

# Health and safety in public sector construction procurement

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# Health and safety in public sector construction procurement

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This study was concerned with examining health and safety issues in public sector construction procurement. The broad aim of the research was to provide an evidence-based assessment of how well the public sector in England, Scotland and Wales meets its health and safety obligations in the procurement of construction.

The research methodology involved primary data collection. The main data collection instrument was a self-completion postal questionnaire. The overall approach followed two distinct stages:

- a survey of public sector clients; and
- a survey of private sector suppliers.

The conclusions, drawn from the evidence of the research, suggest at the broadest level that while some public sector clients performed reasonably well in terms of meeting their health and safety obligations during the procurement of construction, there is certainly more that could be done.

In terms of recommendations going forward, the evidence suggests that more needs to be done to embed current health and safety guidance among public sector clients. While the research findings appear to indicate that the majority of public clients surveyed generally followed the guidelines set out in the Construction (Design and Management) Regulations 1994. There is a sense, from the results, that 'best practice' is not as widely embedded as it perhaps could be.

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## EXECUTIVE SUMMARY

This is the final report of a study concerned with examining health and safety issues in public sector construction procurement commissioned by the Health and Safety Executive (HSE), the Department of Trade and Industry (DTI) and the Office of Government Commerce (OGC). The broad aim of the research is to provide an evidence-based assessment of how well the public sector in England, Scotland and Wales meets its health and safety obligations in the procurement of construction.

The study has a number of distinct objectives:

- Assess how the public sector are discharging their health and safety obligations vis-à-vis public procurement
- Assess the strength of the health and safety input by contractors into the tender process
- Establish the level to which best practice health and safety criteria have been 'embedded' within public construction procurement processes

The research methodology adopted by us on this commission involved primary data collection. After discussions with HSE it was agreed that the main data collection instrument would be a self-completion postal questionnaire. Our overall approach followed two distinct stages:

- A survey of public sector clients
- A survey of private sector suppliers

Our initial approach was to design a survey-based enquiry that sought information from public clients on the extent to which:

- they adopt the principles of best practice guidance (i.e. OGC AE 10; Common Minimum Standards) in the procurement of construction work generally
- their tender documentation and processes provide for assessments at tender/contract award stage of contractors' proposals and potential performance with respect to health and safety
- responses and proposals from contractors at tender stage meet or exceed clients' requirements on health and safety or, in the absence of any such requirements, address health and safety issues directly

In addition to the public sector survey we developed a questionnaire to ascertain the views of the private sector project participants (i.e. construction contractors) to provide a balanced view regarding public procurement processes.

To capture a broad range of client types and sizes in the study, we developed a project, rather than client focused, approach. To this end we obtained the sampling frame for the research from Emap Glenigan, a commercial data provider. We obtained data from the Emap database for the calendar year 2005 which included some 3,000 public projects. This formed our sampling frame for both surveys. The sample allowed us to identify the public sector department that had procured the project and the private sector suppliers (i.e. contractors) that were delivering the project and provided a named contact for both.

The surveys were distributed in summer 2006 and resulted in a response rate of 12.6% for the client survey and 13.4% for the contractor survey.

The main findings of the research indicate that there are some areas where the public client performed reasonably well in terms of discharging their health and safety obligations on the projects in question, more specifically:

- The vast majority of clients required some form of health and safety information to be provided by contractors during the procurement process
- The majority of contractors used were pre-qualified
- Nearly all projects had a planning supervisor appointed
- Public clients health and safety awareness is generally rated as good by contractors
- Health and safety considerations scored quite highly when choosing design options
- Clients considered health and safety risks during the construction stage of projects

However, the research findings suggest that generally, public clients exhibited more confidence in terms of their responsibilities as a client than they did with their responsibilities for health and safety risk management. In particular, clients appeared to be most confident appointing competent teams and least confident monitoring project progress, outcomes and performance.

The research highlighted some particular shortcomings of the public client during various stages of project development. During the procurement stage of the projects in question the findings of the research indicate that generally public clients:

- Used traditional approaches to construction procurement despite guidance to the contrary and their undoubted adversarial nature
- Appointed contractors too late in the procurement process to have much influence on design decisions that may have impacted health and safety
- The method of procurement used was generally pre-determined by the clients parent body
- The requirement to manage health and safety risks scored relatively low when selecting the procurement method
- Clients did not provide feedback to contractors of the relative strength of their tenders

In terms of monitoring health and safety performance, the findings suggest that:

- Health and safety performance criteria were set more frequently during the selection of a contractor and construction on site stages compared to other stages of project development (in other words, a traditional construction approach rather than a project life-cycle approach to health and safety)
- A sizeable proportion of public clients did not collect any data on health and safety performance during the build/construction phase of the projects in question
- The use of client risk registers is not widespread
- A considerable proportion of public clients did not undertake a post-completion review

The conclusions, drawn from the evidence of the research, suggest at the broadest level that while some public sector clients perform reasonably well in terms of meeting their health and safety obligations during the procurement of construction, there is certainly more that could be done.

More specifically, public clients could do more during the procurement of construction, in particular:

- Provide feedback to all contractors on their tender evaluation
- Consider procurement routes other than the more traditional approaches
- Appoint contractors earlier in the procurement process to allow them greater influence on design decisions that may impact health and safety, this is likely to be a function of the procurement method used

and more during the monitoring of project health and safety performance:

- Set criteria or targets for health and safety performance during the construction phase of all projects

- Undertake post-completion reviews of all projects and feed the results back to the contractors to allow continuous improvement in the construction process
- For every project produce a client risk register (this is a register of all risks on a project, and their mitigating actions) and share this with the integrated project team

In terms of recommendations going forward, the evidence suggests that more needs to be done to embed current health and safety guidance among public sector clients. While the research findings appear to indicate that the majority of public clients surveyed generally followed the guidelines set out in the Construction (Design and Management) Regulations 1994. There is a sense, from the results, that 'best practice' is not as widely embedded as it perhaps could be. Given the requirement that, "all clients are to follow OGC's Achieving Excellence in Construction Procurement Guide 10, Health and Safety" (OGC Common Minimum Standards) it appears that further awareness raising may be required among public sector clients to ensure increased take-up of best practice.

Indeed, in terms of the requirement to report health and safety performance data directly to OGC, the research findings indicate that while the public client may well collect this type of data it does not appear be passed on to OGC for whatever reason. This suggests that perhaps a more pro-active approach is required between OGC and project sponsors to ensure this data is reported in future to allow benchmarking of health and safety performance across government projects.

Furthermore, the immediate focus going forward should be on increasing the confidence of public clients in terms of developing their responsibilities for monitoring project progress, outcomes and performance. This is likely to be most effectively delivered through specific training programmes.



# INTRODUCTION

## 1 INTRODUCTION

The public sector is the single largest construction client in the country, commissioning approximately 40% of total construction output in the UK each year.

A recent event called to showcase best health and safety practices in public sector construction procurement reported that approximately 17 workers were killed each year on projects procured by the public sector. Lord Hunt, at the time the Minister for Health and Safety, argued that this was too high a price to pay and suggested that the public sector should become exemplary construction clients able to influence the design, construction, maintenance and use of buildings and help raise health and safety standards for workers involved in such projects.

Following the event it was suggested that an evidence base was required from which to assess the public sectors current practice in terms of considering health and safety issues when procuring construction projects. At the beginning of 2006 the Health and Safety Executive (HSE), the Department of Trade and Industry (DTI) and the Office of Government Commerce (OGC) commissioned this research to provide an assessment of how the public sector client currently performs in terms of considering health and safety issues during the procurement of construction projects.

### 1.1 Aims and objectives

The broad aim of the research was to provide an evidence-based assessment (backed by robust quantitative and qualitative data) of how well the public sector in England, Scotland and Wales meets its health and safety obligations in the procurement of construction.

More specifically, the study had a number of distinct objectives:

- Assess how the public sector are discharging their health and safety obligations vis-à-vis public procurement
- Assess the strength of the health and safety input by contractors into the tender process
- Establish the level to which best practice health and safety criteria have been 'embedded' within the public construction procurement process

### 1.2 Focus of the research

Discussions with HSE at an early stage confirmed that the primary focus of the research was the public sector client. However, HSE were keen to obtain a balanced view regarding how/if the public sector discharged its health and safety obligations during the procurement of construction projects. To this end an enquiry of suppliers (construction contractors) was to be used to gauge their views in terms of health and safety requirements set by the public client.

HSE were interested in evidence from a wide range of construction projects (of different sizes and types) commissioned by 'an appropriate mix' of public sector client types (local authorities, non-departmental public bodies and central government departments).

The study covered construction projects procured in England, Wales and Scotland by public sector clients. At a minimum, this suggested that construction procurement by the main government departments (and their agencies) in England – and by counterpart departments within the Welsh Assembly Government and the Scottish Executive – were included in the

study. However, because at the time of the study the Scottish Executive were introducing their own health and safety guidance, it was felt that projects procured via the Scottish Executive should be excluded from the study. Thus, coverage in Scotland was provided by projects that had been procured by other agencies.

Finally it should be remembered that, while health and safety issues are of relevance during the design and construction process, they are also relevant throughout the lifetime of buildings and built assets, however, within the constraints of this research the specific focus of the study was on health and safety during design and construction processes.

### **1.3 Methodology**

There were a number of significant methodological challenges in attempting to identify/quantify public sector construction projects. In particular, there is no public-owned central register of public contracts in Britain from which to construct a survey or sampling frame for survey work.

Indeed, a relatively small number of central government departments account for a high proportion of public construction expenditure. We have recently completed work for OGC on developing a database to capture public sector construction project expenditure which suggests that some 10-12 central government departments and agencies in England may, collectively, account for a high proportion of total public construction spend at any one time. Conversely, a relatively large number of smaller, local government authorities and agencies account for a smaller proportion of public spending on construction but a much higher proportion of projects.

In addition, we were particularly concerned with the risk of ‘double counting’ and overlap (if for example Departments such as Health were included in the study alongside individual hospital trusts).

To address this feature of the target population, and to capture a broad range of client types and sizes in the study, we proposed a project, rather than client, approach.

### **1.4 Overall approach**

The research methodology involved primary data collection. After discussions with HSE it was agreed that the main survey instrument would be a self-completion questionnaire, with some (limited) telephone follow-up with selected respondents to clarify anomalies, secure missing information and expand on details already provided.

Our overall approach followed two distinct stages:

- A survey of public sector clients
- A survey of private sector suppliers

#### **1.4.1 Public sector client survey**

Our initial approach was to design a survey-based enquiry that sought information from public clients on the extent to which:

- they adopt the principles of best practice guidance (i.e. AE 10; Common Minimum Standards) in the procurement of construction work generally
- their tender documentation and processes provide for assessments at tender/contract award stage of contractors’ proposals and potential performance with respect to health and safety

- responses and proposals from contractors at tender stage meet or exceed clients' requirements on health and safety or, in the absence of any such requirements, address health and safety issues directly

The public sector client questionnaire consisted of twenty three questions in five sections, covering issues such as project details, the respondents awareness of their client responsibilities, the method of procurement adopted for the project in question, and the procedures adopted for the monitoring of project health and safety performance. A copy of the questionnaire survey is available in Annex B of this report.

