

Office of Rail Regulation

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**Contract no:  
ORR/CT/334/MEROT  
Monitoring and  
Evaluation of  
Railways and Other  
Guided Transport  
Systems (Safety)  
Regulations 2006  
(ROGS)**

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Monitoring Report 2 –  
Year 1 Survey 2008



**OFFICE OF RAIL REGULATION**

**CONTRACT NO: ORR/CT/334/MEROT  
MONITORING AND EVALUATION OF RAILWAYS  
AND OTHER GUIDED TRANSPORT SYSTEMS  
(SAFETY) REGULATIONS 2006 (ROGS)**

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## GLOSSARY OF TERMS

- **Duty holder** – refers to a transport operator (or ‘undertaking’) with a duty to comply with some or all of the elements of ROGS. These transport operators include: mainline railways; non-mainline railway and other transport systems operating above 40kph (for example, light rail, metro systems); non-mainline railway and other transport systems operating below 40kph (for example, heritage railways); tramways; some types of sidings; work in engineering possessions; and work in depots.
- **Non-duty holder** – a rail oriented organisation working in the rail industry that does not have a duty to comply with any element of ROGS. for example, passenger groups or trade unions.
- **Organisation** – the term organisation is used to refer to all organisations operating within the rail industry, whether or not they have a duty to comply with ROGS.
- **Baseline respondents** – this term is used to refer to people who completed the first ROGS survey, the findings of which constituted the ‘baseline measure’.
- **Year one respondents** - this term is used to refer to people who completed the ‘Year 1’ survey, the findings of which are presented in this report.

## **EXECUTIVE SUMMARY**

### **EVALUATION OVERVIEW**

The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) define the safety management regime adopted across all UK rail companies. To assess the performance and overall impact of the regulations upon the rail industry the Office of Rail Regulation (ORR) commissioned Noble Denton BOMEL Limited to monitor and evaluate ROGS. The evaluation involves gathering a range of performance measures including safety performance, indicators of safety culture and cost data. This performance data will be collected across a three-year period (2007 to 2010) and analysed to assess the nature and extent of any noticeable changes in the rail industry which may be attributable to the introduction of the new regulatory regime. Ultimately, all of the information gathered over time will be analysed to assess the extent to which ROGS have achieved their overall aims and objectives, and whether they can be considered value for money.

A total of four data gathering activities will be undertaken. The first activity has already been completed and involved developing the baseline measure. This current report builds upon the baseline and describes the second data gathering activity, the 'Year 1' survey. The survey is designed to explore how the rail industry is managing implementation of the regulations approximately one and a half years since ROGS fully came into force.

### **YEAR 1 SURVEY METHODOLOGY**

The Year 1 survey issued to the rail industry explored a series of key safety indicators including organisational awareness and understanding of ROGS, indicators of industry safety culture, implementation of ROGS and the associated costs, and the perceived impact of ROGS on safety. The survey was developed to ensure the questions will be applicable over the three-year period, allowing it to be utilised again for Year 2 and Year 3 data collection. This will ensure direct comparisons can be made over time in order to assess where changes may be occurring. The survey was targeted at individuals with a responsibility for safety (e.g. Safety Managers, Supervisors, Safety Representatives etc.). It was emailed to a representative sample of rail industry organisations during May 2008.

The survey process allowed respondents to complete the form electronically and return it by email, or print the form, complete it in hard copy and return it by post. Forms completed electronically were automatically imported into an Access database and those completed in hard copy were transferred into electronic forms and then imported into the same database. Responses were then analysed using bespoke consultation analysis software.

### **RESPONDENT SAMPLE**

The Year 1 survey was issued to 93 individuals working in the rail industry in an attempt to bolster statistical reliability. Within each organisation, it targeted those individuals with a responsibility for safety, such as Safety Managers, Supervisors and Safety Representatives etc. A total of 28 organisations responded (a 30% response rate); 22 of the 28 classed themselves as 'duty holders' and 6 classed themselves as 'non-duty holders'. In terms of the types of organisations that responded, the largest numbers were Train Operating Companies (TOCS); a total of 13 out of 28 (46%) TOCS responded to the survey. Other types of responding organisation included infrastructure

managers, on-track machine operation (OTM) companies, metro systems, companies involved with rolling stock, Freight Operating Companies (FOCS) and light railways.

## KEY FINDINGS

The ultimate objective of ROGS is to “*maintain national standards of rail safety in line with EU requirements and strive for continuous improvement*”. The Year 1 survey provided a strong indication that this objective is on its way to being successfully met. This was illustrated when respondents were asked to indicate their level of agreement with the statement “*From experience, I believe that standards of safety are the same under ROGS*”. At the time of the baseline survey the majority of respondents (69% - 18 out of 26) ‘agreed’ or ‘strongly agreed’ that standards of safety are the same under ROGS. The Year 1 survey indicated that this has increased to 79% (22 out of 28 either ‘agree’ or ‘strongly agree’). Furthermore, the number of respondents who disagreed that standards of safety were the same under ROGS decreased in the Year 1 survey.

Organisations that felt ROGS has changed the way safety is managed in their organisation were asked how the changes made have impacted on their business operations. Of those that answered (23), it was found that most people thought that changes have had a neutral impact (52% - 12 out of 23), whilst 35% (8 out of 23) thought there had been a positive impact. Only 13% (3 out of 23) felt there had been a negative impact.

The survey findings also indicated that the industry is starting to view safety management as an integrated part of an organisations core business. By way of example, 47% (9 out of 19) of organisations with a ROGS compliant Safety Management System (SMS) in the Year 1 survey indicated that they had ‘integrated SMS with other systems’, compared with only 17% (2 out of 12) of such organisations in the baseline survey. Further to this, four organisations indicated their safety management processes had become more risk based.

With regard to the duty of co-operation, there was an increase in the number of organisations identifying where the majority of interfacing occurs with other organisations, compared with the number of organisations doing this when the baseline measure was taken (47% at the baseline measure versus 71% of the Year 1 respondents). This may indicate progress in addressing these ROGS requirements during the time between the baseline and the Year 1 survey.

It also appeared that respondents to the Year 1 survey were finding it easier to address the new safety critical work regulations under ROGS compared with the baseline respondents. For example, less year one respondents (5%) required major changes to their existing methods (25% in the baseline) and more required only minor changes (76% compared with 38% in the baseline). Furthermore, with regard to addressing the safety critical work regulations, less Year 1 respondents were finding ‘time / resourcing’ an issue (33% compared with 69% in the baseline) and less were finding training an issue (19% compared with 56% in the baseline). In fact, 43% of year one respondents found there were no challenges (compared with only 19% in the baseline).

One area that could warrant further investigation, is the increase in the number of organisations experiencing time and / or resourcing pressures in the preparation and submission of an annual safety report. Only 12% (2 out of 17) of baseline respondents were facing time and / or resource pressures compared with 57% (12 out of 21) of the Year 1 survey respondents.



## **NEXT STEPS**

The next steps in the ongoing monitoring and evaluation of ROGS include a third survey during the early part of 2009. This will provide further insight into the impact of ROGS on the rail industry and identify any areas that may require further investigation.

# 1. INTRODUCTION

## 1.1 BACKGROUND

This report has been prepared by Noble Denton BOMEL Limited (Noble Denton BOMEL) for the Office of Rail Regulation (ORR) and describes the second stage in a project designed to monitor and evaluate the performance and impact of the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS).

## 1.2 CONTEXT OF THE STUDY

The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) define the safety management regime adopted across all UK rail companies from October 2006. The Office of Rail Regulation (ORR) wanted to establish monitoring and evaluation arrangements for ROGS to monitor and evaluate both their performance and their overall impact. In order to conduct this effectively ORR commissioned Noble Denton BOMEL to carry out the project which involves collecting and developing a baseline measure, followed by three further data collection activities over a three-year period. A range of performance measures will be gathered including: safety performance; indicators of safety culture; and cost data and these will be analysed to assess whether there have been any noticeable changes in the rail industry which may be attributable to the introduction of the new regulatory regime.

