most difficult. It's what they've been brought up doing.'

(Site manager, large haulage company)

'Somewhere where they've got a lot of machinery in place, they consider that to be more of a risk than working at a height of one metre.'

(HSE inspector)

It may therefore be worth working together with, for example, the Highways Agency in getting across safety messages to drivers.

## 5.3.3 Internal regulation

Evidence from dutyholders suggests that the level of internal monitoring standards within the industry is high. Several companies had rigorous internal quality assurance standards. In the main, large national companies had standardised policies and procedures. In smaller companies health and safety advice was often bought in from an external provider (eg in the form of 'Competent Person' Services). In the case of multi-site operations, regular health and safety checks were often conducted by a regional or national representative of the national company (or parent organisation). This was often accompanied by a co-ordinated programme of health and safety training amongst larger companies. On some sites involved in MGS3, inspectors felt that the level of provision actually exceeded their expectations, and represented best practice.

'We did an NVQ2 for drivers. To say to a driver when you go on a site, if you've never been on the site before that you wait for them to come for you. You don't get out of your cab and walk round looking for somebody, which is the normal thing to do. The normal thing will be to go on site, go out the cab and find somebody.'

(Site manager, large haulage company)

'That's a culture thing in the business which is why we have a safety passport, it's to change the culture of safety in the thought process. A personal risk assessment is a thing we do. It's a long process to change. The driving workforce in the UK is an aged workforce.'

(Site manager, large haulage company)

'When it comes to inductions or toolbox talks we're on the ball.'

(Operations manager, large haulage company)

Thus, even without inspections from a regulator, it is likely that some parts of the targeted sectors will be pushing forward standards due to internal pressures to do so. Whether this applies equally to smaller dutyholders, however, is not clear.

### 5.3.4 Supply chains

### Lack of a MGS3 'multiplier effect'

This evaluation, via interviews with contractors/suppliers of dutyholders taking part in the survey and site visits, sought to gain insights into the level at which MGS3 had a 'multiplier effect' (ie by targeting individual dutyholders, a wider impact could be felt as they shared good practice with other elements of their supply chain)<sup>1</sup>. The interviews aimed to establish whether there had been any changes in communications regarding health and safety between the main dutyholder and other parties as a result of the intervention and/or whether any aspects of their contractual arrangements have been revised in line with recommendations made to the main dutyholder. These interviews were limited to contractors who had not received an inspection themselves (either as part of an audit or a linked visit) in order to gauge a 'true' multiplier effect.

Information provided by this group of dutyholders revealed an overall lack of awareness that a MGS3 inspection (or any other type of inspection) had occurred on the main dutyholder's premises. There was also an overall lack of evidence from subcontractors that any aspect of their working arrangements with the main dutyholder had been impacted by the intervention. In some cases there was a view that the appearance of the main site had changed for the better (as evidenced by improved signage or general tidiness) but there was no indication that this had impacted on work practices carried out by the contractor on their own site or on those of any third parties (ie other dutyholders in their supply chain).

Chapter 2 provides further details on the methods used to recruit sub-contractors.

However, many contractors were able to cite examples of existing contractual arrangements with the main dutyholder.

## Importance of formal arrangements

There was evidence that there is a role for supply chains in driving forward change, with some companies selecting their contractors on the basis of their approach to health and safety. There was evidence from dutyholders suggesting that health and safety arrangements are established at the contractual stage with companies in their distribution chain. Where targeted companies worked with large national or multinational producers, working relations and health and safety contractual obligations were already in place.

'We have long-term working relationships with a lot of companies but we do select people and companies who are willing to buy in to the health and safety attitude. You can't afford not to. It's almost as much a commercial issue.'

(Manager, manufacturing company)

In addition, drivers carrying certain types of load were accustomed to standard-setting by suppliers. This was particularly where food was concerned, and load temperature as well as other aspects of health and safety behaviour (such as use of PPE) were tightly controlled.

'The company I'm working [for] at the moment, it's all food so their procedures are highvis vests, boots ... then they will come and check your vehicle, ie your refrigerator, they will not accept a load if the temperature had dropped maybe two or three degrees in the unit or if there's air getting into the back of the freezer, they can refuse a load for that.'

(Driver, large haulage company)

Large organisations tend to have considerable influence over small suppliers and the effects of this were apparent to inspectors. Large clients would generally require their contractors to fulfil certain health and safety standards and most performed an internal audit on a frequency agreed on their contract.

'[Large companies] can ask for whatever they want. If I'm delivering to you and you're reliant on my delivery and you haven't got a forklift truck and you expect my driver to unload it all by hand, I'm not going to deliver to you again. I've got a lot of influence. That's something we should tell the dutyholders or transport companies, they've got a lot of influence.'

(HSE inspector)

'We are trying to attract blue chip customers from the food industry and we have been pretty successful... you will find your really top-notch customers will not entertain you unless you have got these things in place.'

(Operations manager, large haulage company)

'He works for [pallet network] and he goes to all the sites to make sure that they are within the law because to be honest they don't want anybody joining their system ... even though they are in the West Midlands and we are in [Northern England] they still need to know that we are safe because we are part of them.'

(Health and safety officer, large haulage company)

Improving health and safety was therefore seen, amongst a number of dutyholders, as a part of their drive for greater competitiveness. By running a safer site, and having better procedures in place for peripatetic workers, the company could expect to offer a better service to their customers and ensure that the number, and costs, of accidents are minimised.

'You are always looking to improve your facility for the next five years or ten years. If you don't get involved in your warehousing and improve the infrastructure your competitor will.'

(Operations manager, 3PL)

'The company want to have a good name and to do that you need to be clean on all aspects. You don't want to be running your drivers illegal[ly] or damaging your customer's freight or getting it late.'

(Site manager, national haulage company)

The use of a supply chain approach to an initiative like MGS3, therefore, seems entirely appropriate. A greater focus by inspectors on these supply chains, as was the case during audits, could be a useful way forward. However, this type of approach is time consuming and resource intensive. Such audits must be targeted effectively to ensure the greatest returns on this investment.

### 6 CONCLUSIONS

MGS3 was made up of several elements or work streams and was not, as a collective set of interventions, designed with evaluation in mind. However, there were themes and approaches that were common across MGS3 inspections and this evaluation sought to identify and assess the effectiveness of these.

The evaluation focussed on the following broad questions:

- Were the objectives of the intervention achieved?
- Which parts of the MGS3 campaign worked well and in which circumstances?
- What were the barriers to effectiveness?
- Was there a 'multiplier effect'?

### 6.1 WERE THE OBJECTIVES OF THE INTERVENTION ACHIEVED?

There was strong evidence that MGS3 was implemented as intended in terms of HSE inspector inputs. Inspections and audits aimed to cover the same principal areas of risk, including site layout, use of vehicles and equipment, and management of visiting drivers and loading/unloading practices. Inevitably, the emphasis of visits altered according to the nature of the specific work strand inspectors were implementing. Nevertheless, the thematic content of inspections was fairly consistent from the point of view of inspectors, and a broad range of issues was addressed during visits. Both HSE and LA inspectors were satisfied they had been able to engage dutyholders and influence behaviour and generally felt that their knowledge and skills base equipped them to deliver the intervention effectively.

A significant proportion of inspected employers made changes in at least one of the MGS3 target risk areas: the majority of improvements were made to site layout and vehicle access. However, the main influence of the intervention appears to have been in terms of speeding up changes. The evaluation was unable to find any evidence that the intervention had impacted on long-term outcomes: there were no differences between the employers who received the intervention and those that did not when sickness absence and accident data were compared. However, a range of procedural and behaviour changes was identified which could, over time, lead to improved final outcomes, but such an analysis is beyond the scope of this evaluation.

# 6.2 WHICH PARTS OF THE MGS3 CAMPAIGN WORKED WELL AND IN WHICH CIRCUMSTANCES?

There was a largely favourable reaction to the service from employers, with recommendations generally seen as practical and beneficial. The criteria used by inspectors, however, tended to result in larger, and potentially more health and safety aware, employers forming the focus of visits. It is therefore not clear whether dutyholders involved in MGS3 were typical of the sectors, although it appears from the available evidence that there was a positive attitude to health and safety amongst this group. Inspectors were satisfied with the materials they had been provided with for use in inspections/audits and in general felt that the objectives of the MGS3 visits were realistic and achievable.

In the absence of management data regarding the LA contribution to MGS3, it was not possible to establish the level of their participation in the initiative or the extent to which they had worked jointly with HSE staff. What was apparent was that where joint working had taken place this had been a mutually beneficial experience. LA inspectors dealt with a range of issues, broadly overlapping with those encountered by HSE inspectors. It was generally felt that a co-ordinated HSE/LA approach was suited to the supply chain nature of this intervention. However, co-

ordinating this work required sustained commitment from both sides and success was often dependent upon working relationships established during MGS2.

The comprehensive approach adopted during audits was a powerful tool in addressing supply chain issues. They appear to have been successful in allowing inspectors to gain greater insights into a workplace than would have been possible through a more conventional, one-site, inspection format. The audit allowed in-depth examination of management processes within a given company, and the nature of its work with suppliers/contractors. This enabled supply chain issues to be observed in situ rather than relying on dutyholder accounts (as was usually the case with inspections). The format also allowed direct contact with other employers in the supply chain (in some cases operating from LA-enforced premises) and enabled a coherent approach to be taken across enforcement boundaries, arguably maximising the potential of joint working.

### 6.3 WHAT WERE THE BARRIERS TO EFFECTIVENESS?

MGS3 was a complex intervention, targeting a range of types of employer. It is therefore worth discussing what barriers these factors raised in order to inform the design of future initiatives.

### 6.3.1 Criteria for targeting employers

There appears to have been a tendency for employers targeted by HSE's side of the intervention to be (i) large/have a national presence, (ii) already 'engaged' with health and safety, and (iii) 'known' to HSE in some way. This may indicate that employers targeted by the initiative were already working to high health and safety standards. Therefore, the additive potential of the intervention may have been limited by a 'ceiling effect'.

The relatively limited impact of the intervention also needs to be viewed in the light of an apparent shift in recent years towards improved health and safety standards within the (HSE-enforced) sectors targeted by the intervention. Results are consistent with the hypothesis that there may have been a period during, or subsequent to, the MGS3 intervention when the 'control group' of employers were 'catching up' with the health and safety standards maintained by the group of employers who received the intervention. Again, this would have an effect of limiting the apparent impact of the intervention and the potential for regulators to stimulate additional change.

## 6.3.2 Difficulty of isolating impact

It therefore appears that the intervention was delivered against a background of rising health and safety standards within the target sectors. It was therefore difficult for the evaluation to isolate the specific contribution of MGS3 to any observed changes amongst inspected employers. The counterfactual position was not 'no change' but actually 'substantial change' amongst the sectors. Survey and interview data identified a number of drivers of change within HSE's target sectors, not least the influence of major suppliers/contractors and the desire (in recognition of the health and safety requirements of contractors) to retain and win work in a competitive market, and not be excluded from contracts due to poor health and safety standards.

There was a range of factors, therefore, driving health and safety performance, and it was evident that threat of enforcement action was just one of these. Before receiving a MGS3 visit, many larger companies already had rigorous internal health and safety management systems and premises owned by (or operating under the direction of) national companies which were accustomed to regular internal inspection and auditing processes. Also, a number of industry-wide initiatives were running concurrently to MGS3. Site improvements were frequently attributed to the desire to prevent accidents, satisfy insurers and make sites more secure, which were seen as key influences, particularly among employees who were unaware a HSE inspection/audit had taken place.