#### **1.4.2 Private sector supplier survey**

In addition to the public sector survey we developed a questionnaire to ascertain the views of the private sector project participants (i.e. construction contractors) to provide a balanced view regarding public procurement processes.

The private sector supplier questionnaire consisted of twenty two questions in five sections, covering issues such as project details, the respondents' views on the extent to which the client was aware of their responsibilities, the method of procurement adopted for the project in question, and the procedures adopted for the monitoring of project health and safety performance. A copy of the questionnaire survey is available in Annex C of this report.

### **1.5 Main research areas**

The ability to be able to compare the performance of different public client types was a crucial output of the research.

Broadly speaking the results of the survey allowed comparisons to be made between:

- Clients (Government departments, Local Authorities and Non-Departmental Public Bodies)
- Client experience (Occasional or repeat)
- Project size (Large to small)
- Countries (England, Scotland and Wales)

### **1.6 Questionnaire development**

After consultation with HSE it was decided that it should be possible to elicit most, if not all, of the core data we need from respondents by use of self-completion questionnaires. Any supplementary (including more qualitative) information could be captured via follow up interviews if required.

The survey questions were primarily closed with the response choices determined by Davis Langdon after consultation with HSE. However, opportunity was given for an unanticipated response if the respondent deemed this necessary. The closed method allowed more questions to be posed within the constraints of the questionnaire, as the method is quicker for the respondent.

Because of the nature of the questions we were careful about managing issues of security and confidentiality. In order to elicit a reasonable response rate we were conscious that, for respondents to take part willingly, they may need some assurance that data they provided would be confidential. We were therefore careful to stress, in both the questionnaire and the accompanying survey letter, that the identity of individual respondents would not be divulged.

Indeed, we fielded a number of telephone calls during the survey process inquiring about the reporting of results.

The questionnaires were designed to help minimise potential problems with data collection, validation and cleaning processes and also to minimise the burden on respondents.

The survey constructs were developed from previous research and in-depth discussions with HSE and modified during pre-testing and piloting of the survey. Following questionnaire development the survey was initially pre-tested with colleagues. To ensure correct interpretation of the questions two pilot surveys were conducted in summer 2006 with respondents (public clients and private contractors identified through the Davis Langdon contacts database) that were later omitted from the final survey.

## **1.7 Sampling frame**

Davis Langdon obtained the sampling frame for the research from Emap Glenigan. Emap is a publisher of marketing information targeted at firms from developers to contractors engaged in construction work in the UK.

The Emap data is based on planning applications. Each year the Emap survey covers approximately 15,000 projects with a value of £100,000 or more. Smaller projects are also surveyed but less information is collected on smaller projects which are not monitored as closely as the larger schemes. The Emap survey gathers information such as the names and addresses of clients, developers, architects, contractors and other contact points. Other data includes the value of projects, procurement methods used, expected start dates, expected finish dates, type of building or structure, and location by town, county and region.

The main benefit of using Emap data, over other sources, is that it contains information about all significant projects, in all regions. It contains a larger number of different building types than any other published source and it is capable of showing the data for sub-regional areas down to the level of cities or even towns within regions. The data is collected throughout the UK on a continuous basis with researchers calling on local authority planning departments, where they receive details of planning applications. Each planning application is then followed up as the project proceeds through to completion by contacting the developers, architects and contractors involved. All the information is entered into a database which therefore contains a vast amount of project data on most planning applications, and by extension construction project, throughout the country.

We obtained data from the Emap database for the calendar year 2005 which included some 3,000 public projects. This formed our sampling frame for both surveys. We used this data to identify a representative sample of all public projects, stratified by project type, location, size and procurement route.

The sample allowed us to identify the public sector department that had procured the project and the private sector suppliers (i.e. contractors) that were delivering the project and provided a named contact for both. This approach ensured that project coverage was consistent, in other words we were asking clients and contractors about their perceptions of health and safety on the same projects.

After data cleaning, which included removing projects with incomplete records, and those that had been procured by the Scottish Executive our final sampling frame consisted of some 2,620 projects with reasonable coverage in terms of project size, project type and government client.

These records represented £22 billion of public construction; we estimate that they probably accounted for approximately 50% of all public construction in 2005.

At the outset we anticipated obtaining approximately 300 responses from these records (i.e. approximately 10% of the sampling frame).

## **1.8 Survey distribution**

In terms of survey distribution, the structure of the records from the Emap database favoured the use of a self-completion postal survey. Lack of e-mail contact details largely dictated our approach. We had some limited telephone contact with respondents to follow-up any issues that were highlighted by the survey returns.

The client survey was distributed in late July 2006 to named respondents identified via the sampling frame. Three weeks after the initial mailing we conducted a follow-up exercise for those clients that had failed to respond. This entailed making telephone contact with non-respondents and, if they were willing to take part, e-mailing the questionnaire for their completion. Finally, of the 2,620 clients contacted some 365 responded of which 39 were invalid resulting in 326 valid replies representing a response rate of 12.6% (valid replies + refusal / total sample - ineligible).

The contractor survey was distributed in late August 2006 to named respondents identified via the sampling frame. Three weeks after the initial mailing we conducted a follow-up exercise for those contractors that had failed to respond. Again this entailed making telephone contact with non-respondents and, if they were willing to take part, e-mailing the questionnaire for their completion. Finally, of the 2,620 contractors contacted some 369 responded of which 22 were invalid resulting in 347 valid replies representing a response rate of 13.4% (valid replies + refusal / total sample - ineligible).

In an attempt to discover any bias in the sample, non-response analysis was conducted. Characteristics of the respondents were compared with characteristics of the total sample. Thus data concerning project location was compared both for the sample as a whole and for the respondents. The distributions were compared using a Chi-square test. The results suggest that there is no significant difference between the distribution of the respondents and that of the total sample. Therefore the respondents can be assumed to be a reasonable representation of the sample as a whole. Thus non-response bias, if any exists, is considered to be negligible.

## **1.9 Data Analysis**

In terms of questionnaire completion, most questions were answered, however where a written response was required many respondents failed to provide any data. Because the primary data collected is essentially nominal, and ordinal, some of the assumptions needed for the use of parametric statistics will not be satisfied, therefore non-parametric statistics are employed to analyse the collected data. The methods used, and their appropriateness, are discussed more fully in the results section. The statistical analysis was performed using the computer program the Statistical Package for the Social Sciences (SPSS v9).

## **1.10 Contents**

The research consists of six chapters. The first chapter provides the introduction, including the research methodology, and sets the scene for the research that follows. Chapter two presents details concerning the characteristics of the survey samples and details of the projects reviewed.

Next, Chapter three provides the survey results considering client responsibilities. Chapter four presents the results of the surveys regarding procurement of construction. Next, Chapter five provides the survey results concerned with monitoring of project health and safety performance. Finally, Chapter six provides a summary of the research and draws conclusions from the findings presented in the earlier chapters.

# HEALTH AND SAFETY IN PUBLIC SECTOR CONSTRUCTION PROCUREMENT

## 2 HEALTH AND SAFETY IN PUBLIC SECTOR CONSTRUCTION PROCUREMENT

The following sections provide a summary of the results of the research. The survey results are reported under the following headings in line with the structure of the questionnaires, namely; details of the projects surveyed; awareness of client responsibilities; procurement of construction; and monitoring of project health and safety performance. Results are reported for both the client and contractors' surveys as a whole, and then for the following client sub-samples: type of client; size of project; project location; and client experience. Sub-sample results are only reported where they differ substantially from the results reported for the client sample as a whole. While commentary is made in the report regarding any sub-sample differences the results are reported in Annex A due to space constraints. Generally, the results in the following sections are reported in terms of frequencies and proportions. First we examine some characteristics of the respondents to the surveys and provide summary details of the projects surveyed.

### 2.1 Characteristics of the respondents

The following section provides some details of the respondents to the surveys. The clients' role on the projects in question is shown in Table 2.1, the sample includes clients and client advisors, the majority being client project managers (the other category includes 53 roles which are not summarised here).

**Table 2.1** Client respondent's role on the projects in question

	<i>Frequency</i>	<i>Percent</i>
Client	34	10
Client Project manager	121	37
Client representative	32	10
Other	139	43

The contractor's role on the projects in question is summarised in Table 2.2, the sample includes contract managers and project managers (again the other category includes 39 roles which are not summarised here).

**Table 2.2** Role of the contractors on the projects in question

	<i>Frequency</i>	<i>Percent</i>
Contracts manager	175	50
Project manager	40	12
Other	132	38

## 2.2 Characteristics of the client sample

The following section provides some details of the public client survey sample as a whole, more specifically the respondents organisation, the experience of the respondent, project location, project size, type of project, and the stage the project was at when the survey was undertaken.

**Table 2.3** Respondents by type of client organisation

	<i>Frequency</i>	<i>Percent</i>
Local Authority	184	57
Non-departmental public body	44	13
Housing Association	65	20
Central government department	32	10

The respondent's organisation is displayed in Table 2.3. As can be seen we have the greatest coverage in terms of Local Authority respondents, followed by those from Housing Associations.

Table 2.4 exhibits the experience of the respondent in terms of the number of projects that they or their organisation have been involved with over the last five years. The majority of respondents are repeat clients (5 or more projects over the last five years) although we do have responses from occasional clients (less than five projects).

**Table 2.4** Client respondent's experience

	<i>Frequency</i>	<i>Percent</i>
Occasional client	83	26
Repeat client	243	74

### 2.2.1 Project details from the client sample

Table 2.5 displays the location of the projects in question. The vast majority of projects were in England although we do have limited coverage of projects in Scotland and Wales.

**Table 2.5** Project location in the client sample

	<i>Frequency</i>	<i>Percent</i>
England	259	79
Scotland	45	14
Wales	19	6

Data concerning project size is reported in Table 2.6. As can be seen we have reasonable coverage of various project sizes (small = <£1million; medium = £1million - £10 million; large = >£10 million). The largest proportion is in the £1 million to £10 million category. However, it is worth noting that we have responses from a considerable number of smaller projects i.e. those less than £1 million. Indeed, we have responses from a wide range of project sizes, more specifically from £22,000 to £320 million in value.

**Table 2.6** Size of projects in the client sample

	<i>Frequency</i>	<i>Percent</i>
Small	119	37
Medium	158	49
Large	47	14

Table 2.7 displays the type of project we are considering in our analysis. As can be seen the majority of projects were new build but we have reasonable coverage of refurbishment projects. Of these projects, data in Table 2.8 suggests that the majority of projects were complete when the inquiry was conducted, although we have reasonable coverage of projects that were still on-site.

**Table 2.7** Type of project (client sample)

	<i>Frequency</i>	<i>Percent</i>
New build	207	64
Refurbishment	115	36

**Table 2.8** Project stage at time of the survey

	<i>Frequency</i>	<i>Percent</i>
Design	8	2
Pre-contract	7	2
On-site	107	33
Complete	200	62

Respondents were asked if a planning supervisor had been appointed for the project in question, as can be seen in Table 2.9 the vast majority of projects had a planning supervisor appointed. The results in Table 2.10 indicate that the majority of planning supervisor appointments were external to the respondent's organisation.