## 1.3 OVERARCHING PROJECT METHODOLOGY

The monitoring and evaluation project will span across a three-year period. The project started with the development of an overarching evaluation plan and collection of a baseline measure (published in 'Monitoring Report 1'<sup>1</sup>). This baseline measure will be followed by three further data gathering activities in Year 1, 2 and 3. These data collection time points are as follows:

- **Baseline data collection**<sup>1</sup> - review of existing information from 2006 and primary research conducted during August to September 2007.
- **Year 1 ROGS survey** - early 2008 (findings presented in this report)
- **Year 2 ROGS survey** - end of 2008
- **Year 3 ROGS survey** - end of 2009

This current report constitutes the findings from the Year 1 survey.

All of the information gathered over time will be analysed to assess the extent to which ROGS have achieved their overall aims and objectives, and whether they can be considered value for money.

## 2. THE SURVEY

### 2.1 INTRODUCTION

A ROGS baseline survey was issued to a representative sample of organisations in the rail industry during August and September 2007. The survey explored a series of key safety indicators including organisational awareness and understanding of ROGS, indicators of industry safety culture, implementation of ROGS and the associated costs and the perceived impact of ROGS on safety. The survey was developed to ensure the questions would be applicable over the three-year period, allowing it to be utilised again at the Year 1, 2 and 3 data collection time points. This ensured direct comparisons could be made over time in order to assess where changes may be occurring. However, there were some additional questions included in the Year 1 survey, designed to further probe aspects of safety culture. The following section provides a brief overview of the survey.

### 2.2 SURVEY STRUCTURE AND CONTENTS

The survey consists of two parts. The first part is completed by everyone (i.e. duty holders and non-duty holders) and the second part is designed for duty holders only. More specifically these two parts consist of the following sections:

#### Part 1 – To be completed by everyone

- **Organisational details** – this section is confidential to Noble Denton BOMEL only and enables respondents to be contacted again if necessary
- **Awareness and understanding of ROGS** – this section is developed in order to gauge whether the initial outcomes on the impact pathway have been achieved.
- **Indicators of industry safety culture** – this section is designed to gather a ‘snapshot’ of safety culture from the perspective of those with a health and safety role within each participating rail organisation. It is not designed to be a full safety culture study. The safety culture items were selected from the HSE’s Safety Climate Tool (HSSCT)<sup>2</sup> and represented each of the key safety culture factors within this safety culture model.
- **General feedback on ROGS and ORR** – this section provides direct feedback from industry on the performance of ROGS and ORR.
- **Additional comments** – this last section in Part 1 of the survey provides respondents with an opportunity to make any additional comments that they had not already had an opportunity to make.

## Part 2 – To be completed by duty holders only

- **Specific duty holder details** – this includes questions about annual company turnover, number of employees and passenger kilometres travelled. This data was required in order to put cost data into context.
- **Implementation of ROGS** – this section asks specific questions in relation to the key elements of ROGS (i.e. safety management systems, safety verification, safety certification, safety authorisation, risk assessment, the annual safety report, duty of co-operation and safety critical work).
- **Additional comments** - this last section in Part 2 of the survey provides respondents with an opportunity to make any additional comments that they had not already had an opportunity to make.

The survey was drafted by Noble Denton BOMEL with input from ORR officials and final approval was given by ORR prior to issuing the Year 1 survey to industry.

Please see Appendix A for a copy of the survey issued to the rail industry.

### 2.2.1 Issuing the Year 1 survey

The survey was targeted at individuals with a responsibility for safety (e.g. Safety Managers, Supervisors, Safety Representatives etc.). It was emailed to a representative sample of rail industry organisations on 7<sup>th</sup> May 2008, with a response deadline of 30<sup>th</sup> May 2008. This was almost one and a half years since ROGS fully came into force.

### 2.2.2 Collation and analysis of the survey findings

The survey was formatted as an electronic Word response form allowing respondents to either complete the form electronically and email it back, or print the form, complete it in hard copy and then post it back to Noble Denton BOMEL. Forms completed electronically were automatically imported into an Access database and those completed in hard copy were transferred into electronic forms and then imported into the same database. Noble Denton BOMEL was then able to analyse the responses using its Noble Denton BOMEL Consultation Response Analysis Tool (see Figure 1 for a diagram of the user interface).

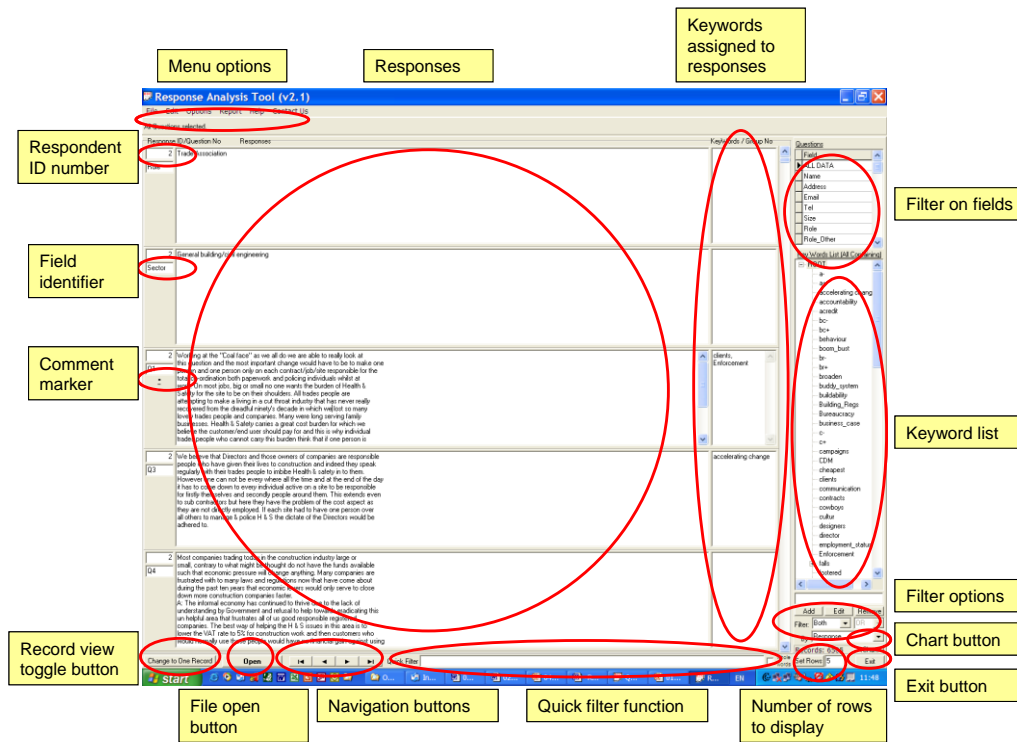


Figure 1 Response Analysis Tool user interface

Figure 1 highlights the Consultation Response Analysis Tool user interface. It illustrates how free text responses to survey questions can be analysed and 'keywords' assigned to highlight key themes running through the answers. The tool also enables more quantitative analysis to be undertaken, where respondents have been asked to answer questions according to a set of predefined responses or on a Likert scale. The tool enabled illustrative graphs to be generated and linked directly to this current report.

This tool was also used to analyse findings from the baseline survey, allowing direct comparisons to be made with the Year 1 survey.

## 3. COMPARISON OF BASELINE AND YEAR ONE FINDINGS

### 3.1 OVERVIEW

The findings are divided into two sections in order to aid interpretation. Section 3.4 presents the survey findings from the questions asked to everyone who completed the survey (i.e. duty holders and non-duty holders) and Section 3.5 presents findings from the questions about implementation of requirements, which were asked to duty holders only.

### 3.2 PRESENTATION OF THE FINDINGS

#### 3.2.1 Glossary of terms

In some cases not everyone in the sample answered all of the questions relevant to them. In other cases some respondents answered questions that may not have been relevant to them. Respondents were asked to provide only one answer for some questions and for other questions respondents were asked to provide as many answers as were relevant. In order to further aid interpretation of the findings, please read and refer to the following definitions:

- **Respondents** – where percentages are displayed out of ‘respondents’ (e.g. 60% - 6 out of 10 respondents) this means that this is a percentage of the total number of people responding to that question.
- **Responses** – where on some occasions percentages are displayed out of ‘responses’ (e.g. 60% - 6 out of 10 responses) this means that this a percentage of the total number of responses given to that question (i.e. 4 people may have provided a total of 10 responses).
- **Majority** – used when the number of respondents or the number of responses answering in a particular way is more than 50% of the total number of respondents or responses answering that question.
- **Large** – used when the number of respondents or the number of responses answering in a particular way is the largest number answering in that way, but is not more than 50% of the total number of respondents or responses answering that question.