### 6.3.3 Timing of inspections

There were some practical difficulties in the delivery of the intervention attributable to working patterns within the industry. The arrival of vehicles for unloading/dispatch did not always occur when inspectors were on site. The result was that inspectors were limited in terms of their ability to observe loading/unloading practices, carry out vehicle inspections or engage in discussion with drivers. The timing of many inspections also prevented a full assessment of lighting and access issues at night. As a result, some visits were effectively 'virtual inspections' as judgements about the hazardous working activities had to be based on discussion rather than direct observation. This therefore limited the potential for the initiative to impact directly on the behaviour of drivers, particularly those only visiting the inspected site.

### 6.3.4 Difficulty of identifying change

At site-by-site level there was some difficulty in assessing the degree to which the intervention had achieved its aims. The design of the intervention did not facilitate the evaluation process in establishing whether individual site visits had been successful, since there were no clear benchmarks which researchers could apply at a site-by-site basis to determine whether the intervention had resulted in 'success'. We were also unable to measure actual change against recommended change for the whole initiative or for individual dutyholders due to a lack of management information.

Difficulty in assessing outputs is attributable in part to the nature of HSE field operations and their enforcement approach. We understand that resources limit the number of re-visits carried out on a systematic basis, and so there is limited scope for inspectors to assess and record the extent of compliance with recommendations. However, improved recording procedures, if they could be introduced without causing too much burden to inspectors, could help our understanding in future.

#### 6.4 WAS THERE A 'MULTIPLIER EFFECT'?

One of the objectives of MGS3 was to encourage the exchange of health and safety information between companies that undertake the movement of goods, and there was an intention that the intervention would produce a 'multiplier effect' across elements of the supply chain of targeted employers. However, interviews with contractors/suppliers of companies targeted by MGS3 demonstrated little impact of the intervention in this respect. There was no evidence that changes adopted by the inspected employers had made an impact on procedures adopted by other companies in their supply chain, beyond access issues on the actual site itself.

This does not reflect an unwillingness of companies within supply chains to work together on health and safety in principle: there were many examples of contractual arrangements between employers and the contractors/suppliers that involved health and safety. It was also evident from interviews conducted with peripatetic workers that their activities are routinely monitored in relation to health and safety. The failure to identify a multiplier effect as a result of MGS3 may therefore be attributable to a lack of spontaneous sharing of good practice between sites that is not linked to commercial imperatives, and/or a limited amount of time spent by inspectors in pushing forward changes themselves across different elements of supply chains (aside from in audits).

There also appeared to be a 'hit and miss' approach to local authority working, resulting in smaller companies further down the chain (where there was anecdotal evidence of poor practice) not being directly involved in the initiative. Larger companies whose business principally depended on contracts with other major players in the target sectors and which already demand high health and safety standards, were more likely to be targeted for inspection.

Inspectors may therefore need to be more proactive in ensuring that improved standards are applied to the whole supply chain and across enforcement boundaries if they are to make a real difference to standards in these sectors in the future.

#### 6.5 LEARNING POINTS

There are a number of learning points from the MGS3 initiative. We have broken these down into those of most use to policymakers in the design of future intervention, and more practical suggestions aimed at inspectors.

## 6.5.1 For HSE policymakers

# Targeting strategies should seek to maximise the potential impact of an intervention

More informed, or more strategic, targeting could have maximised the potential impact of the intervention. In future, selection strategies could more usefully be guided by local knowledge among HSE (and LA) inspectors so that the intervention is delivered where it is most needed. The degree of self-regulation that operates within a company should be a factor in considering resource-intensive interventions, such as MGS3 audits, in order to avoid 'deadweight'.

It is important for HSE policy makers to gain a better understanding of the commercial environment that these sectors operate within and to target frontline interventions towards employers who are less likely to be influenced by alternative drivers of health and safety improvement.

# When designing future interventions, evaluation requirements should be considered

The selection criteria for companies targeted by the MGS3 intervention was (i) not always explicit, and (ii) (with regard to some work streams) all encompassing (ie of a particular sector or employer type). This hindered identification of an appropriate comparison group. The evaluation of future interventions might benefit from a design that makes comparison with the counterfactual more easily achievable.

The availability of baseline data generally allows more robust evaluation of impact. HSE could consider assessing the starting position of employers more systematically so 'before' and 'after' scenarios can be more easily compared.

# A range of measures could be introduced to help specify the outcomes of frontline interventions of this type

Re-visits carried out on a systematic basis would allow better determination of outputs: in the event of resource constraints preventing HSE inspectors from undertaking this task, alternative staff could be considered, such as health and safety advisers or local authority health and safety enforcers. These professionals could be employed at an intermediary stage of evaluation to assess at site level whether (a sample of) inspections were 'successful' in objective terms.

Recording formats could be introduced which record inspection inputs (such as number and type of recommendations), any known outputs (improvements made), and in more detail to assist HSE in evaluating the impact of inspections.

Targets need to be set that will allow evaluators (and policy makers themselves) to better determine the extent to which an intervention has been successful, and the extent to which desirable outcomes have been met. The potential of interventions to be evaluated should be considered before their inception. Basically, if HSE needs to know whether something worked, interventions need to be designed so that this is possible. Specific and measurable intermediate outcomes need to be identified, given the difficulty of capturing final (health/accident) outcomes in a short evaluation time frame.

# Given the apparent effectiveness of audits in addressing supply chain issues, wider application of this delivery model could be considered

Policy makers should consider the gains to be made when adopting the audit approach and investigate the cost implications of applying it on a wider basis. There appears to be a strong case for using the audit approach in relation to smaller companies who (potentially) have less sophisticated H&S management systems than 'big players' in the industry. There was a view among dutyholders and inspectors that 'poorer performers' would have benefited from this approach more than the 16 'top' 3PL providers targeted by the intervention. There appears to be scope for targeting audit interventions more strategically in future. Wider application of audits could also address the evaluation findings that suggest 'multiplier effects' do not occur spontaneously. This format allows inspectors to address supply chain issues directly and is not reliant on the dutyholders to instigate a 'multiplier effect' on their own initiative.

### 6.5.2 For inspectors

- Inspectors should consider inspecting transportation issues at times when drivers are present and loading/unloading is occurring. This may require late night or early morning visits.
- Health and safety concerns of drivers appear to be qualitatively different from site-based staff. It is important for inspectors to gain an understanding of risk perception in this population, and if necessary work with other relevant agencies (eg the Highways Agency, Department of Transport) to address concerns outside HSE's jurisdiction.
- In order to engage with larger numbers of drivers, it may be fruitful for HSE to consider targeting drivers at roadside locations such as motorway facilities and ferry ports. This may be a more reliable way of reaching these workers than visiting individual sites.
- The 'intelligence' that HGV drivers are able to provide about MGS target sectors needs to be considered when targeting specific sites in distribution chains. Peripatetic workers are in a position to observe health and safety standards at different sites and inform inspectors of poorer performers.
- Local authority inspectors' local knowledge could be harnessed to identify distribution chains likely to benefit from HSE intervention. This could be used in conjunction with RIDDOR data to facilitate better targeting.

# **APPENDIX 1: RESPONSE RATES TO SURVEYS**

Table A1.1: Response rate of dutyholders survey

_	Inspected dutyholders: Main respondent	Inspected dutyholder: Extra respondent	Comparison: Main respondent	Comparison: Extra respondent
Total sample in survey	263 (post-pilot)	213	701	286
Completed interviews	153	147	226	225
Total ineligible*	47	1	236#	19
Total refusals	18	4	33	8
Total ineffective/ other	16	8	28	11
Response rate				
a) Number of completed interviews/ total sample	58%	69%	32%	77%
b) Number of completed interviews/ total sample, except ineligible	71%	71%	49%	84%

<sup>\*</sup> includes 35 records which were unusable because that size/sector quota had been filled

# **APPENDIX 2: DUTYHOLDER SURVEY**

# TREATMENT INITIAL CONTACT

1: Questionnaire information Project name: IES HSE MGS3	QUEST
Written by: JF2	
Questionnaire status: Final3	
Approved by: HH4	
2: Extract raw data prior to the change. Increase Version number (Code) with subsequent amendments of the questionnaire. Fill in Questionnaire log. Zip project run on previous version and save it in the "Out of the way" folder. Version number => *	VERS
si 1 > 0  January 200901	
3:  Project manager to fill in while checking data Checking status of the interview  => *	CHECK
si 1 > 0	
Not checked	
Data check (Browse/SPSS)2	
Listened 3 O	
Rejected4	
4: Postcode from database	POST
5: Did they have a site audit or inspection or both? Audit	INSP1
Inspection2	
Both3	

6:	INSP2
Date of audit (/)	
=> +1	
si INSP1=2	
7:	INSP3
Date of inspection (/)	
=> +1	
si INSP1=1	
8:	DATE
Date of first audit / inspection	
9:	F8
procédure 3 -> NAME2	ГО
Respondent's contact details (phone number, company name,	
respondent's name) 1	
10:	PHONE
écran [modèle 4] ->	
NAME2	
Phone number	
11:	CONAM
Business name	
12:	TITLE
<pre></pre>	IIILE
13:	NAME1
First name <name1></name1>	
14:	NAME2
Surname < NAME2 >	
Sulfiditie < NAIVIEZ >	

15: INTRO Introduction: Good morning/afternoon. My name is . . . I'm calling on behalf of the Health and Safety Executive (HSE). We are speaking to logistics and storage sites that received a site visit from HSE or their local authority between October 2007 and March 2008. We are looking to evaluate the effectiveness of the visit in improving onsite health and safety. Ask for named contact. Otherwise ask for person involved with health and safety site visit between Oct 2007 and March 2008. Would it be possible to talk to you about this now? If respondent requires further information: usually takes 10-15 mins dependent on your answers. Databuild is a market research consultancy; we have been commissioned to do this work on behalf of HSE. Continue......01 Busy signal ......BS => /END Left message......LM => /CB Refusal ..... RF => /END Personal appointment ......AP => /CB General appointment ...... GP => /CB Not allowed to speak to respondent ...... GK => /END General call back (3 days).....LT => /END General call back (7 days)......ST => /END => /END Call back after fieldwork......VA => /END Quota full.....QF => /END Number unobtainable .......NU => /END Duplicate .......DU => /END Not in target sector (put why in f6 box) ......NT => /END Would prefer an evening call (put a time and day in f6 box) ..EV => /END => /END 16: REC All responses will be treated in complete confidence; calls may be monitored for training purposes. 17: NAMED

Interviewer to categories

Is this respondent the named contact?