**Table 2.9** Has/was a planning supervisor appointed for the project in question?

	<i>Frequency</i>	<i>Percent</i>
Yes	313	97
No	7	2
Don't know	3	1

**Table 2.10** Was the planning supervisor an internal or external appointment?

	<i>Frequency</i>	<i>Percent</i>
External appointment	200	64
In-house appointment	112	35
Don't know	1	0.3

However, in terms of sub-sample differences, the results in Table A1 indicate that, in contrast to other public bodies, Local Authorities tended to use a higher proportion of in-house planning supervisor appointments.

In addition, the results in Table A2, suggest that the smaller the project the more likely that the planning supervisor was an in-house appointment.

### 2.3 Characteristics of the contractors' sample

The following section provides some details of the private contractors' survey sample as a whole, more specifically the size of the respondents' organisation (in terms of annual turnover in 2005), the proportion of the firms turnover derived from the public sector and some project specific details.

**Table 2.11** Size of the contracting firms

	<i>Frequency</i>	<i>Percent</i>
Small	54	17
Medium	186	57
Large	87	26

Table 2.11 displays the size of the contracting firms, in terms of their annual turnover for 2005 (Small= $\leq$ £10 million; Medium=£10million-£100 million; Large= $\geq$ £100 million). As can be seen the majority of responses came from medium sized firms i.e. those with annual turnover between £10 million and £100 million. However, we have responses from some very small firms (turnover of £1.1 million) and some very large firms (turnover of £5 billion) indicating reasonable coverage across a range of firm sizes.

**Table 2.12** Contractors' turnover derived from the public sector

	<i>Frequency</i>	<i>Percent</i>
<33%	80	27
33-66%	105	36
>66%	110	37

In terms of the contractors' turnover derived from the public sector, Table 2.12 indicates that we have responses from firms that derive a relatively small proportion of their turnover from the public sector (less than 33%), to those that derive a relatively large proportion (more than 66%). In real terms we have a range of responses from firms that derive just 5% of their turnover from the public sector to those that derive 100%.

**Table 2.13** Size of projects in the contractors' sample

	<i>Frequency</i>	<i>Percent</i>
Small	102	35
Medium	163	56
Large	27	9

Data concerning project size is reported in Table 2.13. As can be seen we have reasonable coverage of various project sizes (small = <£1million; medium = £1million - £10 million; large = >£10 million). The largest proportion is in the £1 million to £10 million category. However, it is worth noting that we have responses from a wide range of project sizes, more specifically from £50,000 to £2 billion in value.

### **2.3.1 Project details from the contractors' sample**

Table 2.14 displays the location of the projects in question. As with the client survey the vast majority of projects were in England, although we have limited coverage of projects in Scotland and Wales.

**Table 2.14** Project location in the contractors' sample

	<i>Frequency</i>	<i>Percent</i>
England	273	81
Scotland	42	13
Wales	22	6

Table 2.15 displays the type of project we are considering in our analysis. As can be seen the majority of projects are new build but again we have reasonable coverage of refurbishment projects. Of these projects, data in Table 2.16 indicates that the majority of projects were complete although we have reasonable coverage of projects that were still on-site.

**Table 2.15** Type of project (contractors' sample)

	<i>Frequency</i>	<i>Percent</i>
New build	213	61
Refurbishment	130	38

**Table 2.16** Project stage at time of the survey (contractors' sample)

	<i>Frequency</i>	<i>Percent</i>
Design	3	1
Pre-contract	6	2
On-site	104	30
Complete	233	67

Contractors were asked what their organisations role was on the project in question. Table 2.17 provides a summary of the results and indicates that the vast majority of respondents were acting as principal contractor.

**Table 2.17** Contractors' role on the projects in question

	<i>Frequency</i>	<i>Percent</i>
Principal contractor	279	80
Design & build contractor	58	17
Service provider	2	1
Sub-contractor	5	1
Other	2	1

Table 2.18 displays data concerning at what stage of the procurement process contractors were appointed. The results indicate that the largest proportion of contractors were appointed at the detailed design stage. This is probably too late in the procurement process to take advantage of contractors expertise (in terms of buildability and health and safety issues) but is likely to be a function of the procurement route used.

**Table 2.18** Project stage when contractors were appointed

	<i>Frequency</i>	<i>Percent</i>
Outline specification	46	14
Investment decision	10	3
Outline design	63	18
Detailed design	166	48
Other (framework)	41	12
Don't know	16	5

# AWARENESS OF CLIENT RESPONSIBILITIES

## 3 AWARENESS OF CLIENT RESPONSIBILITIES

The following section provides summary details of the results of the research concerning awareness of client responsibilities. We examine respondents' views in terms of overall client responsibility and responsibility for health and safety risk management. We then look at any assistance received by clients to help them understand their health and safety responsibilities. Finally, in this section, we examine any guidance used by the client to help them to understand and discharge their health and safety responsibilities.

### 3.1 Responsibilities as a client

Clients were asked to rate their understanding of their responsibility as a client at various stages of project development on a five point scale, from 1 (fully) to 5 (not at all). The analysis is concerned with comparing responses for each variable to see whether there are any differences in the respondents' preferences. Given that the data collected is ordinal and the samples are not independent the Friedman Test is used to compare the distribution of the variables.

The Friedman test is the related samples non-parametric equivalent of the repeated measures ANOVA. The calculation of the Friedman test is based on ranks in each case, the scores for each variable are ranked and the mean ranks for each variable are compared.

**Table 3.1** Confidence that the respondent understood their client responsibilities (Friedman Test)

	<i>Mean Rank</i>	<i>Rank</i>
Appointing a competent team	2.84	1
Communicating essential information	2.93	2
Selecting design options	3.05	3
Planning effectively	3.07	4
Monitoring progress and outcomes	3.12	5

The results of the analysis can be seen in Table 3.1. The significant Chi-square of the Friedman test (N=310; Chi-sq=33.5; df=4; Sig:0.000) suggests that there is a significant difference between the mean ranks. Clients appeared to be most confident "appointing a competent team" and least confident "monitoring progress and outcomes".

To obtain a balanced view contractors were asked to rate how well they thought the client understood their responsibilities, at various stages of project development, on a five point scale, from 1 (fully) to 5 (not at all).

The results of the analysis can be seen in Table 3.2. The significant Chi-square of the Friedman test (N=330; Chi-sq=175.9; df=4; Sig:0.000) suggests that there is a significant difference between the mean ranks.

Contractors indicate that the public sector client appeared to understand their responsibilities for "appointing a competent team" more fully than other options. Indeed, these findings tend to support the results from the client survey and suggest that more focus should be given to ensuring that public clients are fully confident in their other responsibilities.

**Table 3.2** Contractors' views on the extent to which clients understood their responsibilities (Friedman Test)

	<i>Mean Rank</i>	<i>Rank</i>
Appointing a competent team	2.41	1
Selecting design options	2.81	2
Monitoring progress and outcomes	3.11	3
Communicating essential information	3.24	4
Planning effectively	3.43	5

### 3.2 Responsibilities for health and safety risk management

Clients were asked to rate their understanding of their responsibility for health and safety risk management at various stages of project development on a five point scale, from 1 (fully) to 5 (not at all). The results of the analysis can be seen in Table 3.3. The significant Chi-square of the Friedman test (N=309; Chi-sq=121.2; df=4; Sig:0.000) suggests that there is a significant difference between the mean ranks. Clients appeared to be most confident “appointing a competent project team” and least confident “monitoring contractors health and safety performance”.

**Table 3.3** Confidence that the respondent understood their responsibilities for health and safety risk management (Friedman Test)

	<i>Mean Rank</i>	<i>Rank</i>
Appointing a competent project team	2.52	1
Managing health and safety risks	3.08	2
Taking action as necessary to ensure h&s risks are properly controlled	3.11	3
Setting h&s performance requirements to be adhered to by the contractor	3.12	4
Monitoring contractors health and safety performance	3.17	5

In addition, contractors were asked to rate how well they thought the client understood their responsibilities for health and safety risk management at various stages of project development, on a five point scale, from 1 (fully) to 5 (not at all).

**Table 3.4** Contractors' views on the extent to which clients understood their responsibilities for health and safety risk management (Friedman Test)

	<i>Mean Rank</i>	<i>Rank</i>
Appointing a competent project team	2.95	1
Setting h&s performance requirements to be adhered to by the contractor	3.32	2
Monitoring contractors health and safety performance	3.52	3
Managing health and safety risks	3.65	4
Taking action as necessary to ensure h&s risks are properly controlled	3.69	5
Allocating sufficient time and resources to the project	3.87	6

The results of the analysis can be seen in Table 3.4. The significant Chi-square of the Friedman test (N=336; Chi-sq=115.2; df=5; Sig:0.000) suggests that there is a significant difference between the mean ranks. Contractors suggest that the public sector client appeared to understand their responsibilities for “appointing a competent project team” more fully than

other options. Again the findings tend to support the results of the client survey and suggest that more focus should be given to the other options.

Generally, the results suggest that public sector clients exhibited more confidence with their responsibilities as a client than they did with their responsibilities for health and safety risk management.

However, we noted some differences between sub-samples of the client sampling frame. The results in Table A3 indicate that “setting health and safety performance requirements to be adhered to by the contractor” is ranked more highly by repeat clients than by occasional clients. However, “monitoring contractors’ health and safety performance” is ranked more highly by occasional clients than repeat clients.

Furthermore, the smaller the project the less confident respondents appear to be “monitoring contractors’ health and safety performance”. However, the larger the project the less confident respondents are “setting health and safety performance requirements” (Table A4).

Finally, in Table A5, the results indicate that “managing health and safety risks” is ranked lower on projects in Scotland and Wales when compared to those in England.

### 3.3 Assistance received

The research was concerned with ascertaining the level of assistance received by the client from their organisation, or parent body, to help them understand their health and safety responsibilities. Table 3.5 indicates that specific training was the most frequently occurring assistance received, followed by advice from in-house experts and advice from external experts.

**Table 3.5** Assistance received by clients to help them understand their health and safety responsibilities

	<i>Frequency</i>
Specific training	176
Advice from in-house experts	168
Advice from external experts	157
Other	9
No assistance provided	16
None needed as had previous experience of construction project management	30

Table 3.6 presents details on how useful public clients found the assistance provided. Specific training was regarded as the most useful assistance and perhaps should be the focus going forward. Particularly in terms of monitoring progress, outcomes, and performance where clients were found to exhibit least confidence.