In terms of the types of organisation responding to the survey, they are defined as follows:

- **Duty holder** – refers to a transport operator (or ‘undertaking’) with a duty to comply with some or all of the elements of ROGS. These transport operators include: mainline railways; non-mainline railway and other transport systems operating above 40kph (for example, light rail, metro systems); non-mainline railway and other transport systems operating below 40kph (for example, heritage railway); tramways; some types of sidings; work in engineering possessions; and work in depots.

- **Non-duty holder** – a rail oriented organisation working in the rail industry that does not have a duty to comply with any element of ROGS. for example, passenger groups or trade unions.
- **Organisation** – the term organisation is used to refer to all organisations operating within the rail industry, whether or not they have a duty to comply with ROGS.
- **Baseline respondents** – this term is used to refer to people who completed the first ROGS survey, the findings of which constituted the ‘baseline measure’.
- **Year one respondents** - this term is used to refer to people who completed the ‘Year 1’ survey, the findings of which are presented in this report.

### 3.2.2 Graphical presentation

In order to present the findings in a meaningful way and help the reader to interpret the results, a mixture of vertical and horizontal bar charts have been used. The majority of the findings have been presented on vertical bar charts, which indicate the *number* of actual respondents providing feedback. A small number of findings have been presented on horizontal bar charts, which indicate the *percentage* of respondents answering in a particular way. Some of the findings have also been presented in a tabular format.

### 3.3 SURVEY SAMPLE

The ROGS baseline survey was issued to 34 organisations considered representative of the UK rail industry. A total of 26 organisations responded to the survey, achieving a 76% response rate. The year one survey was issued to 93 organisations in an attempt to bolster statistical reliability. This yielded 28 responses (a 30% response rate). Within these organisations, it targeted those individuals with a responsibility for safety, such as safety managers, supervisors and safety representatives etc.

Of the 26 organisations that responded in the baseline survey, 17 classed themselves as ‘duty holders’ and 9 classed themselves as other rail industry organisations (or ‘non-duty holders’) such as passenger groups, safety groups, other transport associations, trade unions etc.

In the year one survey, 22 organisations classed themselves as duty holders and 6 classed themselves as non-duty holders. Figure 2 highlights the different types of rail industry organisation represented in both survey samples. It can be seen that the main difference between the samples was that several more train operating companies (TOCs) took part in the year one survey, in that 46% of the year one survey respondents were TOCs (13 out of 28) compared with only 13% (3 out of 24) of the baseline survey respondents. Overall, there was a higher proportion of duty holder in the year one survey (79%) compared with the baseline survey (62%).

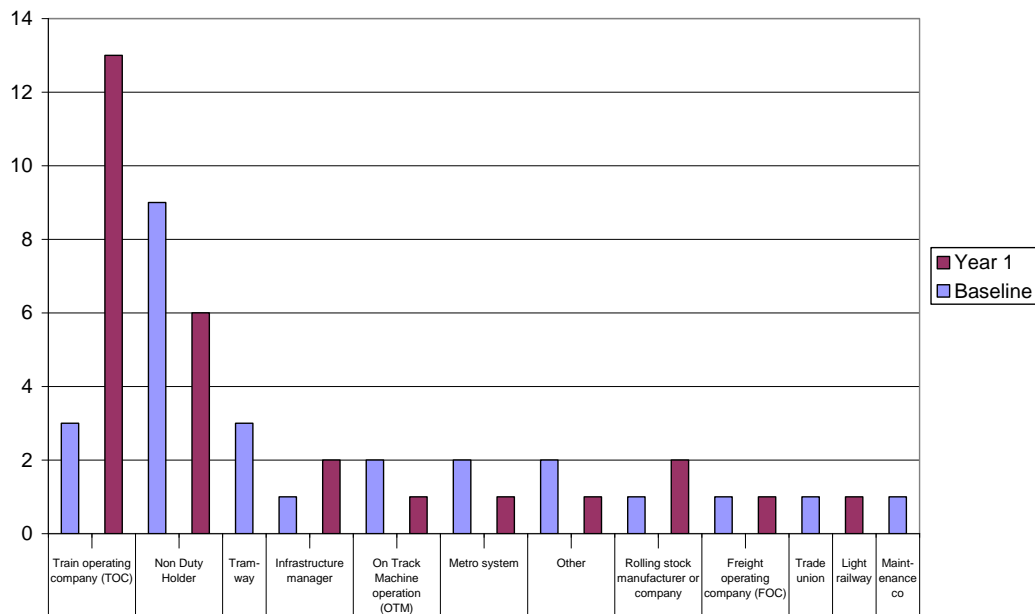


Figure 2 Types of survey respondent

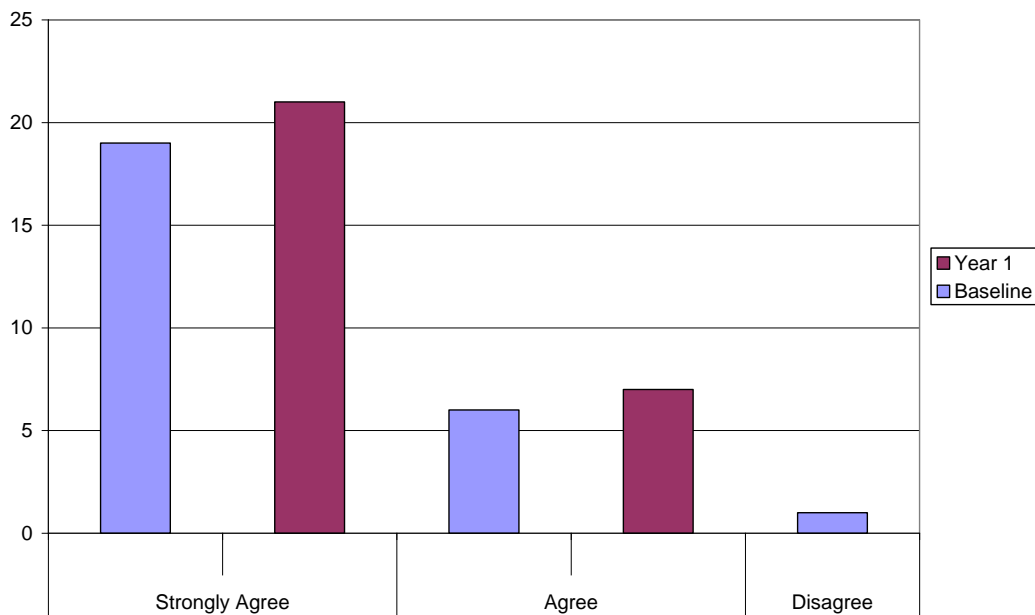


### 3.4 SURVEY FINDINGS – COMPLETED BY ALL SURVEY RESPONDENTS

#### 3.4.1 Awareness and understanding of ROGS

To assess the industry’s general awareness and understanding of ROGS, all organisations were asked a series of questions to assess their awareness of ROGS and explore any guidance or assistance they had used to help them understand and implement the regulations. All organisations were asked these questions (i.e. both duty holders and non-duty holders), 26 in the baseline survey and 28 in the year one survey.