18:	NTITL
écran [modèle 4] ->	
NAME4	
Title => JOB	
si NAMED=1	
SI WANGED - I	
19:	NAME3
First Name	
20:	NAME4
Surname	
21:	JOB
Code and write exact title  Firstly, I would just like to clarify some background information. What is your job title?  Owner	
Managing Director2	
Health and Safety Manager/ Director	
Other Director	
General Manager 5 O	
Operations Manager 6	
Other Manager	
Other?	
22:	ACT
Code and write exact title I'd like to ask a few questions about the organisation you work for. What is the main activity of your site? Note to researcher: What do they make or do at this site?  Manufacturing/ Primary	
Logistics/ Haulage	
Warehousing3	
Retail 4	
Other?5	

23:	EMP1
Code and write exact figure	
Can you tell me how many workers are currently on the payroll, just at this site?	
0-41	
5-92	
10-19	
20-494	
50-995	
100-1996	
200-250	
251 or more8	
Don't know – DO NOT READ OUT9	
24: In addition to the workers on the payroll, are there any others who work for your company at this site who are NOT on the payroll, even if they only work at this site occasionally, eg drivers collecting / bringing goods? Yes	EMP2
No2	
Don't know – DO NOT READ OUT3	
25:	EMP3
If yes – only numbers in verbatim How many are there?	
=> +1	
si NOT EMP2=1	
0-4	
5-9	
10-19	
20-494	
50-995	
100-1996	
200-250	
251 or more8	
Don't know – DO NOT READ OUT9	

26:	SITE1
Does this company have more than one site? If needed: By different sites we mean geographically separate workplaces or offices, not different workplaces or office in the same location.	
Yes 1	
No	
27:	SITE2
If yes Is this site the Head Office?	
=> +2	
si SITE1=2	
Yes 1	
No	
2	
28:	EMP4
Code and write exact figure  And how many people are on the payroll for the whole organisation – that	
is, at this site and all others? Note to researcher: If don't know, ask for an	
approximate figure. 0-4	
5-9	
10-19	
20-494	
50-995	
100-1996	
200-250	
251 or more	
Don't know9	
20	FCT1
29: Record verbatim and categories: only number of years in verbatim – enter	EST1
0 if less than a year	
Can you tell me how many years your company has been in operation?	
0-2 years 1	
3-5 years	
6-10 years 3	
11-20 years 4	
More than 20 years 5	
Don't know6	

30: EST2 Only numbers in verbatim Can you tell me how many years your company has been in operation at this site? => +1 si SITE1=2 31: SAFE1 écran [modèle 3] -> SAFE5 I am going to read out statements with regards to health and safety in the workplace, and for each I'd like you to say whether you agree or disagree. Is that strongly agree/ disagree? Strongly Strongly Neither Disagree Agree disagree agree It is not up to employers to help workers look at their own health Workload and other pressures make it difficult for your organisation to deal with health and welfare issues It can be difficult to find the money needed for health and welfare services given other priorities It can be difficult to work out where to go to get advice about how to look after or improve the health or welfare of staff Your organisation isn't always sure what it needs to do to look after or improve the health and welfare of staff

If recall the visit

How many times was your site visited in this time period?

38: Were you notified of the (first) visit before it took place? Yes	NOTIF
No	
Don't know – DO NOT READ OUT	
39: What do you understand the main purpose of the visit to have been?	PURPS
40:  Prompted  Which organisation was the inspector from?  HSE	RECA2
Local council	
Have been visited by both in the time period	
Don't recall4	
41:  Only numbers in verbatim – only hours  Overall, how many hours did inspector(s) spend at your site (in hours)?	LONG
42:	DISCU
Multiple choice  Which of the following areas did the inspector discuss when they came to your site?  Loading and unloading of goods	
Vehicle movement and parking	
Appropriate use of equipment eg mechanical handling aids 5	
Other?	
43: You mentioned that the inspector discussed loading and unloading of goods. What was discussed / recommended?  => VEHIC si NOT DISCU=3	LOAD
44: Following the discussion / recommendation, have you made any changes in loading and unloading as a result? Yes, what?	REC2A

45: Unprompted What was the main reason for not having made the recommended changes?	REC2B
=> +2 si REC2A=1	
Too costly to implement changes	
Too time consuming to implement changes2	
Too difficult to implement changes3	
We were doing the right thing to begin with4	
It is still unclear how best to make the changes5	
Don't know6	
Other	
46: Were there any other reasons for not having made any changes?	RECB2
=> +1	
si REC2B=4  élimination -> 1	
selon REC2B.	
Too costly to implement changes1	
Too time consuming to implement changes2	
Too difficult to implement changes	
We were doing the right thing to begin with4	
It is still unclear how best to make the changes5	
· ·	
None	
47:	REC2C
écran [modèle 3] -> RECC2	REGZG
=> +2	
si REC2A=2	
On a scale of 1-5, where 1 is not at all and 5 is very, to what extent w recommendation(s):	ere the
1 – Not at all 2 3 4	5 – Very
Practical to implement	
Beneficial to health and safety on the site	
and safety on the site	

49: You mentioned that the inspector discussed vehicle movement and parking. What was discussed / recommended? => EQUIP si NOT DISCU=4	VEHIC
50: Following the discussion / recommendation, have you made any changes at work as a result? Yes, what?	REC3A
2	
Unprompted What was the main reason for not having made the recommended changes?  => +2 si REC3A=1	REC3B
Too costly to implement changes	
Too time consuming to implement changes2	
Too difficult to implement changes	
We were doing the right thing to begin with4	
It is still unclear how best to make the changes 5	
Don't know6	
Other	
52: Were there any other reasons for not having made any changes? => +1	RECB3
si REC3B=4	
élimination -> 1	
selon REC2B	
Too costly to implement changes	
Too time consuming to implement changes	
Too difficult to implement changes	
We were doing the right thing to begin with4	
It is still unclear how best to make the changes 5	
None	

REC3C  secran [modèle 3] ->  RECC3  => +2  si REC3A=2  On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the recommendation(s):    1 - Not at all   2   3   4   5 - Very    Practical to
RECC3  => +2 si REC3A=2  On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the recommendation(s):  1 - Not at all 2 3 4 5 - Very
RECC3  => +2 si REC3A=2  On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the recommendation(s):    1 - Not at all   2   3   4   5 - Very
On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the recommendation(s):    1 - Not at all   2   3   4   5 - Very
On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the recommendation(s):    1 - Not at all   2   3   4   5 - Very
On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the recommendation(s):    1 - Not at all   2   3   4   5 - Very
recommendation(s):  1 - Not at all 2 3 4 5 - Very
1 – Not at all 2 3 4 5 – Very
Practical to
Tractical to
implement
Beneficial to health
and safety on the site
55: EQUIP
You mentioned that the inspector discussed appropriate use of equipment
(eg mechanical handling aids) during the visit. What was discussed /
recommended?
=> OTHER
si NOT DISCU=5
56: REC4A
Following the discussion / recommendation, have you made any changes
at work as a result?
Yes, what?1 O
No2
57: REC4B
Unprompted
What was the main reason for not having made the recommended
changes?
=> +2
si REC4A=1
Too costly to implement changes1

Too time consuming to implement changes ......2

Too difficult to implement changes......3

Other......7

58:	RECB4
Were there any other reasons for not having made any changes?  => +1	
si REC4B=4	
élimination -> 1	
selon REC2B	
Too costly to implement changes	
Too time consuming to implement changes	
Too difficult to implement changes	
We were doing the right thing to begin with4	
It is still unclear how best to make the changes 5	
None	
59:	REC4C
écran [modèle 3] -> RECC4	
=> +2	1
si REC4A=2	
On a scale of 1-5, where 1 is not at all and 5 is very, to what extent w	vere the
recommendation(s):	
1 - Not at all 2 3 4	5 – Very
1 – Not at all 2 3 4 Practical to	5 – Very
Practical to implement	5 – Very
Practical to	5 – Very
Practical to implement Beneficial to health and safety on the site	5 – Very
Practical to implement Beneficial to health and safety on the site	5 – Very
Practical to implement  Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed /	
Practical to implement Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed / recommended?	
Practical to implement  Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed /	
Practical to implement Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed / recommended?  => ALREC	
Practical to implement  Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed / recommended?  => ALREC si NOT DISCU=6	
Practical to implement  Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed / recommended?  => ALREC si NOT DISCU=6  62: Following the discussion / recommendation, have you made any changes at work as a result?	OTHER
Practical to implement  Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed / recommended?  => ALREC si NOT DISCU=6  62: Following the discussion / recommendation, have you made any changes	OTHER
Practical to implement  Beneficial to health and safety on the site  61:  If selected other areas discussed with inspector You mentioned that the inspector discussed (other). What was discussed / recommended?  => ALREC si NOT DISCU=6  62: Following the discussion / recommendation, have you made any changes at work as a result?	OTHER

63: REC5B Unprompted What was the main reason for not having made the recommended changes? => +2si REC5A=1 Too costly to implement changes......1 Too time consuming to implement changes ......2 Too difficult to implement changes......3 We were doing the right thing to begin with ......4 It is still unclear how best to make the changes......5 Don't know ......6 Other......7 RECB5 Were there any other reasons for not having made any changes? => +1si REC5B=4 élimination -> 1 ..... selon REC2B..... Too costly to implement changes......1 Too time consuming to implement changes ......2 Too difficult to implement changes......3 We were doing the right thing to begin with ......4 It is still unclear how best to make the change ......5 65: REC5C écran [modèle 3] -> RECC5

:	=> +2
,	si REC5A=2
Ī	On a scale of 1-5, where 1 is not at all and 5 is very, to what extent we

On a scale of 1-5, where 1 is not at all and 5 is very, to what extent were the					
recommendation(s):					
	1 – Not at all	2	3	4	5 – Very
Practical to					
implement					
Beneficial to health					
and safety on the site					

67:   Prompted   Thinking about all the recommendations you were given in the visit, how many have you implemented?   All of the recommendations 1   Most of them 2   Some of them 3   Just a few 4   Don't know 5	ALREC
68: From all the changes made since the visit, which do you feel has had the biggest positive impact and why? => +1 si REC2A=2 AND REC3A=2 AND REC4A=2 AND REC5A=2	BEST
69: Did the site visit influence you to take any additional action that we have not discussed already? Yes, what?	CHAN1
70:  Prompted + find out how  To what extent has the inspector's visit changed your view of health and safety in the workplace?  A great deal	CHAN2
71: Thinking about the overall impact, which of the following statements do you think best describes the impact of having the inspector's visit? We would have introduced the same measures anyway	OVER
72: What other factors would have motivated you to make changes? => +1 si OVER=3,4	OVER1

73:	OVER2
How much longer would it have taken to make the changes without the site visit?	
=> +1	
si NOT OVER=2	
74:	OVER3
If the site visit had not taken place, which measures would you not have introduced?	
=> +1	
si NOT OVER=3	
	SICK1
Now I would like to ask you a few questions about your records on staff health and well-being. Which of the following best describes how, if at all, your organisation keeps a record of employees' sickness absence? There is a formal centralised system	
Line managers and employees keep individual records2	
There are no records kept	
Don't know4	
76:	SICK2
THIS SITE ONLY During the last 12 months, how many days off sick have been taken by your workers?	
77:	SICK3
IF a change, probe as to how much by. From x to x?  Since the site visit, would you say the number of days taken off sick by	
your workers has:	
Increased a lot1 O	
Increased a lot	
Increased a lot	
Increased a lot	
Increased a lot       1 O         Increased a little       2 O         Stayed the same       3         Decreased a little       4 O	
Increased a lot       1       0         Increased a little       2       0         Stayed the same       3         Decreased a little       4       0         Decreased a lot       5       0	SICK4

79:	SICK5
IF a change, probe as to how much by. From x to x?	
Since the site visit, would you say the number of workers having taken	
sick leave has: Increased a lot	
Increased a little	
Stayed the same	
Decreased a little	
Decreased a lot	
Don't know6	
80:	I NJ1A
THIS SITE ONLY	
During the last 12 months, how many days off sick have been taken by workers due to injuries / accidents in the workplace? (By injuries, I mean injuries which required some form of first aid or other treatment.)	
81:	INJ1B
IF a change, probe as to how much by. From x to x?	
Since the site visit, would you say the number of days taken off due to	
accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has:	
Increased a lot	
Increased a little	
Stayed the same	
Decreased a little	
Decreased a lot	
Don't know6	
82:	INJ2A
During the last 12 months, how many workers have taken sick leave due to accidents or injuries in the workplace?	
83:	INJ2B
IF a change, probe as to how much by. From x to x?	111025
Since the site visit, would you say the number of workers injured in the	
workplace (and by injuries, I mean injuries which required some form of	
first aid or other treatment) has:	
Increased a lot	
Increased a little	
Stayed the same	
Decreased a little	
Decreased a lot	
Don't know6	