**Table 3.6** Perceived usefulness of the assistance provided to help clients understand their health and safety responsibilities

	<i>Rank</i>	<i>Combined score</i>
Specific training	1	776
Advice from in-house experts	2	713
Advice from external experts	3	663
Other	4	44

### **3.4 Guidance used**

The research was concerned with identifying what, if any, guidance documents and other material the public client used to help them understand their health and safety responsibilities on the project in question. This question required respondents to write the name of any guidance used and as a result many clients failed to complete this section of the questionnaire. However, of those that did respond the results indicate that the most frequently used guidance documents were:

- CDM Regulations (Managing Health and Safety in Construction)
- HSE publications (Managing Construction for Health and Safety)
- Approved Codes of Practice (ACOP)

There were only two specific mentions made of any OGC Achieving Excellence in Construction guidance and neither of these specified the actual guidance documents used (i.e. AE-10). This finding, although not conclusive due to a relatively low response rate for the question, suggests that “best practice” guidance was not specifically used, by the public clients that responded to this survey, for the projects in question.

This tends to suggest that a campaign is needed to raise awareness of the OGC Achieving Excellence in Construction guidance with a view to embedding this throughout the public sector.

# PROCUREMENT OF CONSTRUCTION

## 4 PROCUREMENT OF CONSTRUCTION

The following section provides summary details of the results of the research regarding the procurement method adopted for the projects in question. First we examine the clients decisions involved in selecting design options. Next we look at the procurement method selected for the projects in question and examine criteria that impacted on the procurement decision. Then we provide details of the extent public clients used pre-qualified suppliers. Finally in this section, we examine if the public client required information to be provided by the contractor during the procurement process, and if the public client provided any feedback to contractors following the procurement decision.

### 4.1 Design options

Clients were asked to rank the top three criteria used when choosing between design options for the project in question. The results are presented as a combined score (where 1=top priority and scores 3; and 3=third order priority and scores 1).

**Table 4.1** Top three criteria used by clients when choosing between design options

	<i>Rank</i>	<i>Combined score</i>
Fit with functional requirements	1	563
Project capital cost	2	470
Future adaptability/flexibility	3	197

The results, in Table 4.1, indicate that both “fit with functional requirements” and “project capital cost” score considerably higher than other criteria when choosing between design options.

Table 4.2 summarises the results concerning how much consideration clients gave to various criteria when choosing design options on a six point scale from 1 (high) to 6 (none). The results are presented as a combined score (where 1=high and scores 6; and 6=sixth order priority and scores 1). The results indicate that “overall quality” scores the highest but also that “health and safety considerations” scored relatively highly when choosing design options.

**Table 4.2** Consideration given to various criteria by clients when choosing design options

	<i>Rank</i>	<i>Combined score</i>
Overall quality	1	1375
Health and safety	2	1343
Maintainability	3	1340
Life span and durability	4	1299
Environmental impact	5	1239
Project whole life costs	6	1147

In terms of sub-sample differences, “health and safety considerations” when choosing design options were ranked more highly by Central government clients compared to others (Table A6). However, the results in Table A7 indicate that on smaller projects it appears that a relatively

high level of consideration is given to health and safety when choosing design options when compared to larger projects.

Clients were asked to rate the extent to which they believed their organisation considered health and safety risks, at various project stages, during the development of the preferred design option on a five point scale, from 1 (fully) to 5 (not at all). The analysis is concerned with comparing responses for each variable to see whether there are any differences in the respondent's preferences. Given that the data collected is ordinal and the samples are related the Friedman test is used to compare the distribution of the variables.

**Table 4.3** Extent client considered health and safety risks that might arise during various project stages (Friedman Test)

	<i>Mean Rank</i>	<i>Rank</i>
During construction	2.46	1
During use	2.75	2
At commissioning/putting into use/occupation	2.80	3
During ongoing repair and maintenance	3.05	4
During de-commissioning/demolition	3.94	5

The results of the analysis can be seen in Table 4.3. The significant Chi-square of the Friedman test (N=250; Chi-sq=248.3; df=4; Sig:0.000) suggests that there is a significant difference between the mean ranks. The results suggest that clients believed that their organisation considered health and safety risks during the construction stage of projects more fully than at other stages of project development.

## 4.2 Procurement method

The research was concerned with identifying the method of procurement adopted for the projects in question. Table 4.4 displays the results and despite guidance to the contrary the majority of clients procured construction projects using traditional procurement methods. Indeed, this was the case even for some very large projects.

**Table 4.4** Procurement methods used for the projects in question (client survey)

	<i>Frequency</i>	<i>Percent</i>
Design and build	76	25
Prime contracting	20	6
Traditional	173	56
PFI/PPP	3	1
Other (framework)	37	12

Furthermore, the results in Table 4.5 suggest that for the majority of clients the method of procurement was pre-determined by their parent body, as a matter of policy.

**Table 4.5** Was the method of procurement pre-determined by the client’s parent body, as a matter of policy?

	<i>Frequency</i>	<i>Percent</i>
Yes	207	67
No	96	31
Don't know	7	2

Table 4.6 displays the results from the contractors’ survey concerning the method of procurement adopted for the projects in question. Again the results indicate that the greatest proportion of projects were procured using traditional methods followed by design and build. This finding tends to support the evidence from the client survey and at the very least suggests that a review of public procurement methods may be useful to ascertain why public clients are using traditional methods, in preference to others, despite guidance to the contrary.

**Table 4.6** Procurement methods used for the projects in question (contractor survey)

	<i>Frequency</i>	<i>Percent</i>
Design & build	83	24
Prime contracting	9	3
Traditional	201	59
PFI/PPP	10	3
Other	32	9
Don't know	8	2

In terms of sub-sample differences between client types, displayed in Table A8, a higher proportion of Local Authority and Central Government respondents report that the procurement route for the project in question was pre-determined by their parent body, as a matter of policy. Furthermore, the results in Table A9 indicate that respondents from Local Authority and Non-departmental bodies report a higher proportion of traditional procurement routes used on the projects in question.

Regarding sub-sample differences in terms of project size, in Table A10, a considerably higher proportion of smaller projects had the method of procurement pre-determined by the respondent’s parent body. In addition, a considerably higher proportion of smaller projects were procured via traditional methods when compared to larger projects (Table A11).

Regarding differences in terms of client experience, the research findings indicate that a considerably higher proportion of repeat clients report that the method of procuring the project in question was pre-determined by their parent body (Table A12).

Finally, projects in Scotland had a considerably higher proportion of traditional procurement methods when compared to projects in England and Wales (Table A13).

Clients were asked to rank the top three criteria used to select the procurement method used for the project in question. The results are presented as a combined score (where 1=top priority and scores 3; and 3 = third order priority and scores 1). The results, in Table 4.7, indicate that “need for cost certainty” was the highest ranked criteria. The requirement to “manage health and safety risks” scored relatively low when selecting the procurement route despite scoring

relatively highly when selecting design options, suggesting that health and safety receives less consideration when selecting procurement routes.

**Table 4.7** Rank of criteria used by the client to select the procurement method for the projects in question

	<i>Rank</i>	<i>Combined score</i>
Need for cost certainty	1	316
Project size and complexity	2	268
Need for quality	3	227
Need for time certainty	4	152
Availability of project funding	5	121
Need to allocate contract risk	6	110
Always done this way	7	60
Other	8	45
Requirement to manage health and safety risks	9	44
Availability of key personnel	10	27

### 4.3 Pre-qualification of suppliers

Table 4.8 displays the results concerning whether clients used a recognised pre-qualification scheme, or approved list of suppliers, to help identify potential contractors for the projects in question. The results indicate that the majority of clients did use a recognised scheme, ConstructionLine and the Contractors Health and Safety Assessment Scheme (CHAS) were the most frequently cited schemes used.

**Table 4.8** Did the client use a pre-qualification scheme, or approved list of suppliers for the project in question?

	<i>Frequency</i>	<i>Percent</i>
Yes	212	67
No	91	29
Don't know	13	4

To obtain a balanced view contractors were asked if their organisation was either pre-qualified, or on an approved suppliers list, for the projects in question, Table 4.9 summarises the results.

**Table 4.9** Was the contractor either pre-qualified, or on an approved list of suppliers for the project in question?

	<i>Frequency</i>	<i>Percent</i>
Yes	227	66
No	67	19
Don't know	52	15

The results indicate that two-thirds of the contractors were pre-qualified, or on an approved suppliers list. Again, ConstructionLine and the Contractors Health and Safety Assessment Scheme (CHAS) were the most frequently cited schemes. These findings tend to suggest that

public clients are making use of pre-qualification schemes, or approved suppliers lists, to help identify potential contractors.

However, in terms of any differences between client types, data in Table A14 indicates that Non-departmental bodies and Housing Association respondents report using a lower proportion of pre-qualified suppliers.

Furthermore regarding differences between size of project, data in Table A15 suggests that for three-quarters of smaller projects a pre-qualification scheme was used to identify potential contractors compared to approximately two-thirds for larger projects.

#### 4.4 Integrated delivery teams

A summary of the clients' views regarding the extent to which the project team delivering the projects was integrated is provided in Table 4.10. The majority of clients believe that an integrated project team was used to deliver the project in question. This is a surprising finding given that the majority of the projects in question were procured using traditional procurement methods.

**Table 4.10** Clients views on the extent to which the team delivering the project were integrated

	<i>Frequency</i>	<i>Percent</i>
Integrated supply team	32	10
Integrated project team	195	61
Not integrated	80	25
Don't know	11	4

Table 4.11 provides a summary of the contractors views regarding the extent to which the project team delivering the project was integrated. The majority of contractors believe that an integrated project team was used to deliver the project in question. Again, this is a surprising finding given that the majority of the projects in question were procured using traditional procurement methods, and suggests that knowledge regarding integration of project teams may need refreshing for both the client and the contractor.

**Table 4.11** Contractors views on the extent to which the team delivering the project were integrated

	<i>Frequency</i>	<i>Percent</i>
Integrated supply team	48	14
Integrated project team	198	58
Not integrated	77	23
Don't know	16	5

We noted some differences between sub-samples. In terms of client experience, a higher proportion of repeat clients perceive that the team delivering the project in question was not integrated (Table A16). This finding suggests that occasional clients may need more information regarding integrated project teams.

#### 4.5 Information required and feedback

Details of any information contractors had to provide to the client to demonstrate their organisations health and safety record is provided in Table 4.12. The results suggest that the vast majority of contractors provided some information concerning their health and safety record to public clients during the selection process.

**Table 4.12** Did contractors provide information to the client to demonstrate their health and safety performance during the selection process

	<i>Frequency</i>	<i>Percent</i>
Yes	309	89
No	18	5
Don't know	20	6

**Table 4.13** Information provided by contractors to the client to demonstrate their health and safety performance

	<i>Frequency</i>
Organisations health and safety policy	305
Organisations health and safety training procedures and records	286
Summary of accident and ill health records	283
Details of improvement/prohibition notices	264
Details of any legal proceedings	235
Details of number of staff directly employed	278

In terms of the information provided, Table 4.13 summarises the results. The contractors health and safety policy was the most frequently provided information. The results in Table 4.14 indicate that this was mostly provided at pre-qualification or invitation to tender stages of project procurement.