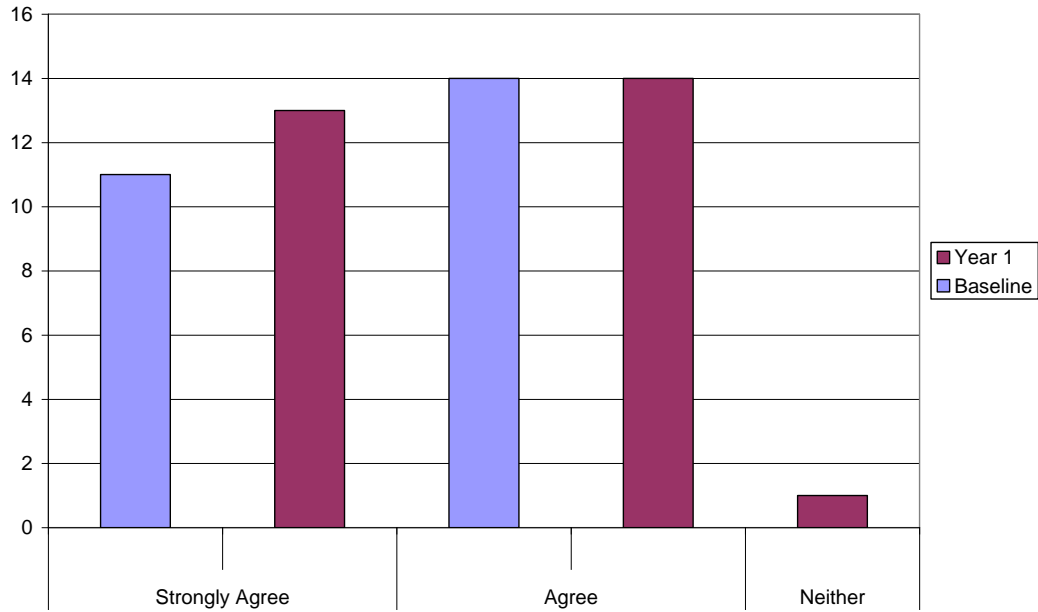
Figure 3 highlights respondents’ level of agreement with the statement “I am aware of ROGS and their contents”.



**Figure 3** Respondents level of agreement with the statement “I am aware of ROGS and their contents”

Figure 3 highlights that, in the baseline survey, the majority of respondents (73% - 19 out of 26) ‘strongly agreed’ with the statement, with a further 23% (6 out of 26) indicating they ‘agreed’, that they were aware of ROGS and their contents. Both these figures increased slightly in the year one survey with 75% (21 out of 28) of responses being ‘strongly agree’ and 25% (7 out of 28) being ‘agree’. The increase is likely to reflect the increase in number of respondents in Year 1 (28) versus the baseline survey (26). One respondent said they disagreed with the statement in the baseline survey but no one disagreed with it in the year one survey.

In order to probe respondents understanding of ROGS, Figure 4 highlights respondents' level of agreement with the statement "I understand the requirements of ROGS".

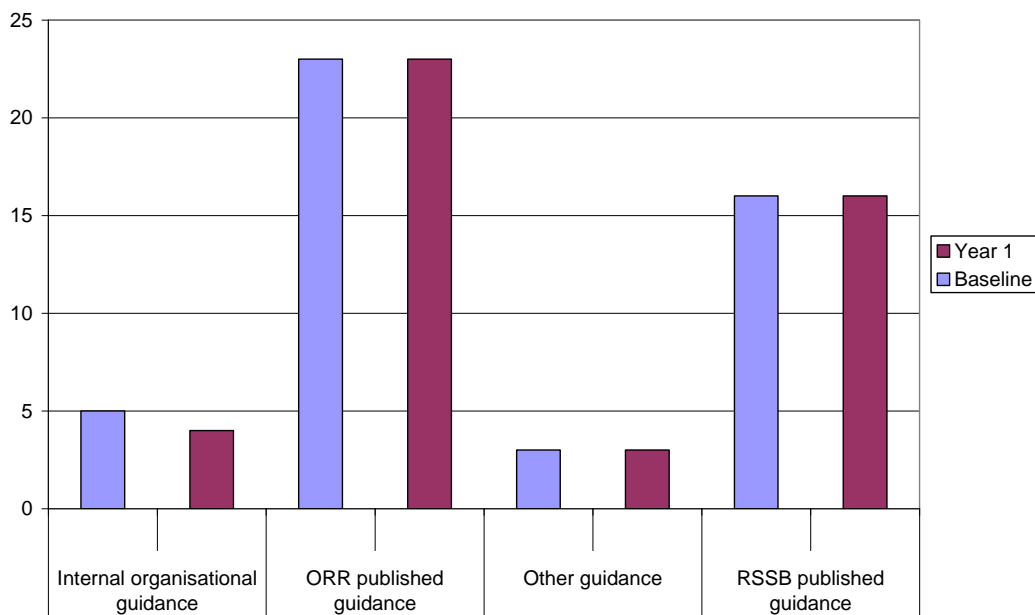


**Figure 4** Respondents level of agreement with the statement "I understand the requirements of ROGS"

Figure 4 highlights how out of the 28 respondents to the Year 1 survey everybody (with the exception of just one respondent) felt that they understood the requirements of ROGS. This is a very encouraging finding.

In terms of how this finding compares with the baseline survey, the majority of baseline respondents (54% - 14 out of 26) 'agreed' they understood the requirements of ROGS compared with 50% of the year one respondents (14 out of 28) indicating 'agree' to this statement. However, the slight reduction in the percentage of year one respondents is likely to be due to the increased total number of respondents in the year one survey. The actual numbers agreeing (14) are the same for both the baseline and year one survey.

The survey also asked respondents if they used any guidance to help them understand ROGS; the majority of baseline respondents (96% - 25 out of 26) said they used guidance and in the year one survey, 89% used guidance (25 out of 28) with two respondents indicating that they did not use guidance. This may be because these respondents had become familiar with ROGS and no longer felt they required guidance. For those who did use guidance, respondents were then asked what type of guidance they had used and Figure 5 highlights the response. It should be noted that respondents could indicate having used more than one type of guidance.

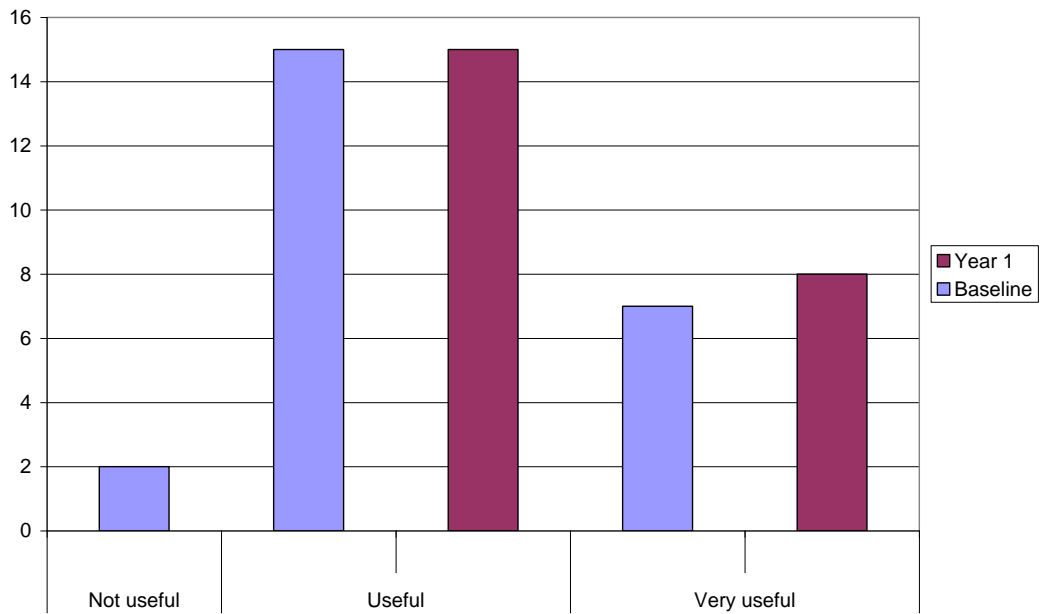


**Figure 5** Guidance used by respondents to help them understand ROGS

For those who indicated they *did* use guidance (25 respondents in both surveys), Figure 5 shows the type of guidance used. The ORR guidance was used by 92% of those using guidance in both surveys (23 out of 25) and the RSSB guidance was used by 64% (16 out of 25) of those using guidance in both surveys. In fact, the number of responses in each category is almost identical in both the baseline and year one surveys, with the only difference being one less response against 'internal organisational guidance' in the year one survey.