During the last 12 months, how many workers have taken 4 or more days' absence from work due to accidents or injuries in the workplace? 85: INJ3B IF a change, probe as to how much by. From x to x? Since the site visit, would you say the number of workers experiencing injuries resulting in 4 or more days' absence from their normal duties has: Stayed the same .......3 Don't know ......6 **ATRIB** To what extent do you feel that the reduction in work-related accidents / injuries is due to the measures introduced after the site visit? si (SICK3=1,2,3,6) AND (SICK5=1,2,3,6) AND (INJ1B=1,2,3,6) AND (INJ2B=1,2,3,6) AND (INJ3B=1,2,3,6)Not at all.....1 Not much......2 Completely.....4 87: AWAR1 How would you rate employee awareness and understanding of on-site health and safety issues, on a scale of 1-5 where 1 is very low and 5 is very high? Very low ......1 High ......4 Very high......5

**INJ3A** 

84:

88: AWAR2 Probe as to how Since the inspector's visit, would you say employee awareness and understanding of on-site health and safety issues has: Improved a lot...... 1 O Don't know...... 5 89: AWAR3 On the same scale as before, how would you rate your managers' awareness and understanding of on-site health and safety issues (1 being very low and 5 being very high)? Very low...... 1 High......4 Very high ...... 5 90: AWAR4 Probe as to how Since the inspector's visit, would you say managers' awareness and understanding of on-site health and safety issues has: Got worse ...... 4 O Don't know......5 91: BEHA1 On a scale of 1-5, where 1 is very poor and 5 is very good, how would you rate your employees' health and safety behaviour? Very poor ...... 1 Very good ...... 5

BE
BEI
PC
•

96:  Prompted Since the inspector's visit, how would you say that your staff involvement in workplace health and safety policies has changed? Staff are much more involved	POLI2
97:  Do you conduct risk assessments (give options):  At set intervals	RISK1
Not at all? 3 => COMM	
98:  Prompted And how regularly are risk assessments conducted?  => +1 si RISK1=3  At least every 6 months	RISK2
99: Since the inspector's visit, would you say that you conduct risk assessments: A lot more regularly	RISK3
100: Has the person who conducts risk assessments received formal training? If yes, what training have they received?	RISK4

Have they dot a heal			0					RISK5
Have they got a heal <sup>.</sup> If yes, do you know v					1 O			
No	•							
Don't know					3			
102:								COMM
écran [modèle 3] -> COMM1								
SOMM								
We are coming to the communication came	npaigns and	d/or stake	eholder ev	vents rela	ting to 'Fa	ills from V	'ehicles <sup>'</sup>	
during which	Traffic		FTS Free		Received		Cannot	
				Operator		informati	recall	
	ioner	t		Standard	from	on		
		Associati		s Agency		received		
	S	on (FTA) Transpor		(VOSA) Driver	accompa nied by			
		t anspol t		Vehicle		attended		
		Manager		Operator	, 0			
		Seminar		(DVO)				
		S		Seminar				
Colleagues attended				3				
Personally attended								
n which of the follow	ving ways o	does your	business	work?				WOR
In which of the follow [Code all that apply]					1			WORk
In which of the follow [Code all that apply] Work independently o	on jobs							WORK
In which of the follow [Code all that apply] Work independently of Work as subcontractor	on jobs	business	ses		2			WORK
In which of the follow [Code all that apply] Work independently of Work as subcontractor	on jobs	business	ses		2			WORK
104: In which of the follow [Code all that apply] Work independently of Work as subcontractor Subcontract work to	on jobs	business	ses		2			WORK WORK WORK
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to 105:	on jobs ors to other other busin	business	sesjobs that	you man	2			
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to 105:  Prompted if necessar Which way of working	on jobs ors to other other busing Ty g is most c	business nesses on	jobs that	you man	2 age3			
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to 105:  Prompted if necessary Which way of working Work independently of the work independent	on jobs  ors to other  other busin  y  g is most con jobs	nesses on	jobs that	e?	2 age3 1			
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to 105:  Prompted if necessary Which way of working Work independently of the work independent	on jobs  ors to other  other busin  y  g is most con jobs	nesses on	jobs that	e?	2 age3 1			
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to 105:  Prompted if necessary Which way of working Work independently of Work as subcontracted work as subcontracted the subcontracted work as subcontracted to 100 work as subcontracted work as subcont	on jobs  ors to other other busin  y g is most con jobs  ors to other	ommon to	jobs that  o your site	e?	2 age3 1 2			
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to 105:  Prompted if necessary Which way of working Work independently of Work as subcontracted work as subcontracted the subcontracted work as subcontracted to 100 work as subcontracted work as subcont	on jobs  ors to other other busin  y g is most con jobs  ors to other	ommon to	jobs that  o your site	e?	2 age3 1 2			
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to	on jobs  ors to other other busin  y g is most con jobs  ors to other	ommon to	jobs that  o your site	e?	2 age3 1 2			/ORK2
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to a subcontract work independently of Work as subcontract work to subcontract work to a subcontract work to a subcontract work to subcontra	on jobs  ors to other other busin  y g is most con jobs  ors to other other busin	ommon to	jobs that o your site	e?	2 age3 1 2 age3	from		/ORK2
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to subcontract work to work as subcontracted Work independently of Work as subcontracted Subcontract work to subcontract	on jobs  ors to other other busin  y g is most con jobs  ors to other other busin	ommon to	jobs that o your site	e?	2 age3 1 2 age3	from		/ORK2
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to a subcontract work independently of Work as subcontracted Subcontract work to a subcontract work as subcontract work to a subcontract	on jobs  ors to other other busin  y g is most con jobs  ors to other other busin	ommon to	jobs that o your site	e?	2 age3 1 2 age3	from		
In which of the follow [Code all that apply] Work independently of Work as subcontracted Subcontract work to subcontract work to subcontract work independently of Work as subcontracted Subcontract work to s	on jobs  ors to other other busin  ry g is most con jobs  ors to other other busin  or require of ubcontract	ommon to business on business on certain stawork?	jobs that o your site ses jobs that	e?  you man you man	2 age312 age3	from		/ORK2

Could you provide the contact details of some sub-contractors that you work with?	
108:  Prompted  To what extent does your business take time to inform subcontractors about the possible health and safety risks in work areas they are working in for you?  All the time	WORK3
Most of the time	
109:	WORK4
UNPROMPTED  How does your business tend to inform subcontractors about possible health and safety risks? [Code all that apply]  => +1 si WORK3=4	Work
Formally, as part of a regular training programme 1	
Formally, as part of a one-off course	
Informally, through short discussions/training sessions 3	
Through the use of manuals/literature4	
Through correspondence send to workers (such as memos) 5	
Other 6 O	
110: Prompted In deciding which subcontractors to work with, how important is it to know about their health and safety practices? Very important	WORK5
111:  Do you require customers to have certain standards of health and safety?  => +4  si NOT WORK=2  Yes	CON
No	

SUB1

107:

Could you provide the contact details of some contractors that you work 113: WORK6 Prompted How well informed do you feel your business is by organisations granting you a contract about possible health and safety risks in work areas you are contracted to work on? Extremely well informed......1 Fairly well informed ......2 Not very well informed at all......3 Not at all informed......4 114: WORK7 UNPROMPTED How do you tend to get informed about health and safety risks by businesses you are subcontracted to work for? => +1 si WORK6=4 Formally, as part of a regular training programme ......1 Formally, as part of a one-off course.....2 Informally, through short discussions/training sessions.........3 Through the use of manuals/literature ......4 Through correspondence send to workers (such as memos) ....5 **IMPRV** 115: Is there any way in which you feel the site visit could have been more useful to you? Yes, how? ...... 1 O 116: **SALE** Finally, so that we can get an idea of the scale of your business, roughly, what do you expect that your total sales for the site to be this financial year? Gave answer (£s) ...... 1 O Don't know or unwilling to answer ......2

CON1

112:

117: SALE1 If don't know or unwilling to say...Prompt Could you estimate within the following bands your total sales will fall into this year? => +1si SALE=1 £2 million to £10 million...... 5 £10 million plus ...... 6 COLL In order to fully understand the impact of the site visit, we are also hoping to speak to a couple of your colleagues with regards to their perceptions of health and safety on the site. This will be a much shorter conversation covering their awareness and perceptions of the visit and health and safety procedures and policies. If possible, it would be very useful to obtain contact details for the following: Any other colleagues you feel it would be useful for us to speak to? 119: IES Would it be possible to talk to you in more depth about the issues we discussed today. This would be in the form of a qualitative telephone interview at a later date. Yes ...... 1 No ...... 2 120: IES2 To help understand the impact of actions taken, we would also like to visit some sites and do a short survey of employees. There is no need to agree to anything definite at this stage, but could we put your details forward for this so someone can contact you at a later date to explain more about what it would involve? Yes ...... 1 No ...... 2

121: Thank you for your time, that's been very helpful. As part of our quality procedures our research manager might call you back to verify some of your answers. Is this OK? Yes	THANK
No	
122: Finally, would you like to take Databuild's number or the Market Research Society freephone number just in case you want to check anything? Databuild – 0121 687 1144	CODE
Market Research Society freephone – 0500 396 9992	
None3	
Both4	

# **CONTROL INITIAL CONTACT**

1: Questionnaire information Project name: IES HSE MGS3	QUEST
Written by: JF	
Questionnaire status: Final	
Approved by: HH	
2:	VERS
Extract raw data prior to the change. Increase Version number (Code) with subsequent amendments of the questionnaire. Fill in Questionnaire log. Zip project run on previous version and save it in the "Out of the way" folder.  Version number	
=> *	
si 1 > 0	
January 2009 01	
3:  Project manager to fill in while checking data Checking status of the interview => *	CHECK
si 1 > 0	
Not checked	
Data check (Browse/SPSS)	
Listened	
Rejected4	
4: Is the respondent a site contact from the treatment group / COIN database?	TREAT
Yes	
No	
5: Postcode from database	POST
6: procédure 3 -> NAME2	F8
Respondent's contact details (phone number, company name, respondent's name)	

7: écran [modèle 4] -> NAME2	PHONE
Phone number	
8:	CONAM
Business name	
9:	TITLE
<title>&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;10:&lt;/td&gt;&lt;td&gt;NAME1&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;First name &lt;NAME1&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;11:&lt;/td&gt;&lt;td&gt;NAME2&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Surname &lt; NAME2 &gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>	

12: INTRO

Introduction: Good morning/afternoon. My name is . . . I'm calling on behalf of the Health and Safety Executive (HSE). Ask for the person responsible for health and safety on-site. We are speaking to logistics, storage and manufacturing companies across the UK to find out about their experiences and perceptions of health and safety issues, as well as any action taken to improve on-site health and safety. Would it be possible to talk to you about this now? If respondent requires further information: usually takes around 10 mins dependent on your answers. Databuild is a market research consultancy; we have been commissioned to do this work on behalf of HSE.

Continue01	
Busy signal BS	=> /END
Left messageLM	=> /CB
RefusalRF	=> /END
Personal appointment	=> /CB
General appointmentGP	=> /CB
Not allowed to speak to respondentGK	=> /END
General call back (3 days)LT	=> /END
General call back (7 days) ST	=> /END
No answer	=> /END
Call back after fieldwork	=> /END
Quota fullQF	=> /END
Number unobtainableNU	=> /END
DuplicateDU	=> /END
Not in target sector (put why in f6 box)NT	=> /END
Would prefer an evening call (put a time and day in f6 box) EV	=> /END
No longer in businessDD	=> /END

13: REC

All responses will be treated in complete confidence; calls may be monitored for training purposes.