**Table 4.14** Stage of the procurement process that information was provided

<i>Percent</i>	<i>Expression of interest</i>	<i>Pre-qualification</i>	<i>Invitation to tender</i>	<i>Invitation to negotiate</i>	<i>Final bid submission</i>	<i>Other</i>
Organisations health and safety policy	6	58	27	2	4	3
Organisations health and safety training procedures and records	6	57	27	3	5	2
Summary of accident and ill health records	4	61	27	2	4	2
Details of improvement/prohibition notices	5	60	27	2	3	2
Details of any legal proceedings	5	60	27	2	3	3
Details of number of staff directly employed	5	60	26	3	4	2

Contractors were asked how important they thought their organisations health and safety record was in their selection for the project in question. The results in Table 4.15 indicate that the health and safety record is generally viewed as being “important” by contractors during the selection process.

**Table 4.15** Perceived importance of contractor’s health and safety record in their selection for the project in question

	<i>Percent</i>
Very important	32
Quite important	34
Moderately important	26
Slightly important	6
Not important	2

Table 4.16 provides a summary of the results concerning whether the public client provided feedback to the contractor on the evaluation of their tender. The results indicate that, according to contractors, a relatively high proportion of clients didn’t provide feedback. This is something that could easily be improved without a great deal of effort. Indeed, all public clients should be encouraged to provide feedback of their tender evaluations to any contractors involved in bidding for public works.

**Table 4.16** Did the client provide feedback to the contractor on their tender evaluation

	<i>Frequency</i>	<i>Percent</i>
Yes	100	30
No	159	48
Don't know	75	22



# MONITORING OF PROJECT HEALTH AND SAFETY PERFORMANCE

## 5 MONITORING OF PROJECT HEALTH AND SAFETY PERFORMANCE

The following section provides summary details of the results of the research regarding the monitoring of project health and safety performance. First we examine whether public clients set health and safety performance criteria on the projects in question. Next we look at the collection and reporting of any data concerning health and safety performance. Then we summarise data concerning the health and safety awareness and performance of the public client. We then look at whether the client took any action, if required, to improve health and safety performance on the projects in question. Finally, in this section, we examine the extent client risk registers were used and post-completion reviews were undertaken by the public client.

### 5.1 Setting health and safety performance criteria

Table 5.1 displays the results concerning whether the client set health and safety performance criteria at various stages of project development. The results indicate that health and safety performance criteria appear to be set more frequently during the “selecting a contractor” and “construction on-site” stages compared to other stages of project development. This suggests a “traditional” view of the construction process, perhaps confirmed by the method of procurement used. Considering the projects entire life cycle, from design through occupation to maintenance and repair, would enable a more holistic view to be taken of health and safety.

**Table 5.1** Did the client set health and safety performance criteria at various stages of project development

	<i>Yes (%)</i>	<i>No (%)</i>	<i>Don't know (%)</i>	<i>N</i>
Development of the design option	61	30	9	302
Selecting a contractor	75	19	6	304
Construction on site	74	19	7	304
Ongoing maintenance once built	51	32	17	278
Other	60	27	13	15

Contractors were asked if the public client set criteria or targets for health and safety performance during the build/construction phase of the project in question. The results in Table 5.2 indicate that, according to contractors, the majority of clients did not set criteria or targets for health and safety performance during the construction phase.

**Table 5.2** Contractors’ views on whether the client set health and safety performance criteria during build/construction phase of the projects in question

	<i>Frequency</i>	<i>Percent</i>
Yes	88	26
No	194	56
Don't know	63	18

However, we noted some differences between sub-samples in terms of project size. Specifically, higher proportions of clients set health and safety performance criteria on larger projects at all stages of project development when compared to smaller projects (Table A17).

## 5.2 Collecting and reporting data on health and safety performance

Table 5.3 provides a summary of the results concerning whether the client collected data on health and safety performance during the build/construction phase of the project in question. The results indicate that while the majority of respondents collected data on health and safety performance, almost one third didn't. Similarly, the results in Table 5.4 indicate that while two-thirds of respondents used Key Performance Indicators (KPIs) to monitor contractor health and safety performance almost one-third didn't.

**Table 5.3** Did the client collect data on health and safety performance during the build/construction phase of the project in question?

	<i>Frequency</i>	<i>Percent</i>
Yes	200	65
No	98	32
Don't know	11	3

**Table 5.4** Did the client use KPIs to monitor contractor health and safety performance?

	<i>Frequency</i>	<i>Percent</i>
Yes	148	64
No	67	29
Don't know	17	7

In terms of the type of data collected to assess health and safety performance, Table 5.5 provides a summary of the results. The results suggest that the “number of reportable accidents” statistics were the most frequently collected data, with virtually all respondents collecting this type of data. In terms of reporting the data collected, the results in Table 5.6 indicate that for most respondents the data was reported to their parent body. Interestingly, a surprisingly low proportion of clients reported any data collected to the Office of Government Commerce (OGC) despite a requirement to do so (OGC, 2004).

**Table 5.5** Data collected by the client to assess health and safety performance

	<i>Yes (%)</i>	<i>No (%)</i>	<i>Don't know (%)</i>	<i>N</i>
Number of unsafe behaviours	49	36	15	152
Number of reportable accidents	95	1	4	188
Number of days worked	68	20	12	131
Number of near misses	59	28	13	140
Number of days absent	43	39	18	135
Other	100	0	0	9

**Table 5.6** To whom was the health and safety data collected by the client reported to?

	<i>Parent body (%)</i>	<i>OGC (%)</i>	<i>Other (%)</i>	<i>Don't know (%)</i>	<i>N</i>
Number of unsafe behaviours	70	1	10	18	77
Number of reportable accidents	67	3	23	7	159
Number of days worked	59	2	22	17	87
Number of near misses	65	1	19	15	81
Number of days absent	62	2	18	18	60
Other	78	22	0	0	9

The majority of clients reported any data collected on a monthly basis (Table 5.7), and the highest proportion of clients reported that their organisations reviewed any data collected on a monthly basis (Table 5.8), although a surprising proportion of clients were unaware of how often health and safety data was reviewed by their organisation.

**Table 5.7** How often was the health and safety data reported?

	<i>Weekly (%)</i>	<i>Monthly (%)</i>	<i>Quarterly (%)</i>	<i>Annually (%)</i>	<i>Don't know (%)</i>	<i>Other (%)</i>	<i>N</i>
Number of unsafe behaviours	6	62	11	1	12	8	78
Number of reportable accidents	5	72	5	3	6	9	171
Number of days worked	9	70	5	1	10	5	92
Number of near misses	2	70	5	4	11	8	83
Number of days absent	3	63	6	3	16	9	64
Other	0	67	11	11	0	11	9

**Table 5.8** How often was the health and safety data reviewed by the client's organisation?

	<i>Weekly (%)</i>	<i>Monthly (%)</i>	<i>Quarterly (%)</i>	<i>Annually (%)</i>	<i>Don't know (%)</i>	<i>Other (%)</i>	<i>N</i>
Number of unsafe behaviours	5	45	19	5	23	3	75
Number of reportable accidents	2	50	12	13	18	5	157
Number of days worked	2	49	10	11	25	2	83
Number of near misses	1	57	8	7	24	3	75
Number of days absent	0	52	9	14	22	3	58
Other	0	60	10	10	20	0	10

Contractors were asked what data was collected by the public client to assess health and safety performance on the project in question. The results in Table 5.9 indicate that the “number of reportable accidents” was the most frequently reported data, followed by the “number of days worked”. The results in Table 5.10 indicate that this data was generally collected on a monthly basis. Many contractors reported that they were involved in collecting this data for the public client.

**Table 5.9** Contractors' views concerning what data was collected by the client to assess health and safety performance

	<i>Yes (%)</i>	<i>No (%)</i>	<i>Don't know (%)</i>	<i>N</i>
Number of unsafe behaviours	53	41	6	80
Number of reportable accidents	92	5	3	88
Number of days worked	72	24	5	81
Number of near misses	63	30	6	79
Number of days absent	50	41	9	78

**Table 5.10** Contractors' views concerning how often the data was collected?

	<i>Weekly (%)</i>	<i>Monthly (%)</i>	<i>Quarterly (%)</i>	<i>Annually (%)</i>	<i>Don't know (%)</i>	<i>N</i>
Number of unsafe behaviours	14	70	9	2	5	44
Number of reportable accidents	10	70	11	5	3	79
Number of days worked	12	71	9	3	3	58
Number of near misses	12	74	4	6	2	49
Number of days absent	13	69	10	5	3	39

However, we noted some differences between sub-samples. In terms of client types, Local Authority clients were found to collect a relatively low proportion of health and safety performance data when compared to other client types (Table A18). Furthermore, data in Table A19 indicates that compared to Housing Association respondents, Central government, Local Authority and Non-departmental bodies use KPIs less frequently to monitor contractor health and safety performance.

In terms of differences regarding project size, data in Table A20 suggests that a relatively small proportion of respondents collected data on health and safety performance during the construction phase of small projects. In addition, a relatively small proportion of respondents use KPIs to monitor contractor health and safety performance on smaller projects (Table A21).

Finally, and perhaps most surprisingly, data in Table A22 indicates that a higher proportion of occasional clients, compared to repeat clients, collected data on health and safety performance during the construction phase of the projects in question. This finding suggests that perhaps in-experienced clients take health and safety performance as seriously as experienced clients.

### 5.3 Health and safety performance and awareness

Table 5.11 provides a summary of the clients rating of the health and safety performance of the contractors and their staff working on the projects in question. The majority of respondents rated the health and safety performance of contractors as good (“very good” + “good”), only a relatively small proportion rated the performance of contractors as either “moderate” or “poor”.

**Table 5.11** Clients’ rating of the health and safety performance of contractors

	<i>Frequency</i>	<i>Percent</i>
Very good	159	51
Good	133	42
Moderate	19	6
Poor	1	0.3

Similarly, contractors were asked to rate, on a four point scale, from very good to poor, the health and safety awareness of the client and their staff working on the project in question. The results in Table 5.12 suggest that although the largest proportion of contractors rated the health and safety awareness of the client as “good”, a relatively large proportion considers their awareness to be “moderate”.

**Table 5.12** Contractors’ rating of the health and safety awareness of the client

	<i>Frequency</i>	<i>Percent</i>
Very good	100	29
Good	170	49
Moderate	74	21
Poor	1	0.3

### 5.4 Taking action as necessary to improve health and safety performance

Tables 5.13 and 5.14 provides the results from the questions concerning whether the client, or the client’s organisation, needed to take action to improve the health and safety performance on the project in question. In summary, while the majority of clients had to take no action, a considerable proportion had to take some action. Regarding the frequency of any action, the majority of clients had to take action less often than once a month.

**Table 5.13** Did the client have to take action to improve health and safety performance on the project in question?

	<i>Frequency</i>	<i>Percent</i>
Yes	90	29
No	222	71

**Table 5.14** Frequency of any action the client had to undertake to improve health and safety performance

	<i>Frequency</i>	<i>Percent</i>
Daily	5	5
Weekly	5	5
Monthly	13	13
Less than once a month	75	77

However, we noted some sub-sample differences between client types. Specifically, central government clients had to take action to improve health and safety performance less often than other client types (Table A23).

Contractors were asked if there were any health and safety issues that had to be referred back to the client to resolve, or which could have been avoided by the client. The results, in Table 5.15, indicate that for the vast majority of projects there were no health and safety issues that needed to be referred back to the client.