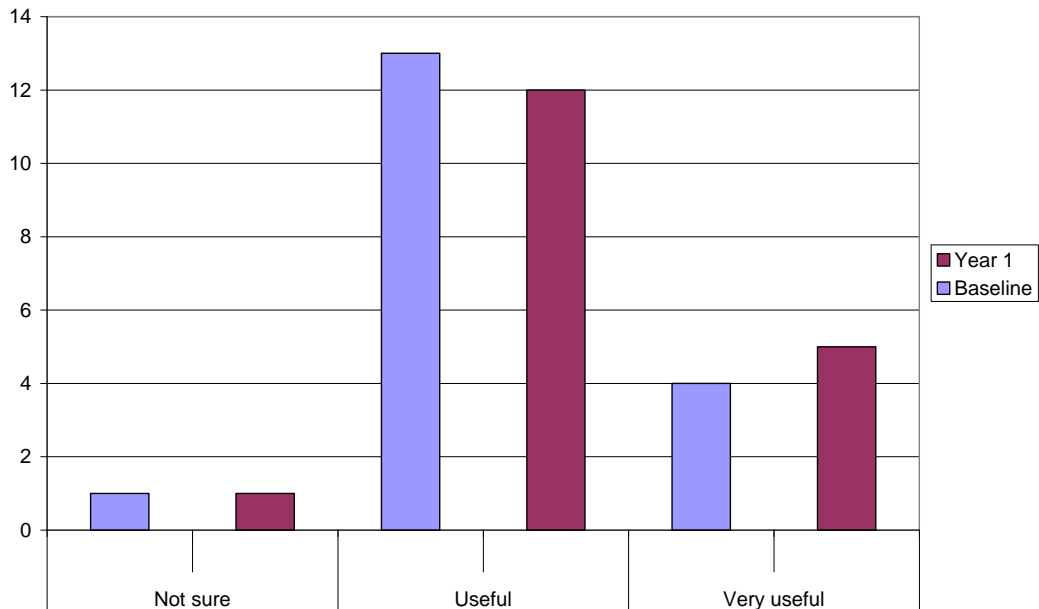
Where respondents had indicated using a particular type of guidance, they were then asked to indicate how useful they found that particular type of guidance. The results are shown for the two most commonly used pieces of guidance; the ORR guidance (Figure 6) and the RSSB guidance (Figure 7). It should be noted that more people responded to the questions on the usefulness of the guidance than indicated that they used the guidance. It may be that some people had opinions on the guidance without actually having used it.

Figure 6 shows that 24 baseline respondents had a view on the ORR guidance (although only 23 indicated they used it), with 29% (7 out of 24) finding it 'useful', 63% (15 out of 24) finding it 'very useful' and 8% (2 out of 24) finding it 'not useful'. This compares to 23 year one respondents having a view on the usefulness of the ORR guidance (23 used it) with 65% (15 out of 23) finding it 'useful' and 35% (8 out of 23) finding it 'very useful'. No one found this guidance to be 'not useful' in the year one survey.



**Figure 6** Perceived usefulness of ORR published guidance on ROGS

Figure 7 shows that 18 baseline respondents commented on the RSSB guidance compared with 16 who indicated they used it. Of these, 72% (13 out of 18) found it 'useful', 22% found it 'very useful' and one respondent was 'not sure'. There were also 18 year one respondents who commented on this guidance (16 indicated they used it), with 66% (12 out of 18) finding it 'useful' and 27% (5 out of 18) finding it 'very useful'.



**Figure 7** Perceived usefulness of RSSB published guidance on ROGS

Where respondents indicated they felt the guidance had been either 'useful' or 'very useful' they were asked to give a reason why they felt this way. Most of the comments were in relation to either the ORR or RSSB published guides. In the baseline survey, the following good points of these guides were highlighted:

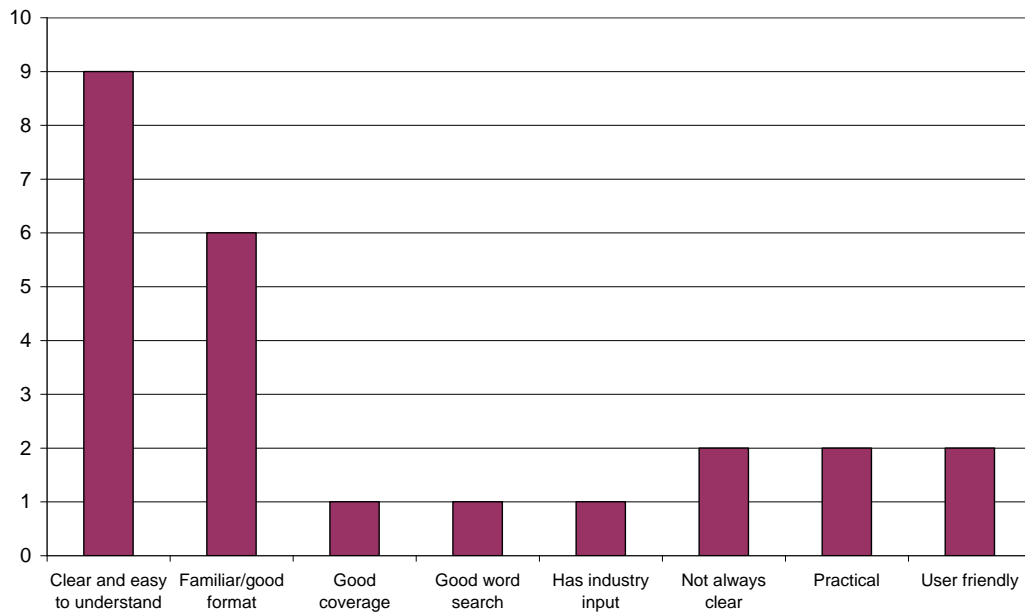
- **ORR published guidance** - standardised and therefore familiar format; excellent interpretation of the intent behind the Regulations and what duty holder's must do to ensure compliance; clear, concise and thorough; based on facts.
- **RSSB published guidance** - guidance follows a logical structured path to the requirements; user friendly; useful in clarifying 'duty of cooperation' regulation.

Two baseline respondents felt the ORR published guidance was not useful; the reasons given were as follows:

- Concentrates too much on heavy rail and is not specific enough about the application to the light rail and tramway sectors.
- SMS requirements applicable to tramways could have been stated more clearly. Specific guidance relating to tramways only would be of great help.

- Structuring of the guidance notes (particularly the degree of cross referencing and exclusion references) can be difficult to interpret; described as too 'legalistic'.

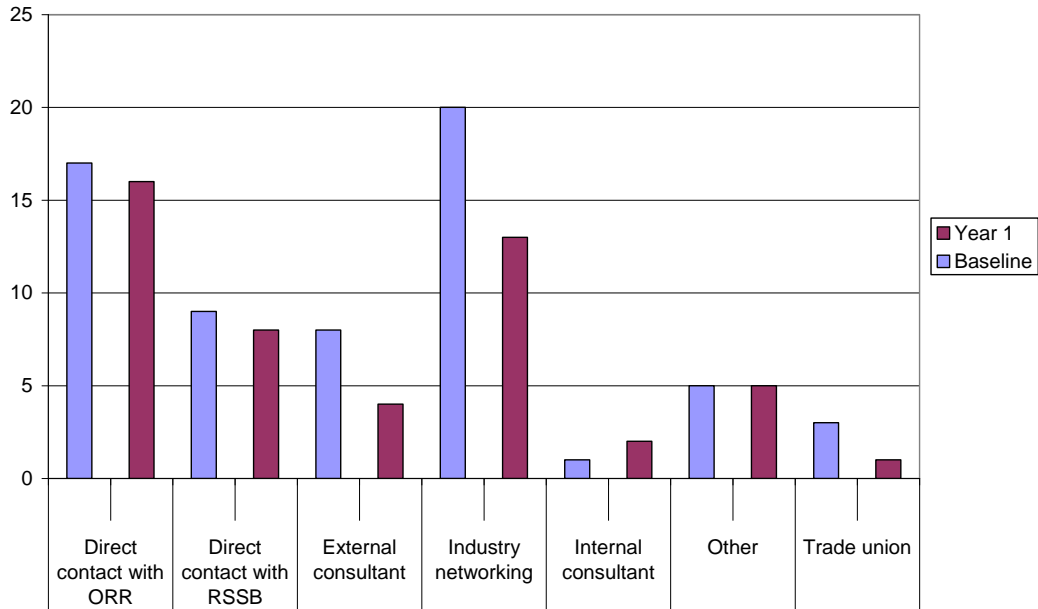
The year one respondents comments on the ORR guidance are shown in Figure 8. Many of these are similar to the baseline comments; it can be seen that 'clear and easy to understand' (9 responses) and 'familiar / good format' (6) were the two most commonly selected good points of the guidance. The only negative comment was from two respondents who thought the guidance was not always clear.