14:	JOB
Code and write exact title  Firstly, I would just like to clarify some background information. What is your job title?  Owner	
Managing Director	
Health and Safety Manager/ Director3	
Other Director	
General Manager5	
Operations Manager6	
Other Manager	
Other?	
15:  Code and write exact title I'd like to ask a few questions about the organisation you work for. What is the main activity of your site? Note to researcher: What do they make or do at this site?  Manufacturing/ Primary	ACT
16:  Code and write exact figure  Can you tell me how many workers are currently on the payroll, just at this site? 0-4	EMP1
10-193	
20-49	
50-995	
100-1996	
200-250	
251 or more8	
Don't know – DO NOT READ OUT9	

17: In addition to the workers on the payroll, are there any others who work for your company at this site who are NOT on the payroll, even if they only work at this site occasionally? Yes	EMP2
DOITE KITOW - DO NOT READ OUT	
18:	EMP3
If yes – only numbers in verbatim How many are there?	
=> +1	
si NOT EMP2=1	
0-4	
5-9	
10-19	
20-494	
50-995	
100-1996	
200-250	
251 or more	
Don't know – DO NOT READ OUT	
19:	SITE1
Does this company have more than one site? If needed: By different sites we mean geographically separate workplaces or offices, not different workplaces or office in the same location.	
Yes	
No	
20:	SITE2
If yes Is this site the Head Office?	
=> +2	
si SITE1=2	
Yes	
No	

Code and write exact	figure				
And how many people is, at this site and all approximate figure. 0-4	others? Note	to researcher	: If don't kno	w, ask for an	
5-9				.2	
10-19				3	
20-49				.4	
50-99				.5	
100-199				.6	
200-250				.7	
251 or more				.8	
Don't know				.9	
22:					EST1
Record verbatim and of if less than a year Can you tell me how ro-2 years	many years yo	our company	has been in o	peration?	
3-5 years				.2	
6-10 years				.3	
11-20 years				.4	
More than 20 years				.5	
Don't know				.6	
23:					EST2
Can you tell me how this site?	many years y	our company	/ has been in	operation at	
=> +1					1
si SITE1=2					
24:					SAFE1
écran [modèle 3] -> SAFE5					
Lam going to road a	ıt statomonto	with regards	to boolth on	d cafaty in the	a workplace
I am going to read ou and for each I'd like y		ether you agi	ee or disagre		
	Ctmamaril	disagree?		A	Ctrongl
	Strongly disagree	Disagree	Neither	Agree	Strongly agree
It is not up to					
employers to help workers look at their					

21:

own health Workload and other pressures make it EMP4

1, 66, 11, 6				1	Ī	
difficult for your						
organisation to deal						
with health and						
welfare issues						
It can be difficult to						
find the money						
needed for health						
and welfare services						
given other priorities						
It can be difficult to						
work out where to go						
to get advice about						
how to look after or						
improve the health or						
welfare of staff						
Your organisation						
isn't always sure						
what it needs to do						
to look after or						
improve the health						
and welfare of staff						
and wenare or starr						
29:					ACTIO	
Over the past 12 months, has	s thoro boon as	ny action tako	n to improve			
		iy action take	ii to iiiipiove	•		
health and safety in the following	-		1			
Loading and unloading of goods	3	• • • • • • • • • • • • • • • • • • • •	1			
Vehicle movement and transpo	rtation		2			
Vehicle movement and transportation						
Proper use of equipment						
			_			
Other?			4			
None of the above			5 Y			
None of the above			5 X			
					1071	
30:					ACT1	
What action have you taken t	o improve heal	th and safety	in relation to	)		
loading and unloading of goods	?					
=> +1						
si NOT ACTIO=1						
SINOT ACTIO=1				_		
31:					ACT2	
	a improva hadi	h and cafaty	in relation to		71012	
What action have you taken t		ili aliu salety	iii reiation to	)		
vehicle movement and parking	<u>(</u>					
=> +1						
si NOT ACTIO=2						
				_		
32:					ACT3	
What action have you taken t	o improve heal	th and safety	in relation to	)		
proper use of equipment?	<u> </u>			_		

=> +1

si NOT ACTIO=3

33: ACT4 What action have you taken to improve health and safety in relation to the 'other' area you spoke about? => +1 si NOT ACTIO=4 34. SICK1 Now I would like to ask you a few questions about your records on staff health and well-being. Which of the following best describes how, if at all, your organisation keeps a record of employees' sickness absence? There is a formal centralised system......1 Line managers and employees keep individual records......2 Don't know ......4 35: SICK2 THIS SITE ONLY During the last 12 months, how many days off sick have been taken by your workers? 36: SICK3 IF a change, probe as to how much by. From x to x? Over the past 12 months, would you say the number of days taken off sick by your workers has: Decreased a little......4 O Don't know ......6 37: SICK4 During the last 12 months, how many workers have taken sick leave? SICK5 38: IF a change, probe as to how much by. From x to x? Over the past 12 months, would you say the number of workers having taken sick leave has: Decreased a little......4 O 

Don't know ......6

39:

THIS SITE ONLY

During the last 12 months, how many days off sick have been taken by workers due to injuries / accidents in the workplace? (By injuries, I mean injuries which required some form of first aid or other treatment.)

40:	I NJ1B
IF a change, probe as to how much by. From x to x?  Over the past 12 months, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has:  Increased a lot	
Increased a little	
Stayed about the same	
Decreased a little	
Decreased a lot?	
Don't know6	
41: During the last 12 months, how many workers have taken sick leave due to accidents or injuries in the workplace?	I NJ2A
42:	I NJ2B
IF a change, probe as to how much by. From x to x?  Over the past 12 months, would you say the number of workers injured in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has:  Increased a lot	
Increased a little	
Stayed about the same	
Decreased a little	
Decreased a lot?	
Don't know6	
43: During the last 12 months, how many workers have taken 4 or more days' absence from work due to accidents or injuries in the workplace?	INJ3A

44: INJ3B IF a change, probe as to how much by? From x to x? Over the past 12 months, would you say the number of workers experiencing injuries resulting in 4 or more days' absence from their normal duties has: Stayed about the same......3 Don't know ......6 45: AWAR1 How would you rate employee awareness and understanding of on-site health and safety issues, on a scale of 1-5 where 1 is very low and 5 is very high? Very low ......1 High ......4 Very high......5 46: AWAR2 Probe as to how Over the past 12 months, would you say employee awareness and understanding of on-site health and safety issues has: 47: AWAR3 On the same scale as before, how would you rate your managers' awareness and understanding of on-site health and safety issues (1 being very low and 5 being very high)? Very low ......1 Neither 3 High ......4 Very high......5

48:	AWAR4
Probe as to how	
Over the past 12 months, would you say managers' awarene understanding of on-site health and safety issues has:	
Improved a lot	)
Improved a little	)
Stayed about the same	
Got worse?4 C	)
Don't know5 C	)
49:	BEHA1
On a scale of 1-5, where 1 is very poor and 5 is very good, how we rate your employees' health and safety behaviour?	ould you
Very poor	
Poor	
Neither	
Good	
Very good5	
50:	ВЕНА2
Over the past 12 months, would you say that your employees' heasafety behaviour has:	
Got much better	)
Got a little better	)
Stayed about the same	
Got worse?4 C	)
Don't know5 C	
51:	ВЕНА3
On a scale of 1-5, where 1 is very poor and 5 is very good, how wo rate your managers' health and safety behaviour?  Very poor	ould you
Poor	
Neither3	
Good	
Very good 5	

52: Over the past 12 months, would you say that your managers' health and safety behaviour has:	BEHA4
Got much better	
Got a little better	
Stayed about the same3	
Got worse?	
Don't know5 O	
53: On the same scale as before, how would you rate your staff involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	POLI1
Low	
Neither	
High4	
Very high5	
54:	POLI 2
Prompted  Over the past 12 months, how would you say that your staff involvement in workplace health and safety policies has changed?  Staff are much more involved	
Staff are a little more involved2	
There has been no change	
Staff are less involved4	
Don't know5	
55:	RISK1
Do you conduct risk assessments (give options):  At set intervals	
When the need arises2	
Not at all? 3 => COMM	

56: Prompted	RISK2
And how regularly are risk assessments conducted?	
=> +1	
si RISK1=3	
At least every 6 months	
At least once a year 2	
At least every 2 years 3	
Less frequently than every 2 years	
Don't know. Why?5 O	
57:	RISK3
Over the past 12 months, would you say that you conduct risk	
assessments: A lot more regularly1	
A bit more regularly2	
Less regularly? 3	
There has been no change	
58:	RISK4
Has the person who conducts risk assessments received formal training?  If yes, what training have they received?1 O	
No 2	
Don't know3	
59:	RISK5
Have they got a health and safety qualification? If yes, do you know which qualification(s) this is? 1 O	
No	
60:	COMM
écran [modèle 3] -> COMM1	
We are coming to the end now. Could you tell me if you attended any of the	ne following

We are coming to the end now. Could you tell me if you attended any of the following communication campaigns and/or stakeholder events relating to 'Falls from Vehicles' during which there were discussions about manual handling of goods?

	Traffic	Freight	FTS Free	Vehicle	Received	No	Cannot
	Commiss	Transpor	Briefings	Operator	a letter	informati	recall
	ioner	t		Standard	accompa	on	
	Seminar	Associati		s Agency	nied by	received	
	S	on (FTA)		(VOSA)	campaig	and no	
		Transpor		Driver	n CD	events	
		t		Vehicle		attended	
		Manager		Operator			
		Seminar		(DVO)			
		S		Seminar			
				S			
Colleagues attended							
Personally attended							

62: In which of the following ways does your business work: [Code all that apply] Work independently on jobs	WORK
Work as subcontractors to other businesses2	
Subcontract work to other businesses on jobs that you manage? 3	
63:	WORK2
Prompted if necessary Which way of working is most common to your site? Work independently on jobs	
Work as subcontractors to other businesses2	
Subcontract work to other businesses on jobs that you manage3	
64: Do you recommend or require certain standards of health and safety from those to whom you subcontract work?	SUB
=> WORK6	
si NOT WORK=3	
Yes1	
No2	
65: Prompted	WORK3
To what extent does your business take time to inform subcontractors about the possible health and safety risks in work areas they are working in for you?  All the time	
Most of the time2	
Some of the time3	
Not at all4	

66:  UNPROMPTED  How does your business tend to inform subcontractors about possible health and safety risks? [Code all that apply]  => +1 si WORK3=4  Formally, as part of a regular training programme	WORK4
67:  Prompted In deciding which subcontractors to work with, how important is it to know about their health and safety practices?	WORK5
Very important	
Fairly important	
Not very important	
Not important at all	
68:  Do you require customers to have certain standards of health and safety?  => +3  si NOT WORK=2  Yes	CON
No	
69:  Prompted  How well informed do you feel your business is by organisations granting you a contract about possible health and safety risks in work areas you are contracted to work on?  => +2	WORK6
si WORK=1	
Extremely well informed	
Fairly well informed	
Not very well informed at all	
Not at all informed	

	WORK7
UNPROMPTED	
How do you tend to get informed about health and safety risks by businesses you are subcontracted to work for?	
=> +1	
si WORK6=4	
Formally, as part of a regular training programme1	
Formally, as part of a one-off course2	
Informally, through short discussions/training sessions3	
Through the use of manuals/literature4	
Through correspondence send to workers (such as memos)5	
Other	
71:	SALE
Finally, so that we can get an idea of the scale of your business, roughly,	
what do you expect that your total sales for the site to be this financial year?	
Gave answer (£s) 1 0	
Don't know or unwilling to answer2	
Don't know or unwinning to answer2	
72:	SALE1
If don't know or unwilling to sayPrompt Could you estimate within the following bands your total sales will fall into this year?	
=> +1	
si SALE=1	
Less than £100,000	
£100,000 to £500,0002	
£500,000 to £1 million	
£1 million to £2 million4	
£500,000 to £1 million	
£1 million to £2 million	