**Table 5.15** Contractors' views regarding whether any health and safety issues had to be referred back to the client

	<i>Frequency</i>	<i>Percent</i>
Yes	57	17
No	265	78
Don't know	16	5

## 5.5 Risk registers

The research was concerned with ascertaining the extent that client risk registers were used on projects. The results in Table 5.16 indicate that a slightly higher proportion of clients didn't use a client risk register for the project in question. However, of those clients who did use a client risk register the majority included health and safety risks associated with later use of the project (Table 5.17).

**Table 5.16** For the projects in question was there a client risk register?

	<i>Frequency</i>	<i>Percent</i>
Yes	134	42
No	146	46
Don't know	36	11

**Table 5.17** If a client risk register was used did it include health and safety risks associated with building and later use of the project?

	<i>Frequency</i>	<i>Percent</i>
Yes	90	66
No	37	27
Don't know	10	7

The following results are concerned with contractors' views regarding whether there was a client risk register for the projects in question. The results in Table 5.18 indicate that for a relatively large proportion of the projects in question there was no client risk register in evidence. However, where a client risk register was used the majority included health and safety risks associated with building and later use of the project (Table 5.19).

**Table 5.18** Contractors' views concerning the use of client risk registers

	<i>Frequency</i>	<i>Percent</i>
Yes	155	45
No	123	35
Don't know	69	20

**Table 5.19** Contractors' views regarding if the client risk register included health and safety risks associated with building and later use of the project?

	<i>Frequency</i>	<i>Percent</i>
Yes	126	79
No	18	11
Don't know	15	9

However, we noted some differences between sub-samples, in terms of client type, project size and client experience. Clients from central government departments and Non-departmental bodies reported the highest proportion of client risk register use (Table A24). However, a lower proportion of central government client risk registers included health and safety risks associated with building and later use of the project (Table A25).

Regarding project size, a relatively small proportion of clients reported that a client risk register was used on smaller projects (Table A26).

In terms of client experience, perhaps surprisingly, for a higher proportion of occasional clients the client risk register included health and safety risks associated with building and later use of the project (Table A27).

## 5.6 Post-completion reviews

Table 5.20 provides a summary of the results concerning whether a post-completion review was undertaken by the client for the project in question. The results indicate that a slightly higher proportion of clients did undertake a post-completion review of projects that were complete; however a considerable proportion didn't undertake a review. Although, if a review was

undertaken the majority of them included a review of the contractors' health and safety performance (Table 5.21).

**Table 5.20** Was a post completion review undertaken by the client for the project in question?

	<i>Frequency</i>	<i>Percent</i>
Yes	77	46
No	75	45
Don't know	14	8

**Table 5.21** If a post completion review was undertaken did it cover the principal contractors health and safety performance?

	<i>Frequency</i>	<i>Percent</i>
Yes	51	65
No	22	28
Don't know	5	6

Table 5.22 presents the results concerning contractors' views regarding whether a post-completion review was undertaken for the project in question. The results indicate that for a relatively large proportion of projects, that were complete, there was no post-completion review undertaken by the client. However, if a review was undertaken the majority of contractors were made aware of the reviews findings (Table 5.23).

**Table 5.22** Contractors' views regarding whether a post-completion review was undertaken for the project in question

	<i>Frequency</i>	<i>Percent</i>
Yes	70	30
No	65	28
Don't know	97	42

**Table 5.23** Contractors' views regarding whether they were made aware of the post completion reviews findings?

	<i>Frequency</i>	<i>Percent</i>
Yes	47	68
No	13	19
Don't know	9	13

However, we noted some differences between sub-samples in terms of client types and project size. Specifically, a higher proportion of post-completion reviews were undertaken by central government clients (Table A28). Although a lower proportion of these, when compared to other bodies, included a review of the principal contractors health and safety performance (Table A29).

In terms of project size the findings indicate that, irrespective of project size a surprisingly low proportion of clients reported that a post-completion review had been undertaken on projects that were complete (Table A30).

Post completion reviews by public clients should be undertaken for every project, regardless of size, as a matter of course to enable any issues to be fed back to both clients and contractors and allow continuous improvement in the construction process.

Finally, contractors were asked if, in their opinion, more could have been done by the public client to improve health and safety standards on the projects in question. The results, in Table 5.24, indicate that the majority of respondents thought there was no more that could have been done to improve health and safety standards.

**Table 5.24** Contractor's opinion of whether more could have been done by the public client to improve health and safety standards on the project in question

	<i>Frequency</i>	<i>Percent</i>
Yes	82	24
No	232	68
Don't know	28	8



# CONCLUSIONS AND RECOMMENDATIONS

## 6 CONCLUSIONS AND RECOMMENDATIONS

Chapter one stated that the aim of the research was to provide an evidence-based assessment of how well the public sector in England, Wales and Scotland meets its health and safety obligations in the procurement of construction. The following section presents a summary of the research and draws conclusions from the findings presented in the earlier chapters.

### 6.1 Summary and main findings

The main findings of the research indicate that there are areas where the public client performed relatively well in terms of discharging their health and safety obligations on the projects in question, more specifically:

- The vast majority of clients required some form of health and safety information to be provided by contractors during the procurement process
- The majority of contractors used were pre-qualified
- Nearly all projects had a planning supervisor appointed
- Public clients health and safety awareness is generally rated as good by contractors
- Health and safety considerations scored quite highly when choosing design options
- Clients considered health and safety risks during the construction stage of projects

However, the research findings suggest that generally, public clients exhibited more confidence in terms of their responsibilities as a client than they did with their responsibilities for health and safety risk management. In particular, clients appeared to be most confident appointing competent teams and least confident monitoring project progress, outcomes and performance.

The research highlighted some particular shortcomings of the public client during various stages of project development. During the procurement stage of the projects in question the findings of the research indicate that generally public clients:

- Used traditional approaches to construction procurement despite guidance to the contrary and their undoubted adversarial nature
- Appointed contractors too late in the procurement process to have much influence on design decisions that may have impacted health and safety
- The method of procurement used was generally pre-determined by the clients parent body
- The requirement to manage health and safety risks scored relatively low when selecting the procurement method
- Clients didn't provide feedback to contractors of their tender evaluation

In terms of monitoring health and safety performance, the findings suggest that:

- Health and safety performance criteria were set more frequently during the selection of a contractor and construction on site stages compared to other stages of project development (in other words, a traditional construction approach rather than a project life-cycle approach to health and safety)
- A sizeable proportion of public clients didn't collect any data on health and safety performance during the build/construction phase of the projects in question
- The use of client risk registers is not widespread
- A considerable proportion of public clients didn't undertake a post-completion review

## 6.2 Conclusions

The conclusions, drawn from the evidence of the research, suggest at the broadest level that while some public sector clients perform reasonably well in terms of meeting their health and safety obligations during the procurement of construction, there is certainly more that could be done.

More specifically, public clients could do more during the procurement of construction, to:

- Provide feedback to all contractors on their tender evaluation
- Consider procurement routes other than the more traditional approaches
- Appoint contractors earlier in the procurement process to allow them greater influence on design decisions that may impact health and safety, this is likely to be a function of the procurement method used

.....and more during the monitoring of project health and safety performance, to:

- Set criteria or targets for health and safety performance during the construction phase of all projects
- Undertake post-completion reviews of all projects and feed the results back to the contractors to allow continuous improvement in the construction process
- Produce a client risk register (this is a register of all risks on a project, and their mitigating actions) for every project and share this with the integrated project team

In terms of recommendations going forward, the evidence suggests that more needs to be done to embed current health and safety guidance across the public sector client. While the research findings appear to indicate that the majority of public clients surveyed generally followed the guidelines set out in the Construction (Design and Management) Regulations 1994. There is a sense, from the results, that ‘best practice’ is not as widely embedded as it perhaps could be. Given the requirement that, “all clients are to follow OGC’s Achieving Excellence in Construction Procurement Guide 10, Health and Safety” (OGC Common Minimum Standards) it appears that further awareness raising may be required among public sector clients to ensure increased take-up of best practice.

Indeed, in terms of the requirement to report health and safety performance data directly to OGC, the research findings indicate that while the public client may well collect this type of data it does not appear to be passed on to OGC for whatever reason. This suggests that perhaps a more pro-active approach is required between OGC and project sponsors to ensure this data is reported in future to allow benchmarking of health and safety performance across government projects.

Furthermore, the focus going forward should be on increasing the confidence of public clients in terms of developing their responsibilities for monitoring project progress, outcomes and performance. This is likely to be most effectively delivered through specific training programmes.

## 6.3 Limitations of the research

The research is deficient in some respects, suggesting the need for further research. Coverage from projects in England far exceeds that from both Scotland and Wales and while it may be possible to generalise about results from England, the extent to which the findings for Scotland and Wales can be generalised is in some doubt.

Furthermore, studies such as this would benefit from a longitudinal approach allowing for any changes to be studied over time. This may be particularly salient in this instance given the proposed introduction of the new CDM regulations in April 2007.

In addition, a further review of public procurement methods may be useful to ascertain why public clients are using traditional methods, in preference to others, despite guidance to the contrary.



## REFERENCES

### 7 REFERENCES

CDM (1994) *Construction (Design and Management) Regulations*, HMSO

Constructing Excellence (2006) *Common Minimum Standards: For the procurement of works in the built environment by Local Authorities in England*, Local Government Task Force

OGC (2004) *Achieving Excellence in Construction, Procurement Guide 10 – Health and Safety*, Office of Government Commerce

OGC (2005) *Common Minimum Standards: For the procurement of built environments in the public sector*, Office of Government Commerce

## ANNEX A SUB-SAMPLE DIFFERENCES

**Table A1** Planning supervisor appointment, by type of client

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
External appointment	44	91	86	93
In-house appointment	56	7	14	7
Don't know	0	2	0	0

**Table A2** Planning supervisor appointment, by size of project

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
External appointment	41	78	72
In-house appointment	59	22	26
Don't know	0	0	2

**Table A3** Confidence that the respondent understood their responsibilities for health and safety risk management, by client experience (Friedman Test)

<i>Rank</i>	<i>Occasional</i>	<i>Repeat</i>
Appointing a competent project team	1	1
Managing health and safety risks	2=	2=
Taking action as necessary to ensure h&s risks are properly controlled	4	4
Setting h&s performance standards for the contractor	5	2=
Monitoring contractors health and safety performance	2=	5

**Table A4** Confidence that the respondent understood their responsibilities for health and safety risk management, by project size (Friedman Test)

<i>Rank</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Appointing a competent project team	1	1	1
Managing health and safety risks	3	2=	3
Taking action as necessary to ensure h&s risks are properly controlled	4	4	4
Setting h&s performance standards for the contractor	2	5	5
Monitoring contractors health and safety performance	5	2=	2

**Table A5** Confidence that the respondent understood their responsibilities for health and safety risk management, by country (Friedman Test)

<i>Rank</i>	<i>England</i>	<i>Scotland</i>	<i>Wales</i>
Appointing a competent project team	1	1	1
Managing health and safety risks	2	5	5
Taking action as necessary to ensure h&s risks are properly controlled	3	2	3=
Setting h&s performance standards for the contractor	4	3	2
Monitoring contractors health and safety performance	5	4	3=