**Figure 8** Year one respondents comments on the ORR guidance

In between undertaking the baseline and Year 1 survey ORR has revised its guidance and the new version has achieved the Plain English Campaign's Crystal Mark.

In addition to the guidance available for ROGS, in the baseline survey, 21 respondents said they had also used other help to assist them in understanding the regulations and 4 respondents said they had not used any other help. This compares to 19 respondents who used other help and 9 who did not in the year one survey. Figure 9 highlights the other help used by respondents to assist them in understanding ROGS.



**Figure 9** Other help used by respondents to assist them in understanding ROGS

Figure 9 highlights that baseline respondents enlisted additional help on understanding ROGS from a variety of sources, including industry networking (95% - 20 out of 21 respondents who used other help); direct contact with ORR (81% - 17 out of 21 respondents); and direct contact with RSSB (43% - 9 out of 21 respondents). There were 2 less respondents who used extra help in the year one survey (19 compared with 21 in the baseline) and of these, a lower percentage used industry networking (68% - 13 out of 19); slightly more had direct contact with ORR (84% - 16 out of 19); and almost the same (42% - 8 out of 19) had direct contact with RSSB, compared with the baseline survey.

### 3.4.2 Indicators of Industry Safety Culture

#### Defining Safety Culture

Gathering a 'traditional' measure of organisational safety culture (i.e. the shared attitudes, values and beliefs about safety in an organisation originating from all levels of the organisation) within each rail organisation within the UK rail industry would not have been feasible within the remit of this current evaluation study. Therefore, in order to gather an 'indication' of safety culture within the rail industry, individuals with a health and safety role at each participating rail organisation were asked for their personal views on a series of safety culture statements. It should therefore be underlined that the responses received to the safety culture items presented the views of the individual respondent only, not the views of the whole organisation. However, they do provide an indicator of safety culture, based on the views of the people who are tasked with actively managing safety.

#### Approach

Views on key safety culture items were gathered in the baseline and year one surveys, and all respondents (i.e. duty holders and non-duty holders) were asked to indicate their personal level of agreement with 13 safety culture statements. The safety culture statements included 9 'positive' and 4 'negative' safety culture statements to ensure respondents did not become too familiar with answering the questions using the same scale points and thus reducing the reliability of the findings. The safety culture items were selected from the HSE's Safety Climate Tool (HSSCT)<sup>2</sup> and represented each of the key safety culture factors within this safety culture model. In the year one survey a number of supplementary questions were also asked to explore safety culture in more detail.

#### Findings

Table 1 shows the responses to the safety culture indicator questions. These are expressed in terms of the proportion of responses in each category (agree, disagree etc.) and the associated number (out of 26 in the baseline survey and 28 in the year one survey). The baseline figures are shown on the first line of each table cell with the year one survey figures in **bold** on the second line. The cells have been shaded, either green to show a positive percentage swing from the baseline survey to the year one survey, or orange to show a negative percentage swing. Note – a percentage increase (or decrease) could be positive or negative depending on whether the statement is positive or negative.

Table 1 highlights that the clear-cut positive swings are in relation to the statements on good communications (3.1), 'my boss' talking about safety (3.2), feelings of trust towards workmates (3.6), having enough people to get the job done safety (3.12), and people having a poor understanding of safety (3.11). All these aspects received a more positive response in the year one survey compared with in the baseline. There are two statements that received a markedly less positive response in the year one survey compared with the baseline. These are the statements on near miss reporting (3.13) and on what an individual feels they can do to further improve health and safety (3.5).



**Table 1** Level of agreement with core organisational safety culture issues

<i>POSITIVE SAFETY CULTURE STATEMENTS</i>	Strongly agree	Agree	Neither	Disagree	Strongly disagree	No opinion
3.1. There are good communications here about health and safety issues	19% (5) <b>25% (7)</b>	50% (13) <b>60% (17)</b>	8% (2) <b>4% (1)</b>	4% (1) <b>4% (1)</b>		19% (5) <b>7% (2)</b>
3.2. The company really cares about the health and safety of the people who work here	58% (15) <b>43% (12)</b>	23% (6) <b>50% (14)</b>				19% (5) <b>7% (2)</b>
3.3. My immediate boss often talks to me about health and safety	42% (11) <b>54% (15)</b>	27% (7) <b>29% (8)</b>	4% (1) <b>4% (1)</b>	8% (2) <b>0</b>	0 <b>4% (1)</b>	19% (5) <b>11% (3)</b>
3.4. Supervisors are good at detecting unsafe behaviour	4% (1) <b>4% (1)</b>	46% (12) <b>46% (13)</b>	23% (6) <b>32% (9)</b>	0 <b>7% (2)</b>		27% (7) <b>11% (3)</b>
3.6. I trust my workmates with my health and safety	15% (4) <b>25% (7)</b>	54% (14) <b>61% (17)</b>	8% (2) <b>7% (2)</b>	4% (1) <b>0</b>		19% (5) <b>7% (2)</b>
3.7. I am clear about what my responsibilities are for health and safety	35% (9) <b>57% (16)</b>	46% (12) <b>36% (10)</b>				19% (5) <b>7% (2)</b>
3.9. People here always work safely even when they are not being supervised	12% (3) <b>4% (1)</b>	27% (7) <b>54% (15)</b>	15% (4) <b>29% (8)</b>	23% (6) <b>7% (2)</b>		23% (6) <b>7% (2)</b>
3.12. There are always enough people available to get the job done according to the health and safety procedures/instructions/rules	0 <b>7% (2)</b>	31% (8) <b>54% (15)</b>	19% (5) <b>25% (7)</b>	19% (5) <b>4% (1)</b>		31% (8) <b>11% (3)</b>
3.13. Near misses are always reported	4% (1) <b>4% (1)</b>	15% (4) <b>7% (2)</b>	19% (5) <b>21% (6)</b>	23% (6) <b>32% (9)</b>	15% (4) <b>11% (3)</b>	23% (6) <b>25% (7)</b>

<b>NEGATIVE SAFETY CULTURE STATEMENTS</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neither</b>	<b>Disagree</b>	<b>Strongly disagree</b>	<b>No opinion</b>
3.5. There is nothing I can do to further improve health and safety here		4% (1) <b>0</b>	0 <b>11% (3)</b>	31% (8) <b>0</b>	46% (12) <b>25% (7)</b>	19% (5) <b>64% (18)</b>
3.8. People here do not remember much of the health and safety training which applies to their job		8% (2) <b>4%(1)</b>	8% (2) <b>18% (5)</b>	62% (16) <b>54% (15)</b>	0 <b>7% (2)</b>	23% (6) <b>18% (5)</b>
3.10. People here think health and safety is not their problem – it's up to management and others		4% (1) <b>4% (1)</b>	8% (2) <b>7% (2)</b>	46% (12) <b>61% (17)</b>	23% (6) <b>21% (6)</b>	19% (5) <b>7% (2)</b>
3.11. Some people here have a poor understanding of the risks associated with their work	0 <b>4% (1)</b>	35% (9) <b>18% (5)</b>	12% (3) <b>18% (5)</b>	35% (9) <b>36% (10)</b>	0 <b>14% (4)</b>	19% (5) <b>11% (3)</b>