73: In order to fully understand the impact of any changes to on site health and safety procedures, we are also hoping to speak to a couple of your colleagues with regards to their perceptions of health and safety on the site. This will be a much shorter conversation covering their awareness and perceptions of health and safety procedures and policies. If possible, it would be very useful to obtain contact details for the following:  Someone responsible for health and safety on site	VISIT
Any other colleagues you feel it would be useful for us to speak to 3	
74: Thank you for your time, that's been very helpful. As part of our quality procedures our research manager might call you back to verify some of your answers. Is this OK? Yes	THANK
75: Finally, would you like to take Databuild's number or the Market Research Society freephone number just in case you want to check anything? Databuild – 0121 687 1144	CODE
Market Research Society freephone – 0500 396 999 2	
None	
Both	

## TREATMENT EXTRA CONTACT

1: Questionnaire information Project name: IES HSE MGS3	QUEST
Written by: JF2	
Questionnaire status: Draft	
Approved by:4	
Date of approval:5	
2:	VERS
Extract raw data prior to the change. Increase Version number (Code) with subsequent amendments of the questionnaire. Fill in Questionnaire log. Zip project run on previous version and save it in the "Out of the way" folder.	
Version number si 1 > 0	
January 200901	
3:  Project manager to fill in while checking data Checking status of the interview si 1 > 0	CHECK
Not checked	
Data check (Browse/SPSS)2	
Listened	
Rejected4	
4: Is this respondent from a treatment or control group site? Treatment	TRCON
Control2	
Treatment site which doesn't recall the visit3	
5: Are they an HR contact who is likely to know about sickness / absence figures? Yes	HR
No2	

6: procédure 3 -> NAME2	F8
Respondent's contact details (phone number, company name, respondent's name)	
1	
7:	PHONE
écran [modèle 4] -> NAME2	
Phone number	
8:	CONAM
Business name	
9:	TITLE
<title>&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;10:&lt;/td&gt;&lt;td&gt;NAME1&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;First name &lt;NAME1&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;11:&lt;/td&gt;&lt;td&gt;NAME2&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Surname &lt;NAME2&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>	

12: INTRO

Introduction: Ask for the contact provided by main contact. Good morning/afternoon. My name is . . . I'm calling on behalf of the Health and Safety Executive (HSE). We are speaking to logistics and storage sites that received a site visit from HSE or their local authority between October 2007 and March 2008. We are looking to evaluate the effectiveness of the visit in improving onsite health and safety. Would it be possible to talk to you about this now? If respondent requires further information: usually takes 10-15 mins dependent on your answers. Databuild is a market research consultancy; we have been commissioned to do this work on behalf of HSE.

Continue01	
Busy signalBS	=> /END
Left messageLM	=> /CB
RefusalRF	=> /END
Personal appointmentAP	=> /CB
General appointment GP	=> /CB
Not allowed to speak to respondent GK	=> /END
General call back (3 days)LT	=> /END
General call back (7 days)ST	=> /END
No answer	=> /END
Call back after fieldworkVA	=> /END
Quota fullQF	=> /END
Number unobtainableNU	=> /END
Duplicate	=> /END
Not in target sector (put why in f6 box)NT	=> /END
Would prefer an evening call (put a time and day in f6 box)EV	=> /END

13:

All responses will be treated in complete confidence; calls may be monitored for training purposes.

ALL  Firstly, I would just like to clarify some background information. What is your job title?  Owner	14:	JOB
Firstly, I would just like to clarify some background information. What is your job title?  Owner	Code and write exact title	
your job title? Owner		
Managing Director       2         Health and Safety Manager / Director       3         Other Director       4       0         General Manager       5       0         Operations Manager       6       0         Other Manager       7       0         Other?       8       0         15:       RECA1         Check: if the visit was before October 2007 then it isn't MGS       si TRCON-2         Your site received a health and safety visit between 1st October 2007 and 31 March 2008. Do you recall the visit?       1         Yes       1       1         No       2         16:       PURPS         si RECA1=2       What do you understand the main purpose of the visit to have been?         17:       ALL         Have any health and safety measures been introduced over the past 12 months in any of the following areas?       DISCU         ALL       Appropriate use of equipment eg mechanical handling aids 5       If other, please describe. What have been the benefits of this?6       0         18:       Si NOT DISCU=3         You mentioned loading and unloading of goods. What measures have been	your job title?	
Other Director	Managing Director	
General Manager	Health and Safety Manager/ Director 3	
Operations Manager	Other Director	
Other Manager	General Manager	
Other?	Operations Manager 6	
15: Check: if the visit was before October 2007 then it isn't MGS si TRCON=2 Your site received a health and safety visit between 1st October 2007 and 31 March 2008. Do you recall the visit? Yes	Other Manager 7 O	
Check: If the visit was before October 2007 then it isn't MGS si TRCON=2  Your site received a health and safety visit between 1st October 2007 and 31 March 2008. Do you recall the visit?  Yes	Other?	
Check: If the visit was before October 2007 then it isn't MGS si TRCON=2  Your site received a health and safety visit between 1st October 2007 and 31 March 2008. Do you recall the visit?  Yes		
Si TRCON=2  Your site received a health and safety visit between 1st October 2007 and 31 March 2008. Do you recall the visit?  Yes		RECA1
31 March 2008. Do you recall the visit?  Yes		
No		
16: PURPS  si RECA1=2  What do you understand the main purpose of the visit to have been?  17: DISCU  ALL  Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods	Yes 1	
Si RECA1=2  What do you understand the main purpose of the visit to have been?  17:  DI SCU  ALL  Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods	No 2	
What do you understand the main purpose of the visit to have been?  17:  ALL  Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods	16:	PURPS
17:  ALL  Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods	si RECA1=2	
Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods	What do you understand the main purpose of the visit to have been?	
Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods	17:	DISCU
months in any of the following areas? Loading and unloading of goods	ALL	
Appropriate use of equipment eg mechanical handling aids 5  If other, please describe. What have been the benefits of this? 6 O  18:  Si NOT DISCU=3  You mentioned loading and unloading of goods. What measures have been	months in any of the following areas?	
If other, please describe. What have been the benefits of this?6 O  18:  Si NOT DISCU=3  You mentioned loading and unloading of goods. What measures have been	Vehicle movement and parking 4	
18:  si NOT DISCU=3  You mentioned loading and unloading of goods. What measures have been	Appropriate use of equipment eg mechanical handling aids 5	
si NOT DISCU=3  You mentioned loading and unloading of goods. What measures have been	If other, please describe. What have been the benefits of this?6 O	
si NOT DISCU=3  You mentioned loading and unloading of goods. What measures have been		
You mentioned loading and unloading of goods. What measures have been	18:	LOAD
	si NOT DISCU=3	

19:	VEHIC
si NOT DISCU=4	
You mentioned vehicle movement and parking. What measures have been introduced?	
20:	EQUIP
si NOT DISCU=5	
You mentioned appropriate use of equipment (eg mechanical handling aids). What measures have been introduced?	
21:	SICK1
si HR=2	
Now I would like to ask you a few questions about your records on staff health and well-being. Which of the following best describes how, if at all, your organisation keeps a record of employees' sickness absence?	
There is a formal centralised system1	
Line managers and employees keep individual records2	
There are no records kept	
Don't know4	
	01.01/.0
22: THIS SITE ONLY	SICK2
si HR=2	
During the last 12 months, how many days off sick have been taken by your workers?	
23:	SICK3
IF a change, probe as to how much by. From x to x?	0.0.0
If a change, probe as to now mach by. If our x to x:	
si HR=2	
si HR=2 Since the site visit, would you say the number of days taken off sick by	
si HR=2 Since the site visit, would you say the number of days taken off sick by your workers has:	
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	SICK4
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	SICK4
si HR=2  Since the site visit, would you say the number of days taken off sick by your workers has: Increased a lot	SICK4

25:	SICK5
IF a change, probe as to how much by. From x to x?	
si HR=2	
Since the site visit would you say the number of workers having taken sick leave has: Increased a lot	
Increased a little	
Stayed about the same	
Decreased a little	
Decreased a lot?5	
Don't know6	
26:	I NJ1A
THIS SITE ONLY	
si HR=2	
During the last 12 months, how many days off sick have been taken by workers due to injuries / accidents in the workplace? (By injuries, I mean injuries which required some form of first aid or other treatment.)	
27:	INJ1B
IF a change, probe as to how much by. From x to x?	I NJ1B
IF a change, probe as to how much by. From x to x? si HR=2	INJ1B
IF a change, probe as to how much by. From x to x?	I NJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has:	I NJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	I NJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	I NJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	I NJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	I NJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	INJ1B
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	
IF a change, probe as to how much by. From x to x?  si HR=2  Since the site visit, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	

29:	INJ2B
IF a change, probe as to how much by. From x to x?	
si HR=2	
Since the site visit, would you say the number of workers injured in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has:  Increased a lot	
Increased a little2	
Stayed about the same	
Decreased a little4	
Decreased a lot?5	
Don't know6	
30:	INJ3A
THIS SITE ONLY	
si HR=2	
During the last 12 months, how many workers have taken 4 or more days' absence from work due to accidents or injuries in the workplace?	
31:	I NJ3B
IF a change, probe as to how much by. From x to x? si HR=2	
Since the site visit, would you say the number of workers experiencing injuries resulting in 4 or more days' absence from their normal duties has:  Increased a lot	
Increased a little2	
Stayed about the same3	
Decreased a little4	
Decreased a lot?5	
Don't know6	
32:	INJ4
si HR=1	
Over the past year, would you say that work-related accidents and injuries on site have:  Increased a lot	
Increased a little	
Stayed about the same3	
Decreased a little4	
Decreased a lot?5	
Don't know6	

33:

si (RECA1=2) AND (SICK3=1,2,3,6) AND (SICK5=1,2,3,6) AND (INJ1B=1,2,3,6) AND (INJ2B=1,2,3,6) AND (INJ3B=1,2,3,6)	
To what extent do you feel that the reduction in work-related accidents / injuries is due to the measures introduced?  Not at all	
Not much	
To some extent	
Completely 4	
34:	AWAR2
ALL	
Over the past year, would you say employee awareness and understanding of on-site health and safety issues has:  Improved a lot	
Improved a little	
Stayed about the same	
Got worse?4	
Don't know5	
35:	AWAR4
35: ALL	AWAR4
	AWAR4
ALL  Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has:	AWAR4
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has:  Improved a lot	AWAR4
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has:  Improved a lot	AWAR4
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has:  Improved a lot	AWAR4
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	AWAR4
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	AWAR4
ALL  Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	
ALL  Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	
ALL  Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	
Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Improved a lot	

37:	BEHA2
ALL	
Over the past 12 months, would you say that your employees' health and safety behaviour has:  Got much better	
Got a little better2	
Stayed about the same3	
Got worse?4	
Don't know5	
38:	BEHA4
ALL	
Over the past 12 months, would you say that managers' health and safety behaviour has:  Got much better	
Got much better	
Got a little better	
Stayed about the same	
Got worse?4	
Don't know5	
39:	POLI 2
39: Prompted	POLI2
Prompted ALL	POLI2
Prompted	POLI2
Prompted  ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed?	POLI2
Prompted  ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed?  Staff are much more involved	POLI2
Prompted  ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed?  Staff are much more involved	POL12
Prompted ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed? Staff are much more involved	POLI2
Prompted ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed? Staff are much more involved	POLI2
Prompted ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed? Staff are much more involved	POLI2
Prompted ALL  Since the inspector's visit, how would you say that employee involvement in workplace health and safety policies has changed?  Staff are much more involved	