**Table A6** Consideration given to various criteria when choosing design options, by client type

<i>Rank</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Overall quality	1	1	2	2
Maintainability	2	3	1	3
Health and safety	3	2	3	1
Life span and durability	4	5	4	4
Environmental impact	5	4	5	5
Project whole life costs	6	6	6	6

**Table A7** Consideration given to various criteria when choosing design options, by project size

<i>Rank</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Overall quality	2	1	2
Maintainability	3	3	1
Health and safety	1	2	3
Life span and durability	4	4	4
Environmental impact	5	5	5
Project whole life costs	6	6	6

**Table A8** Was the method of procurement pre-determined by the clients parent body, as a matter of policy, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	70	55	63	71
No	27	45	35	26
Don't know	3	0	2	3

**Table A9** Procurement methods used for the project in question, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Design and build	12	35	60	13
Prime contracting	6	0	8	13
Traditional	68	63	21	47
PFI/PPP	1	0	0	3
Other (framework)	13	2	11	23

**Table A10** Was the method of procurement pre-determined by the clients parent body, as a matter of policy, by project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Yes	80	59	59
No	17	39	41
Don't know	3	2	0

**Table A11** Procurement methods used for the project in question, by project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Design and build	9	36	23
Prime contracting	11	4	4
Traditional	73	47	43
PFI/PPP	0	0	7
Other (framework)	7	13	23

**Table A12** Was the method of procurement pre-determined by the clients parent body, as a matter of policy, by client experience

<i>Percent</i>	<i>Occasional</i>	<i>Repeat</i>
Yes	53	71
No	39	28
Don't know	8	1

**Table A13** Procurement methods used for the project in question, by country

<i>Percent</i>	<i>England</i>	<i>Scotland</i>	<i>Wales</i>
Design and build	26	16	28
Prime contracting	8	2	0
Traditional	53	77	50
PFI/PPP	1	0	0
Other (framework)	12	5	22

**Table A14** Did the client use a pre-qualification scheme, or approved list of suppliers for the project in question, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	77	48	52	73
No	20	45	43	23
Don't know	3	7	5	3

**Table A15** Did the client use a pre-qualification scheme, or approved list of suppliers for the project in question, by project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Yes	74	63	60
No	23	33	33
Don't know	3	4	7

**Table A16** Clients views on the extent to which the team delivering the project were integrated, by client experience

<i>Percent</i>	<i>Occasional</i>	<i>Repeat</i>
Integrated supply team	9	11
Integrated project team	71	58
Not integrated	19	27
Don't know	1	4

**Table A17** Did the client set health and safety performance criteria at various stages of project development, by project size

<i>Percent Yes</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Development of the design option	58	59	76
Selecting a contractor	66	78	86
Construction on site	67	77	85
Ongoing maintenance once built	41	57	66

**Table A18** Did the client collect data on health and safety performance during the build/construction phase of the project in question, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	56	77	80	67
No	38	23	20	29
Don't know	6	0	0	4

**Table A19** Did the client use KPIs to monitor contractor health and safety performance, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	59	58	89	57
No	30	39	11	33
Don't know	11	3	0	10

**Table A20** Did the client collect data on health and safety performance during the build/construction phase of the project in question, by project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Yes	47	74	80
No	47	24	15
Don't know	6	1	5

**Table A21** Did the client use KPIs to monitor contractor health and safety performance, by project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Yes	56	64	83
No	32	31	14
Don't know	12	5	3

**Table A22** Did the client collect data on health and safety performance during the build/construction phase of the project in question, by client experience

<i>Percent</i>	<i>Occasional</i>	<i>Repeat</i>
Yes	73	62
No	24	34
Don't know	3	4

**Table A23** Did the client have to take action to improve health and safety performance on the project in question, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	31	45	22	7
No	69	55	78	94

**Table A24** For the projects in question was there a client risk register, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	40	58	31	59
No	51	37	46	31
Don't know	9	5	23	9

**Table A25** If a client risk register was used did it include health and safety risks associated with building and later use of the project, by type of client

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	72	72	74	32
No	18	28	21	59
Don't know	10	0	5	9

**Table A26** For the projects in question was there a client risk register, by project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Daily	5	5	0
Weekly	13	0	0
Monthly	16	9	13
Less than once a month	66	86	87

**Table A27** If a client risk register was used did it include health and safety risks associated with building and later use of the project, by client experience

<i>Percent</i>	<i>Occasional</i>	<i>Repeat</i>
Yes	75	62
No	19	30
Don't know	6	8

**Table A28** Was a post completion review undertaken by the client for the project in question, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	39	41	50	76
No	51	48	39	18
Don't know	10	11	11	6

**Table A29** If a post completion review was undertaken did it cover the principal contractors health and safety performance, by client type

<i>Percent</i>	<i>Local Authority</i>	<i>Non departmental body</i>	<i>Housing Association</i>	<i>Central govt dept</i>
Yes	56	83	90	67
No	35	17	5	25
Don't know	9	0	5	8

**Table A30** Was a post completion review undertaken by the client for the project in question, project size

<i>Percent</i>	<i>Small</i>	<i>Medium</i>	<i>Large</i>
Yes	44	44	46
No	52	42	37
Don't know	4	13	17

## **ANNEX B PUBLIC SECTOR CLIENT SURVEY**

# HEALTH AND SAFETY IN PUBLIC SECTOR CONSTRUCTION PROCUREMENT

## CONFIDENTIAL SURVEY

**Please return to: David Crosthwaite, Davis Langdon LLP, FREEPOST LON14305, London WC1V 6BR**

*Please answer the following questions, ensuring that the questionnaire is completed by the Contracts Manager who was/is involved in the project named overleaf.*

<b>Name</b>	.....
<b>Job title/position</b>	.....
<b>Organisation</b>	.....
<b>Telephone number</b>	.....
<b>E-mail</b>	.....
<b>What was your role on the project named overleaf</b>	.....

<b>1. Please provide an estimate of your organisation's annual turnover for 2005</b>	£.....
--	--------

<b>2. What proportion of your organisations annual turnover in 2005 was derived from public sector construction work?</b>	.....%
---	--------

**A: PROJECT DETAILS**

<b>3. Is this a new build or refurbishment project?</b>	
New build (Construction of new building, facility or infrastructure works)	<input type="checkbox"/>
Refurbishment (Refurbishment of existing building or facility)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

<b>4. Please provide a brief project description:</b>	.....
	.....
	.....

<b>5. What stage is the project at now?</b>	<i>Please tick only one box which best describes current stage</i>
Design	<input type="checkbox"/>
Pre-Contract	<input type="checkbox"/>
On site – construction / build phase	<input type="checkbox"/>
Complete – construction phase completed	<input type="checkbox"/>
Don't Know	<input type="checkbox"/>

<b>6. For projects that have passed the Contract Award stage...</b>	
What was the total agreed Contract Sum for the project £.....	
What are the contract start and finish dates	
Start Date	Finish Date
<input style="width: 80px;" type="text"/>	<input style="width: 80px;" type="text"/>

<b>7. What was your organisations role on this project?</b>	<i>Please tick one</i>
Principal contractor	<input type="checkbox"/>
Design & build contractor	<input type="checkbox"/>
Service provider (under PFI)	<input type="checkbox"/>
Sub-contractor	<input type="checkbox"/>
Other (please specify) .....	

<b>8. At what stage of the project procurement process was your organisation appointed?</b>	<i>Please tick one</i>
Outline specification	<input type="checkbox"/>
Investment decision	<input type="checkbox"/>
Outline design	<input type="checkbox"/>
Detailed design	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Other (please specify) .....	

**B: AWARENESS OF CLIENT RESPONSIBILITIES**

**9. How well do you think the public sector client understood their responsibilities on this project?**

	Fully	←-----→			Not at all
Selecting design options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appointing a competent team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communicating essential information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring progress and outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**10. More specifically, how well do you think the public sector client understood their responsibilities for health and safety risk management on this project?**

	Fully	←-----→			Not at all
Setting health and safety performance requirements to be adhered to by the contractor(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Managing health and safety risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appointing a competent project team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring contractor(s) health and safety performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking action as necessary to ensure health and safety risks are properly controlled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allocating sufficient time and resources to the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**C: PROCUREMENT OF CONSTRUCTION**

**11. What method of procurement was adopted for the project under review?** *Please tick one*

Design and build	<input type="checkbox"/>
Prime contracting	<input type="checkbox"/>
Traditional	<input type="checkbox"/>
PFI/PPP	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Other (please specify) .....	

**12a. Was your organisation either pre-qualified, or on an approved suppliers list for this project?**

	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**12b. If yes, please name the scheme/list** .....

**13a. In order for your organisation to be selected for this project, did you provide information to the client to demonstrate your organisations health and safety record?**

	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you answered no/don't know please go to Question 14*

**13b. If yes, what information was provided?** *Please tick all that apply*

<b>A</b>	Your organisation's health and safety policy	<input type="checkbox"/>
<b>B</b>	Details of your organisation's health and safety training procedures and records	<input type="checkbox"/>
<b>C</b>	Summary of accident and ill health records	<input type="checkbox"/>
<b>D</b>	Details of any improvement and/or prohibition notices in which your organisation has been involved and which concern health and safety	<input type="checkbox"/>
<b>E</b>	Details of any legal proceedings in which your organisation has been involved and which concern health and safety	<input type="checkbox"/>
<b>F</b>	Details of number of staff directly employed and numbers of trained competent staff	<input type="checkbox"/>
<b>G</b>	Other (please specify) .....	

**13c. At what stage in the procurement process was this information provided?**

	Expression of interest	Pre-qualification	Invitation to tender	Invitation to negotiate	Final bid submission	Other (please specify) .....
<b>A</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**14. In your opinion, how important do you think your organisation's health and safety record was in the selection of your organisation for this project?**

Very important ←                 → Not important

**15a. On this project, did the public client provide you with feedback on the evaluation of your tender?**

Yes      No      Don't know  
       

*If you answered no/don't know please go to Question 16*

**15b. If yes, please briefly describe the feedback provided (including the award criteria if identified)**

.....  
.....  
.....  
.....  
.....

**16. Please indicate your views on the extent to which the project team delivering this project is/was integrated:**

	<i>Please tick one</i>
Integrated supply team (an integrated supply team brings together all the supply chains responsible for delivering the project i.e. design services, construction services, specialist suppliers and facilities managers)	<input type="checkbox"/>
Integrated project team (an integrated project team is made up of the client's project team and the integrated supply team of consultants, constructors and specialist suppliers)	<input type="checkbox"/>
Not integrated (significant separation of appointments for design, construction and maintenance with little or no attempt to bring these together into a project team that will work in a collaborative way)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**D: MONITORING OF PROJECT HEALTH AND SAFETY PERFORMANCE**

**17a. Has the public sector client set criteria or targets for health and safety performance during the build/construction phase of this project?**

Yes      No      Don't know  
       

*If you answered no/don't know please go to Question 18*

**17b. If yes, what data is/was collected to assess health and safety performance on this project?**

	Yes	No	Don't know
<b>A</b> Number of unsafe behaviours observed using a formal audit tool/measure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b> Number of reportable accidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b> Number of days worked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b> Number of near misses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b> Number of days absent due to work related ill health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b> Other (please specify) .....			