\* Not all percentages sum 100% due to rounding

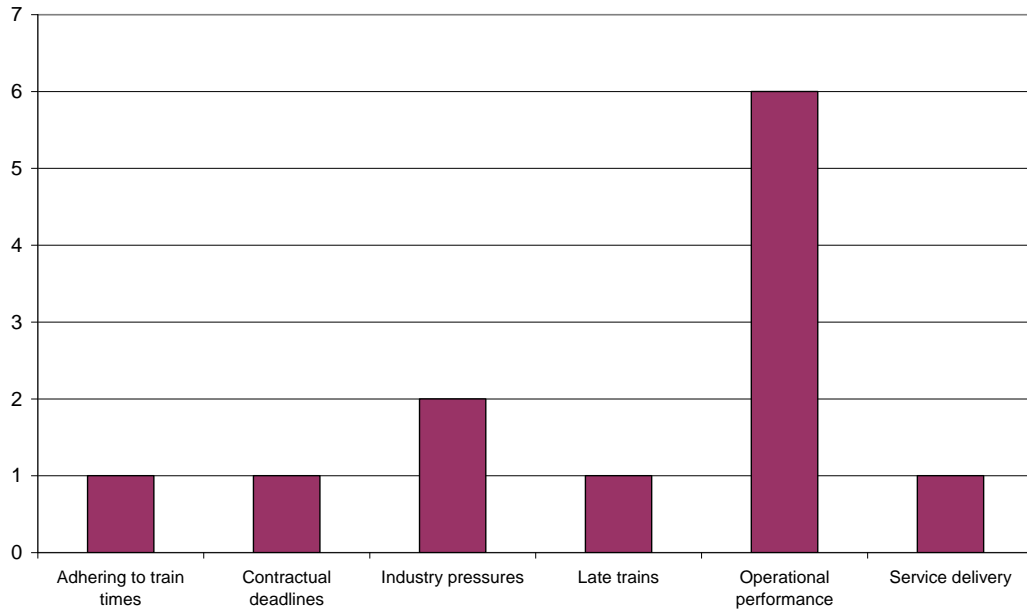
There were a number of supplementary questions added to the year one survey in order to explore industry safety culture in more detail. The responses to these are now presented (Table 2), although there is no comparable data from the baseline survey.

**Table 2** Supplementary safety culture questions in year one survey and responses

Question	Response			
	Yes	No	Not sure	Not answered
Do management involve staff at all levels in safety related decision making?	61% (17)	18% (5)	18% (5)	3% (1)
Is there a message conveyed to all staff that safety is a key priority?	89% (25)	0% (0)	8% (2)	3% (1)
Are there any circumstances where staff are placed under pressure to meet operational performance objectives?	64% (18)	18% (5)	14% (4)	3% (1)
If 'yes' to the above question, do you think this pressure affects safety?	18% (5)	25% (7)	29% (8)	29% (8)

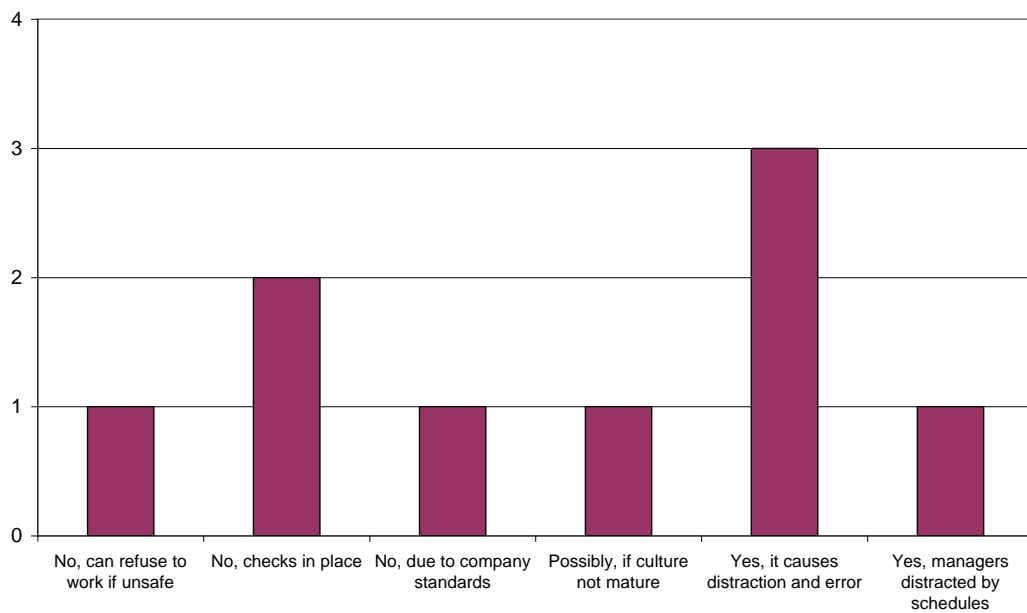
Table 2 shows that the majority of respondents (61%) felt that management involve staff at all levels in safety related decision making although 18% felt this was not the case and a further 18% were not sure. Respondents were then asked if they thought that a message was conveyed to all staff that safety is a key priority. The vast majority (89%) indicated that this was the case. For those who answered 'yes' to this question, they were then asked who is responsible for communicating the safety priority message to all staff. This revealed that 80% of these respondents said that a mix of people are responsible, including senior managers, middle managers, site supervisors and safety representatives.

Finally, respondents were asked if there were any circumstances where staff are placed under pressure to meet operational performance objectives. It was found that the majority (64% - 18 out of 28) of people felt this was the case, 18% answered 'no' and 14% were 'not sure'. Respondents were then asked why they think staff are placed under pressure and the responses are shown in Figure 10. It can be seen that a range of operational reasons were given, with the most common (6 responses) being that operational performance standards had to be met.



**Figure 10** Year one survey “Why do you think staff are placed under pressure?”

Of the 64% who felt there are some circumstances where staff are placed under pressure, they were asked to qualify their answer by indicating whether or not they thought this pressure affects safety. It was found that 18% did think it affected safety and 25% did not think it affected safety. Perhaps of concern is the fact that 29% were not sure and a further 29% did not respond. Respondents were asked to give reasons for their answer and the results are shown in Figure 11. It can be seen that the most common response was ‘yes’, pressure can affect safety as it causes distraction and error. However, several respondents thought safety would not be affected by pressure in their organisation, for example, because checks are in place.

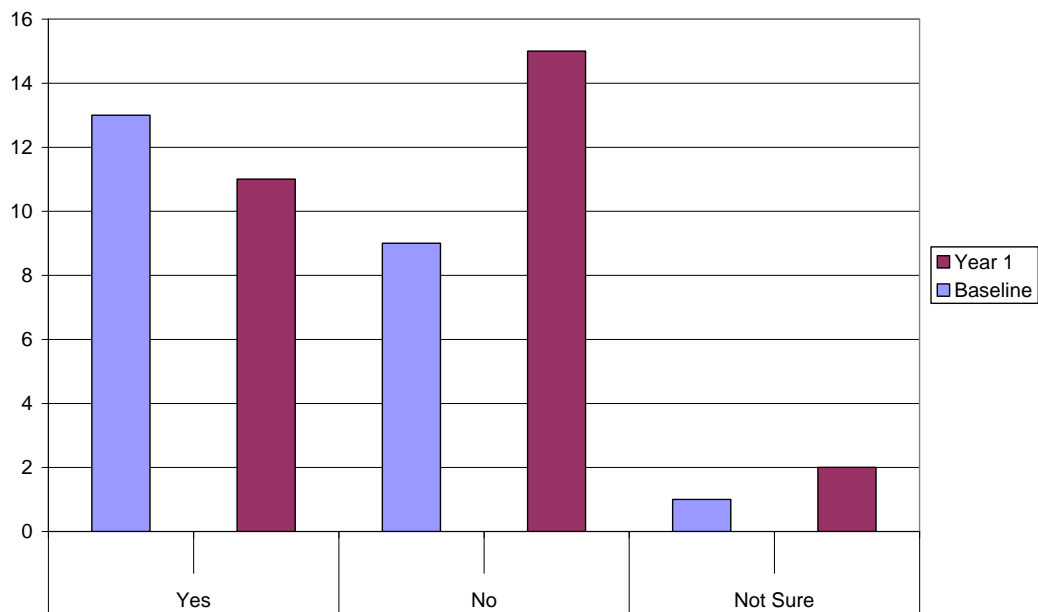


**Figure 11** Year one survey reasons for answer to question “Does pressure affect safety?”

### 3.4.3 Feedback on ROGS and ORR

All respondents were asked a series of questions designed to gather direct feedback about ROGS and the ORR's role as the safety regulator. It should be noted that the views expressed in this section are only the views of the individual respondents and are not necessarily representative of their whole organisation.