41:	CODE
Finally, would you like to take Databuild's number or the Market Research Society freephone number just in case you wanted to check anything? Databuild – 0121 687 1144 1	
Market Research Society freephone – 0500 396 999 2	
None	
Both	

## **CONTROL EXTRA CONTACT**

1: Questionnaire information Project name: IES HSE MGS3	QUEST
Written by: JF2	
Questionnaire status: Final3	
Approved by: Hülya Hooker4	
Date of approval:5	
2:	VERS
Extract raw data prior to the change. Increase Version number (Code) with subsequent amendments of the questionnaire. Fill in Questionnaire log. Zip project run on previous version and save it in the "Out of the way" folder.	
Version number si 1 > 0	
January 200901	
3:  Project manager to fill in while checking data Checking status of the interview si 1 > 0	CHECK
Not checked	
Data check (Browse/SPSS)2	
Listened	
Rejected4	
4: Is this respondent from a treatment or control group site? Treatment	TRCON
Control2	
Treatment site which doesn't recall the visit3	
5: Are they an HR contact who is likely to know about sickness / absence figures? Yes	HR

6: procédure 3 -> NAME2	F8
Respondent's contact details (phone number, company name, respondent's name)	
1	
7:	PHONE
écran [modèle 4] -> NAME2	
Phone number	
8:	CONAM
Business name	
9:	TITLE
<title>&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;10:&lt;/td&gt;&lt;td&gt;NAME1&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;First name &lt;NAME1&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;11:&lt;/td&gt;&lt;td&gt;NAME2&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Surname &lt;NAME2&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>	

12: INTRO

Introduction: Ask for the contact provided by main contact. Good morning/afternoon. My name is . . . I'm calling on behalf of the Health and Safety Executive (HSE). We are speaking to logistics, storage and manufacturing companies across the UK to find out about their experiences and perceptions of health and safety issues, as well as any action taken to improve on-site health and safety. Would it be possible to talk to you about this now? If respondent requires further information: usually takes around 10 mins dependent on your answers. Databuild is a market research consultancy; we have been commissioned to do this work on behalf of HSE.

Continue01	
Busy signalBS	=> /END
Left messageLM	=> /CB
RefusalRF	=> /END
Personal appointmentAP	=> /CB
General appointment GP	=> /CB
Not allowed to speak to respondent GK	=> /END
General call back (3 days)LT	=> /END
General call back (7 days)ST	=> /END
No answer	=> /END
Call back after fieldworkVA	=> /END
Quota fullQF	=> /END
Number unobtainableNU	=> /END
Duplicate	=> /END
Not in target sector (put why in f6 box)NT	=> /END
Would prefer an evening call (put a time and day in f6 box)EV	=> /END
No longer in businessDD	=> /END

13: REC

All responses will be treated in complete confidence; calls may be monitored for training purposes.

14: JOB Code and write exact title Firstly, I would just like to clarify some background information. What is your job title? Health and Safety Manager/ Director......3 General Manager ...... 5 O Operations Manager ...... 6 Other Manager ...... 7 O Other?...... 8 O 15: DISCU Have any health and safety measures been introduced over the past 12 months in any of the following areas? Loading and unloading of goods ...... 3 Vehicle movement and parking ...... 4 Appropriate use of equipment eg mechanical handling aids..... 5 If other, please describe. What have been the benefits of this? 6 O 16: LOAD si NOT DISCU=3 You mentioned loading and unloading of goods. What measures have been introduced? . . . . **VEHIC** 17: si NOT DISCU=4 You mentioned vehicle movement and parking. What measures have been introduced? ... 18: **EQUIP** si NOT DISCU=5 You mentioned appropriate use of equipment (eg mechanical handling aids). What measures have been introduced?

19: Now I would like to ask you a few questions about your records on staff health and well-being. Which of the following best describes how, if at all, your organisation keeps a record of employees' sickness absence?  si HR=2  There is a formal centralised system	SICK1
20: THIS SITE ONLY	SICK2
si HR=2	
During the last 12 months, how many days off sick have been taken by your workers?	
21:	SICK3
IF a change, probe as to how much by. From x to x?	
si HR=2	
Since the site visit / over the past year, would you say the number of days taken off sick by your workers has: Increased a lot	
Increased a little	
Stayed about the same	
Decreased a little4	
Decreased a lot?5	
Don't know6	
22:	SICK4
THIS SITE ONLY	
si HR=2	
During the last 12 months, how many workers have taken sick leave?	

23:  IF a change, probe as to how much by. From x to x?	SICK5
si HR=2	
Since the site visit / over the past 12 months, would you say the number of workers having taken sick leave has: Increased a lot	
Increased a little	
Stayed about the same	
Decreased a little	
Decreased a lot? 5	
Don't know6	
24:	INJ1A
THIS SITE ONLY si HR=2	
During the last 12 months, how many days off sick have been taken by workers due to injuries / accidents in the workplace? (By injuries, I mean injuries which required some form of first aid or other treatment.)	
25:	I NJ1B
IF a change, probe as to how much by. From x to x?	
si HR=2	ı
Since the site visit / over the past 12 months, would you say the number of days taken off due to accidents / injuries in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has: Increased a lot	
Increased a little	
Stayed about the same	
Decreased a little	
Decreased a lot? 5	
Don't know6	

26: INJ2A

THIS SITE ONLY

si HR=2

During the last 12 months, how many workers have taken sick leave due to accidents or injuries in the workplace?

27:	INJ2B
IF a change, probe as to how much by. From x to x?	
si HR=2	
Since the site visit / over the past 12 months, would you say the number of workers injured in the workplace (and by injuries, I mean injuries which required some form of first aid or other treatment) has:  Increased a lot	
Increased a little2	
Stayed about the same3	
Decreased a little4	
Decreased a lot?5	
Don't know6	
28:	INJ3A
THIS SITE ONLY	
si HR=2	
During the last 12 months, how many workers have taken 4 or more days' absence from work due to accidents or injuries in the workplace?	
29:	INJ3B
IF a change, probe as to how much by. From x to x? si HR=2	
Since the site visit / over the past 12 months, would you say the number of workers experiencing injuries resulting in 4 or more days' absence from their normal duties has:  Increased a lot	
Increased a little2	
Stayed about the same3	
Decreased a little4	
Decreased a lot?5	
Don't know6	
30:	INJ4
si HR=1	
Over the past year, would you say that work-related accidents and injuries on site have:  Increased a lot	
Increased a little2	
Stayed about the same3	
Decreased a little4	
Decreased a lot?5	
Don't know 6	

31: **ATRIB** To what extent do you feel that the reduction in work-related accidents / injuries is due to the measures introduced? => +1si (SICK3=1,2,3,6) AND (SICK5=1,2,3,6) AND (INJ1B=1,2,3,6) AND (INJ2B=1,2,3,6) AND (INJ3B=1,2,3,6)Completely ...... 4 32: AWAR1 How would you rate employee awareness and understanding of on-site health and safety issues, on a scale of 1-5 where 1 is very low and 5 is very high? => +1 si 1>0 High......4 Very high ...... 5 33: AWAR2 Over the past year, would you say employee awareness and understanding of on-site health and safety issues has: Got worse?...... 4 O 

34: AWAR3 On the same scale as before, how would you rate your managers awareness and understanding of on-site health and safety issues (1 being very low and 5 being very high)? => +1si 1>0 Very low ......1 Low ......2 Neither ......3 High ......4 Very high......5 35: AWAR4 Over the past year, would you say managers' awareness and understanding of on-site health and safety issues has: Got worse? ...... 4 O Don't know ......5 36: BEHA1 On a scale of 1-5, where 1 is very poor and 5 is very good, how would you rate your employees' health and safety behaviour? => +1si 1>0 Very poor......1 Good ......4 Very good ......5 37: BEHA2 Over the past 12 months, would you say that your employees' health and safety behaviour has: Got a little better......2 Got worse? .....4 Don't know ......5

On a scale of 1-5, where 1 is very poor and 5 is very good, how would you rate your managers' health and safety behaviour?	
=> +1	
si 1>0	
Very poor	
Poor	
Neither	
Good4	
Very good5	
39:	BEHA4
Over the past 12 months, would you say that managers' health and safety behaviour has:	
Got much better	
Got a little better	
Stayed about the same	
Got worse?4	
Don't know	
40:	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low	POLI1
On the same scale as before, how would you rate employee involvement	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	POLI1
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	
On the same scale as before, how would you rate employee involvement in policies concerning health and safety in the workplace (1 being very low and 5 being very high)?  Very low	

BEHA3

38:

42: Thank you for your time, that's been very helpful. As part of our quality procedures our research manager might call you back to verify some of your answers. Is this OK? Yes	THANK
No	
43: Finally, would you like to take Databuild's number or the Market Research Society freephone number just in case you wanted to check anything? Databuild – 0121 687 1144	CODE
Both	

#### **APPENDIX 3: WORKER SURVEY**

# Moving Goods Safely at Work QUESTIONNAIRE

#### CONFIDENTIAL TO THE INSTITUTE FOR EMPLOYMENT STUDIES

At the Institute for Employment Studies (IES) we do independent research. The Health and Safety Executive (HSE) has asked us to do this survey to find out what happens at this workplace. This will help HSE make workplaces safer.

There are no right or wrong answers; we just want to find out what you think. Only the IES will see your answers.

When you have completed this questionnaire, please return it to the person who gave it to you. If you don't have time to do it now, please ask for a pre-paid envelope and post it back to us.

If you have any questions, please ask the person who gave you this questionnaire or call James Walker-Hebborn on 01273 873658 at our offices.

As our thank-you, please pick up YOUR TWO FREE LOTTERY SCRATCH CARDS when you have finished (or taken away a reply-paid envelope so you can fill it in later).



ABOUT YOU AND YOUR JOB	
1. Are you? (Please tick one box.)	
An employee at this workplace	4. What is your job? ( <i>Please tick one box.</i> )
An employee of a subcontractor	Lorry driver
An agency worker	Dispatch clerk
Self-employed	Loading/unloading vehicles
Something else (please say what)	Warehouse worker
	Loading manager
2. How long have you been working on	Order picker
or visiting this site? (Please tick one	Warehouse supervisor
box.)	Forklift driver
Less than 6 months	On-site maintenance worker
Between 6 and 12 months	Something else (please say what)
More than 12 months	
My first visit to the site	5. What is your nationality?
3. How old are you?	British
years	Something else (please say what)
LAYOUT OF THE WORK SITE	0 11 7
Please tell us about how this work site is lai changed over the last year. But if you have be year, tell us about how things have changed sin line.)	en working or visiting here for less than a nce you started. ( <i>Please tick one box on each</i>
6. Compared to a year ago, the <b>separation of w become</b> :	vorkers on foot from moving vehicles has
Better About the same	Worse Don't know
7. NOW the separation of workers from moving	ng vehicles is:
Very good Good	Poor Very poor
8. Compared to a year ago, <b>lighting and visibi</b>	lity have become:
Better About the same	Worse Don't know
9. NOW the <b>lighting and visibility</b> are:	
Very good Good	Poor Very poor
10. Compared to a year ago, warning signs ha	ve hecome.
Better About the same	Worse Don't know
11. NOW the signs are:	
Very clear Clear	Unclear Very unclear
12 Compared to a year ago, the tidiness of the	