**17c. For each of the above, how often is/was this data collected?**

	Weekly	Monthly	Quarterly	Annually	Don't know	Other (please state) .....
<b>A</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**17d. What is/was your organisation's role in collecting this data? (Please give brief details)**

.....  
.....  
.....  
.....  
.....

<b>18a. How would you rate the health and safety awareness of the client(s) and their staff working on this project?</b>	<i>Please tick one</i>		
Very good		<input type="checkbox"/>	
Good		<input type="checkbox"/>	
Moderate		<input type="checkbox"/>	
Poor		<input type="checkbox"/>	
<b>18b. Were there any health and safety issues that had to be referred back to the client to resolve, or which could have been avoided by the client?</b>	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If you answered no/don't know please go to Question 19a</i>			
<b>18c. If yes, please give brief details</b>			
.....			
.....			
.....			
.....			
.....			
.....			

<b>19a. For this project is/was there a client risk register (this is a register of all risks on a project, including their mitigating actions)?</b>	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If you answered no/don't know please go to Question 20a</i>			
<b>19b. If yes, does/did the risk register include health and safety risks associated with building and later use of the project?</b>	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>20a. For this project, did the client undertake (or do they intend to undertake) a post-completion review?</b>	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If you answered no/don't know please go to Question 21a</i>			
<b>20b. If yes, was your organisation made aware of the review findings?</b>	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**E: GENERALLY**

<b>21a. In your opinion, is/was there more that could have been done by the public sector client to improve health and safety standards on this project?</b>	Yes	No	Don't know
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If you answered no/don't know please go to Question 22</i>			
<b>21b. If yes, please give brief details</b>			
.....			
.....			
.....			
.....			
.....			

<b>22. Please use the space below for any general comments/issues you may have regarding this construction project</b>
.....
.....
.....
.....
.....
.....
.....
.....
.....

*Thank you very much for your cooperation. Please return the completed survey in the envelope provided.*

**Please return to: David Crosthwaite, Davis Langdon LLP, FREEPOST LON14305, London WC1V 6BR**

## **ANNEX C PRIVATE SECTOR SUPPLIER SURVEY**

# HEALTH AND SAFETY IN PRIVATE SECTOR CONSTRUCTION PROCUREMENT

## CONFIDENTIAL SURVEY

**Please return to: David Crosthwaite, Davis Langdon LLP, FREEPOST LON14305, London WC1V 6BR**

*Please answer the following questions, ensuring that the questionnaire is completed by either the Senior Responsible Owner (SRO) or the Project Sponsor responsible for the project named overleaf.*

<b>Name</b>	.....
<b>Job title/position</b>	.....
<b>Organisation</b>	.....
<b>Parent Body</b>	.....
<b>Telephone number</b>	.....
<b>E-mail</b>	.....
<b>What was your role on the project named overleaf</b>	.....

### A: PROJECT DETAILS

<b>1. Is this a new build or refurbishment project?</b>	
New build (Construction of new building, facility or infrastructure works)	<input type="checkbox"/>
Refurbishment (Refurbishment of existing building or facility)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

<b>2. Please provide a brief project description:</b>	.....
	.....
	.....

<b>3. What stage is the project at now?</b>	<i>Please tick only one box which best describes current stage</i>
Design	<input type="checkbox"/>
Pre-Contract	<input type="checkbox"/>
On site – construction / build phase	<input type="checkbox"/>
Complete – construction phase completed	<input type="checkbox"/>
Don't Know	<input type="checkbox"/>

<b>4. For projects that have passed the Contract Award stage...</b>					
What was the total agreed Contract Sum for the project	£.....				
What are the contract start and finish dates	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">Start Date</td> <td style="width: 50%; text-align: center;">Finish Date</td> </tr> <tr> <td style="text-align: center;"><input style="width: 80%;" type="text"/></td> <td style="text-align: center;"><input style="width: 80%;" type="text"/></td> </tr> </table>	Start Date	Finish Date	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
Start Date	Finish Date				
<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>				

<b>5a. Has/was a planning supervisor appointed for the project?</b>	Yes	No	Don't Know
<i>If you answered no/don't know please go to Question 6a</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>5b. If yes, was this an external (from outside your organisation) or an in-house appointment?</b>	<i>Please tick one</i>
External appointment	<input type="checkbox"/>
In-house appointment	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

<b>5c. What qualifications did/does the planning supervisor have?</b>	<i>Please tick one</i>
Membership of Association for Project Safety (formerly Association of Planning Supervisors)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Other, please provide details	<input type="checkbox"/>
.....	

<b>6a. Have you or your organisation been involved in the procurement of any other significant construction projects or programmes in the last five years?</b>	Yes	No	Don't Know
<i>If you answered no/don't know please go to Question 7a</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>6b. If yes, please indicate the <u>number</u> of projects and their approximate values (contract sum) that you personally have been involved with?</b>					
≤£50K	<£50K ≤ £100K	>£100K ≤ £500K	>£500K ≤ £5m	>£5m ≤ £25m	>£25m
<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>

<b>6c. If yes, was this for the organisation you currently work for or some other organisation?</b>	
My current organisation	<input type="checkbox"/>
A different organisation	<input type="checkbox"/>



**11. During the development of the preferred design option for this project, to what extent do you believe your organisation considered health and safety risks that might arise in the following stages?**

	Fully	←————→			Not at all
During construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At commissioning/putting into use/occupation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During ongoing repair, maintenance (and subsequent replacement / refurbishment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During de-commissioning/demolition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**12. What changes, if any, were made during design development as a result of considering these health and safety risks? (Please provide brief details)**

.....

.....

.....

**13a. Was the method of procuring this project pre-determined by your parent body, as a matter of policy?**

Yes	No	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**13b. What method of procurement was adopted for the project under review? (Please tick one)**

Design and build (a contract where a single supplier is responsible for both design and construction)	<input type="checkbox"/>
Prime contracting (a contract generally involving a main supplier, the prime contractor, with a well established supply chain)	<input type="checkbox"/>
Traditional (designers and contractors are appointed separately for design and construction respectively, usually through competitive tender)	<input type="checkbox"/>
PFI/PPP (contractor appointed to design, build, finance, and maintain a facility. In some cases, the contractor will also assume responsibility for operating the facility and providing services)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>
.....	<input type="checkbox"/>

**14. Please rank the top three criteria you believe were used by your organisation to select the procurement method used for this project (where 1 = top priority)**

Project size and complexity	<input type="checkbox"/>
The need to allocate contract risk	<input type="checkbox"/>
The need for time certainty (certainty about delivery date/date of availability)	<input type="checkbox"/>
The need for cost certainty (certainty about outturn cost)	<input type="checkbox"/>
The need for quality	<input type="checkbox"/>
The availability of project funding	<input type="checkbox"/>
The availability of key personnel from your organisation or parent body to oversee the project	<input type="checkbox"/>
Requirements to manage Health and Safety risks	<input type="checkbox"/>
Always done this way	<input type="checkbox"/>
Other (provide brief details)	<input type="checkbox"/>
.....	

<b>15a. Did you use a recognised pre-qualification scheme, or approved list of suppliers, to help identify potential contractors for this project?</b>	<b>15b. If yes, please name the scheme/list used...</b>						
<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> <th>Don't know</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Yes	No	Don't know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....
Yes	No	Don't know					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

**16. Please indicate your views on the extent to which the project team delivering this project is/was integrated:**

	Please tick one
Integrated supply team (an integrated supply team brings together all the supply chains responsible for delivering the project i.e. design services, construction services, specialist suppliers and facilities managers)	<input type="checkbox"/>
Integrated project team (an integrated project team is made up of the client's project team and the integrated supply team of consultants, constructors and specialist suppliers)	<input type="checkbox"/>
Not integrated (significant separation of appointments for design, construction and maintenance with little or no attempt to bring these together into a project team that will work in a collaborative way)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

**D: MONITORING OF PROJECT HEALTH AND SAFETY PERFORMANCE**

<b>17. For this project, please indicate whether you or your organisation set health and safety performance criteria at each of the following stages:</b>				Yes	No	Don't know
	Development of the design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Selecting a contractor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Construction on-site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Ongoing maintenance once built	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Other (please provide details)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
.....						

<b>18a. Did/do you collect data on health and safety performance during the build/construction phase of this project?</b>				Yes	No	Don't know
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If you answered no/don't know please go to Question 19a*

<b>18b. Does your organisation use key performance indicators (KPIs) to monitor contractor health and safety performance? E.g. number of accidents, near misses, etc.</b>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--	--	--	--------------------------	--------------------------	--------------------------

<b>18c. If yes to 18a, what data is/was collected to assess health and safety performance on this project?</b>				<b>18d. To whom was the data collected in 18c reported to?</b>				
		Yes	No	Don't know	Parent body	Office of Government Commerce (OGC)	Other please specify	Don't know
<b>A</b>	Number of unsafe behaviours observed using a formal audit tool/measure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	..... <input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	Number of reportable accidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Number of days worked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Number of near misses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Number of days absent due to work related ill health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....								

<b>18e. For each of the above, how often is this data reported?</b>						
	Weekly	Monthly	Quarterly	Annually	Don't know	Other (please state)
<b>A</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	..... <input type="checkbox"/>
<b>B</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>18f. For each of the above, how often is this data reviewed by your organisation?</b>						
<b>A</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>19a. How would you rate the health and safety performance of the contractor(s) and their staff working on this project?</b>			
Very Good	Good	Moderate	Poor
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>19b. Have there been any instances where you or your organisation has needed to take action to improve the health and safety performance on this project?</b>				Yes	No
				<input type="checkbox"/>	<input type="checkbox"/>

<b>19c. If yes, how frequently has your organisation had to take action?</b>			
Daily	Weekly	Monthly	Less often than once a month
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>









# Health and safety in public sector construction procurement

This study was concerned with examining health and safety issues in public sector construction procurement. The broad aim of the research was to provide an evidence-based assessment of how well the public sector in England, Scotland and Wales meets its health and safety obligations in the procurement of construction.

The research methodology involved primary data collection. The main data collection instrument was a self-completion postal questionnaire. The overall approach followed two distinct stages:

- a survey of public sector clients; and
- a survey of private sector suppliers.

The conclusions, drawn from the evidence of the research, suggest at the broadest level that while some public sector clients performed reasonably well in terms of meeting their health and safety obligations during the procurement of construction, there is certainly more that could be done.

In terms of recommendations going forward, the evidence suggests that more needs to be done to embed current health and safety guidance among public sector clients. While the research findings appear to indicate that the majority of public clients surveyed generally followed the guidelines set out in the Construction (Design and Management) Regulations 1994. There is a sense, from the results, that 'best practice' is not as widely embedded as it perhaps could be.

This report and the work it describes were funded by the Health and Safety Executive (HSE). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect HSE policy.