Better	About the same	Worse	Don't know
13. NOW the site is:			
Always tidy	Usually tidy	Sometimes tidy	Never tidy
14. Compared to a year	ar ago, the state of the	floors has become:	
Better	About the same	Worse	Don't know
15. NOW the floors a	re:		
Always clear	Usually clear	Sometimes clear	Never clear
16. Compared to a year	ar ago, the <b>storage of ite</b>	ems has become:	
Better	About the same	Worse	Don't know
17. NOW the <b>storage</b>	of items is:		
Very safe	Safe	Not very safe	Not safe at all
SAFETY RULES			
things have changed o	how the rules of this sover the last year. But it is about how things have	f you have been workir	ng or visiting here for
18. Compared to a ye	ar ago, rules about site	safety are:	
Better	About the same	Worse	Don't know
19. NOW rules about	site safety are:		
Very clear	Quite clear	Not very clear	Not clear at all
20. Compared to a year	ar ago, briefings for wo	rkers about safety rule	es are:
Better	About the same	Worse	Don't know
21. NOW briefings fo	r workers are:		
Very good	Good	Not very good	Not good at all
22. Compared to a year	ar ago, <b>briefings for vis</b> i	itors about safety rules	are:
Better	About the same	Worse	Don't know
23. NOW briefings fo	or visitors are:		
Very good	Good	Not very good	Not good at all
REST AREAS			
changed over the last	st areas you can use at year. But if you have b w things have changed s	een working or visiting	g here for less than a
24. At this site, is ther	re a <b>rest area well away</b>	from moving vehicles	?
Yes	No	Don't know	
25. Compared to a ve	ar ago, access to <b>the res</b>	st area is:	
Safer	About the same	Less safe	Don't know
26. At this site, are the	ere toilets well away fro	m moving vehicles?	_ <del>_</del>

Yes	No	Don't know	
27. Compared to a ye	ar ago, access to the toi	i <b>lets</b> is:	
Safer	About the same	Less safe	Don't know
SUPERVISION AND A	CCIDENT REPORTING	i	
We want to know ho	out <b>supervision and</b> ow things have changed re for less than a year, to ke one box on each line.)	d over the last year. B	But if you have been
28. Compared to a ye	ar ago, <b>supervision on</b> s	safety is:	
Better	About the same	Worse	Don't know
29. NOW, supervision	n on safety is:		
Very good	Good	Not very good	Not good at all
30. Compared to a ye	ar ago, reporting proced	dures for serious accid	ents are:
Better	About the same	Worse	Don't know
31. NOW, reporting p	orocedures for serious a	accidents are:	
Always	Usually followed	Sometimes followed	Never followed
32. Compared to a ye	ar ago, reporting proced	dures for minor accide	nts are:
Better	About the same	Worse	Don't know
	procedures for minor ac		
Always	Usually followed	Sometimes	Never followed
HOW SAFELY PEOPL	F RFHAVF		
TIOW SALLET LOLE	L DETIAVE		
about how things wer <i>line</i> ). Remember if you the time since you star		things are now. (Pleas isiting here for less than	e tick one box on each n a year, tell us about
Better	ar ago, <b>workers' safety</b> About the same	Worse	s: Don't know
35. NOW, workers' b			
Very safe mpared to a ye	Quite safe at ago, the visitors' <b>safe</b>	Not very safe typehaviour at this si	Not safe at all
Better 37. NOW, visitors' be	About the same haviour is:	Worse	Don't know
Very safe	Quite safe	Not very safe	Not safe at all
Better	ar ago, <b>my safety behav</b> About the same	viour at this site is:  Worse	Don't know
39. NOW, my behavi		Not ware as to	Not safe at all
Very safe	Quite safe	Not very safe	Not safe at all

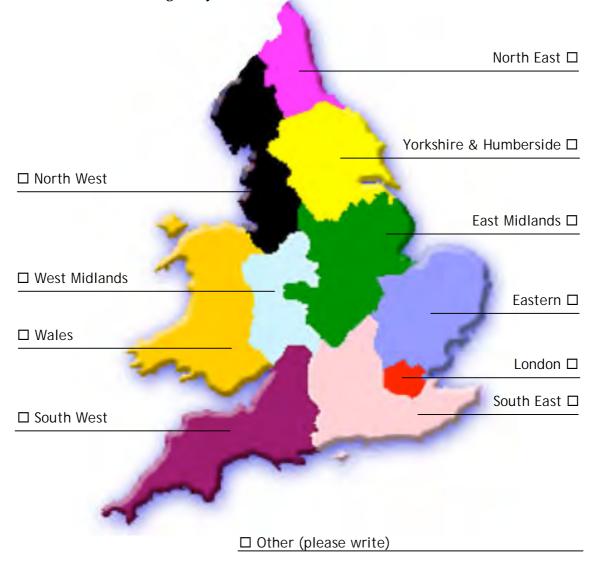
## EQUIPMENT, VEHICLES AND PROTECTIVE CLOTHING

Now please tell us about equipment on site and how this has changed. Remember: if you have been working or visiting here for less than a year, tell us about the time since you started. (*Please tick one box on each line.*)

40. Compared to a year ago, I wear hig vehicles:	h-visibility clothing when I'm around moving
☐ More often ☐ As often	Less often Don't know
41. NOW I wear high-visibility clothing	
Always Sometimes	Not at all I don't need to wear it in my job
42. Compared to a year ago, old equip	,
More often As often	Less often Don't know
43. NOW, old equipment is replaced:	
More often When neede than needed	d Less often than Don't know needed
44. Compared to a year ago, equipmen	t and vehicles are checked:
More often As often	Less often Don't know
45. NOW, equipment and vehicles are	e checked:
More often When neede than needed	d Less often than Don't know needed
WORKING AT OTHER PLACES	
46. Right now, where do you work? (Ple	ease tick one only.)
Only at this workplace	PLEASE GO TO QUESTION 57
At this workplace and others	PLEASE ANSWER THE LAST FEW QUESTIONS
47. How many other workplaces do you	a visit or work at? (Please write number here.)
48. How often do you visit this site? (Pa	lease tick one only.)
Every week Twice a mor	a month
49.Do you ever have concerns about your he	-
Yes	PLEASE ANSWER THE NEXT QUESTION
No	PLEASE GO TO QUESTION 52
50.Do you ever discuss your concerns about	this site with anyone?
Yes	PLEASE ANSWER THE NEXT QUESTION
No	PLEASE GO TO QUESTION 52
51. Who do you discuss these with? ( <i>Tick as</i>	many as you need to.)
Other workers at this workplace	
Supervisors/managers at this workplace	Supervisors/managers at other workplaces
Other (please say who):	
52.Do you ever have concerns about your he	ealth and safety on other sites?
Yes	PLEASE ANSWER THE NEXT QUESTION
∐ ∏No	PLEASE GO TO QUESTION 56

53.Do you ever discuss your concerns a	about other sites this site with anyone?
Yes	PLEASE ANSWER THE NEXT QUESTION
No	PLEASE GO TO QUESTION 56
54. Who do you discuss these with? (tic	ck as many as you need to):
Other workers at those worl	kplaces Other workers at different workplaces
Supervisors/managers at th workplaces	ose Supervisors/managers at different workplaces
Other (please say who):	
55. Have there ever been improvements concerns with the people shown? ( <i>T</i>	s in health and safety because you talked about your ick as many as you need to.)
No	Yes, other workers at other workplaces
Yes, supervisors/managers at the workplace	Yes, supervisors/managers at other workplaces
Yes, other (please say who):	

56. Please show us the areas in which you make deliveries or visit workplaces by ticking the boxes in **all the regions you work**.



## THANK YOU VERY MUCH FOR TAKING PART DON'T FORGET YOUR FREE LOTTERY CARDS

## 57. WOULD YOU LIKE TO EARN £20 FOR HALF AN HOUR OF YOUR TIME?

If possible, we would like to talk to you about your work in more detail. If you are willing to help, please give your details below. We would probably need to spend about half an hour on the 'phone to you, and we'd give you a £20 voucher to say thanks.

Name (first name only):
Telephone number:
Which time of day would be best for you?

## APPENDIX 4: REGRESSION MODEL USED TO COMPARE TREATMENT AND COMPARATOR GROUPS

Table A4.1: Probability of respondents to be in inspected group or comparison group

	Marginal effect		
	(dF/dx)	95%	C.I.
Sector (Comparison category: Manufacturing/Primary)			
Logistic/Haulage	-0.000	-0.135	0.134
Warehousing/Retail/Others	-0.058	-0.224	0.107
Size of organisation (Comparison category: Micro)			_
Small	0.109	-0.066	0.285
Medium	0.369***	0.175	0.564
Large	0.270***	0.028	0.513
Presence of workers not on payroll	0.031	-0.092	0.155
Years company has been in operation (comparison category: less than 10 years)			
11-20 yrs	0.182	-0.006	0.371
More than 20 yrs (>=21)	0.089	-0.062	0.241
Company operates at multiple sites	-0.117	-0.281	0.046
Region where the site operates (comparison category: North East)			
North West	0.185	-0.126	0.496
Yorkshire and The Humber	0.174	-0.163	0.513
East Midlands	0.259	-0.038	0.556
West Midlands	0.084	-0.256	0.425
East of England	0.166	-0.129	0.463
London	-0.258	-0.564	0.047
South East	0.226	-0.059	0.512
South West	-0.160	-0.469	0.148
Scotland	0.123	-0.205	0.451
Wales	0.470***	0.249	0.692

Number of observations=327, Prob>chi2=0.000, Pseudo R2=0.1220

Dependent variable: Inspected dutyholders=1, comparison group=0

<sup>\*\*\*</sup> sign 1%

Table A4.2: Likelihood of dutyholders disagreeing with five attitude statements relating to workplace health (ie demonstrating positive attitudes)

Logistic regression	Odds Exp(B)	95% C.I. fr Exp(B) o	
Independent (x) variables		Lower	Upper
Type of respondent (reference: comparison group)	2.262**	1.396	3.667
Small site ie 10-49 employees (reference: micro 0-9)	-0.997	0.512	1.941
Medium site ie 50-249 employees (reference: micro 0-9)	-0.757	0.404	1.933
Large site ie 250+ employees (reference: micro 0-9)	2.241	0.676	7.423
Multiple sites (reference: one site)	2.498**	1.470	4.246
Sector – Logistics/haulage (reference: manufacturing/primary)	1.270	0.720	2.240
Sector – Other (reference: manufacturing/primary)	1.398	0.694	2.819
11-20 years in operation (reference: 10 yrs or less)	1.250	0.573	2.726
More than 20 years in operation (reference: 10 yrs or less)	1.663	0.886	3.120
Primarily work as subcontractors (reference: primarily work independently)	1.067	0.584	1.948
Primarily subcontract work (reference: primarily work independently)	1.902	0.771	4.694
Job Title – Director/Owner/Partner (reference: role with specific H&S responsibilities)	-0.552	0.250	1.218
Job Title – Other manager (reference: role with specific H&S responsibilities)	-0.932	0.502	1.728
Job Title – Other non manager (reference: role with specific H&S responsibilities)	-0.217*	0.065	0.720
*Significant at 1% level			
**Significant at 5% level			
-2 log Likelihood = 425.386			
Predicted 54.3%			



# **Moving Goods Safely 3**

## Evaluation report

The Moving Goods Safely 3 (MGS3) intervention took place during 2007 and 2008, and targeted risks associated with the movement of goods in the logistics, warehousing, road haulage and goods delivery sectors. It was delivered through inspections and audits carried out by Health and Safety Executive (HSE) and local authority (LA) inspectors and was designed to be a supply chain initiative.

This report presents the findings of an evaluation carried out during 2008/09, and after the intervention had ceased. It considers:

- the activities of HSE inspectors who delivered the intervention and the reaction amongst employers and workers in the pilot area to the service:
- the extent to which the MGS3 intervention made an impact on targeted firms, and the relative effectiveness of its main models of delivery; and
- whether there was evidence of a 'multiplier effect' up and down supply chains.

The report also identifies some barriers to effectiveness and presents learning points for consideration when designing future interventions of this type.

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