Figure 12 highlights survey respondents' feedback to the question "Has ROGS changed the way in which safety has been managed in your organisation?"



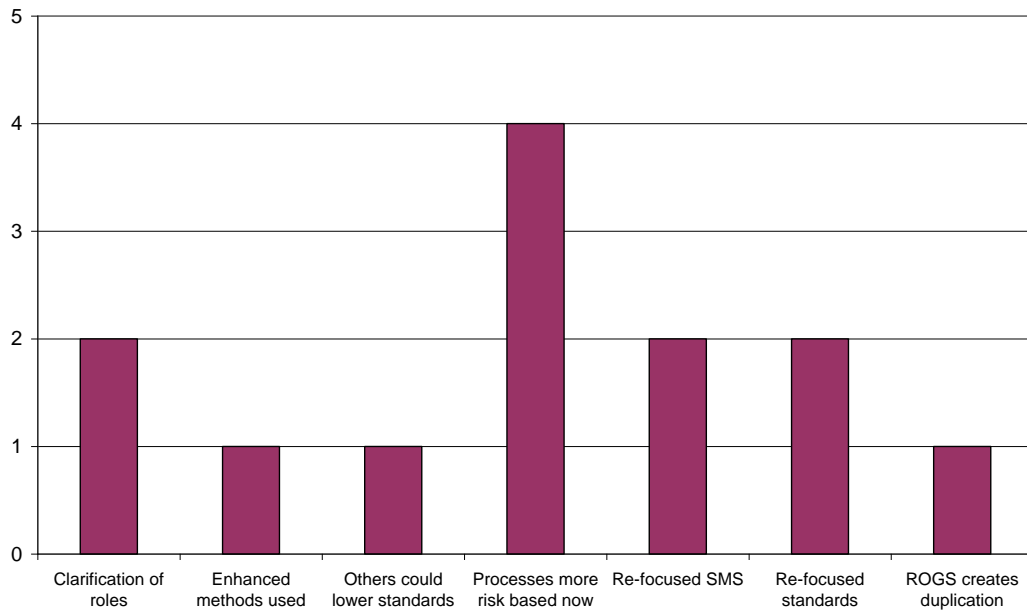
**Figure 12** Has ROGS changed the way in which safety has been managed in your organisation?

Figure 12 highlights that the largest percentage of baseline respondents (50% - 13 out of 26) felt ROGS had changed the way safety is managed in their organisation compared with 39% (11 out of 28) in the year one survey. However, 35% (9 out of 26) did not feel ROGS had made a difference and this increased to 54% in the year one survey. The reasons given to explain the positive answers in the baseline survey included:

- Slight change in emphasis; now focus is on the need for better company standards rather than the content of the Railway Safety Case.
- Increased focus on certain specific issues such as managing fatigue in safety critical workers.
- More emphasis on safety validation has caused internal action to be refocused.
- Developed new safety team at the same time as ROGS introduction.
- Due to requirement for new documentation we have reviewed our existing systems with a fresh pair of eyes.

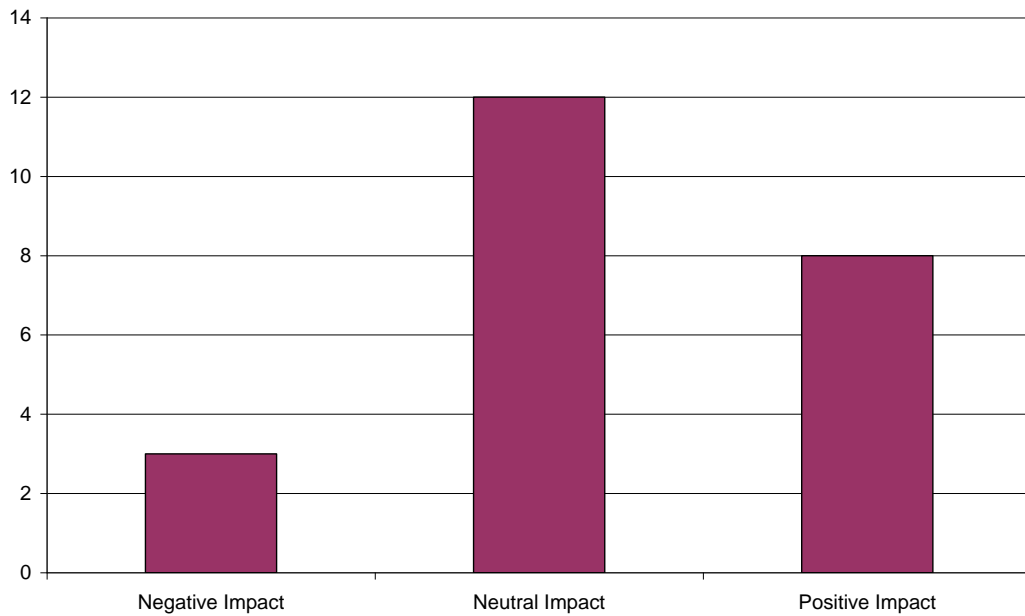
- It has placed a greater requirement on the organisation to have a robust SMS in place.

The reasons given in the year one survey to explain the answers to the question of whether or not ROGS has changed the way in which safety has been managed are shown in Figure 13. It can be seen that the most common reason was that ROGS has encouraged companies to have more risk based processes (4 responses).



**Figure 13** Year one survey reasons for answers to question “Has ROGS changed the way in which safety has been managed in your organisation?”

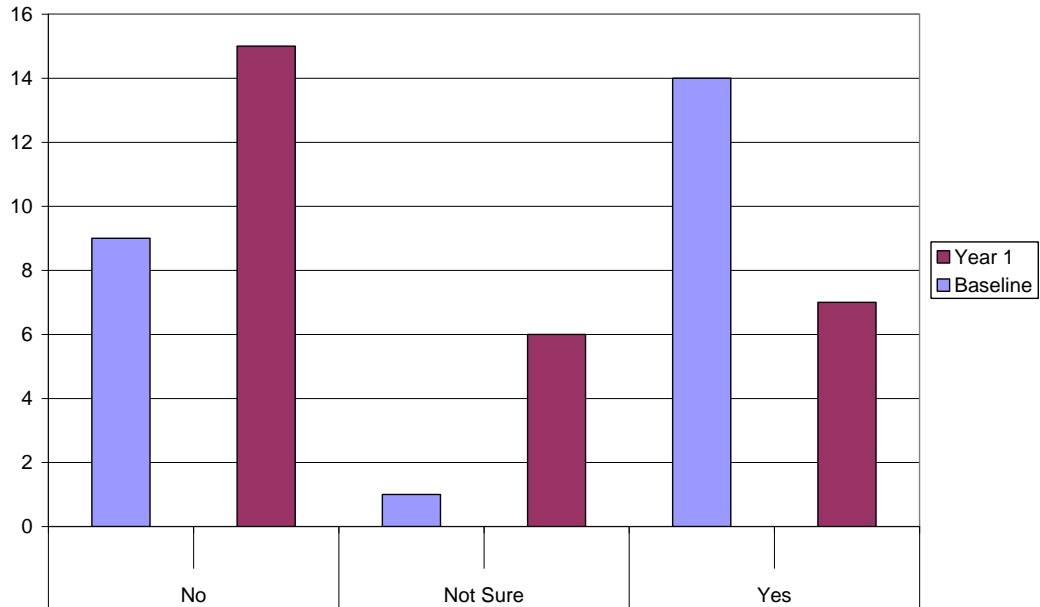
Respondents in the year one survey were asked “If changes have been required, how have they impacted on your business operations?”. The responses are shown in Figure 14. Of those that answered (23), it can be seen that most people thought that changes have had a neutral impact (12, 52%), while 35% (8) thought there had been a positive impact. Only 13% (3) felt there has been a negative impact. There was no baseline data available for comparison to this question.



**Figure 14** If changes have been required (due to ROGS), how have they impacted on your business operations?



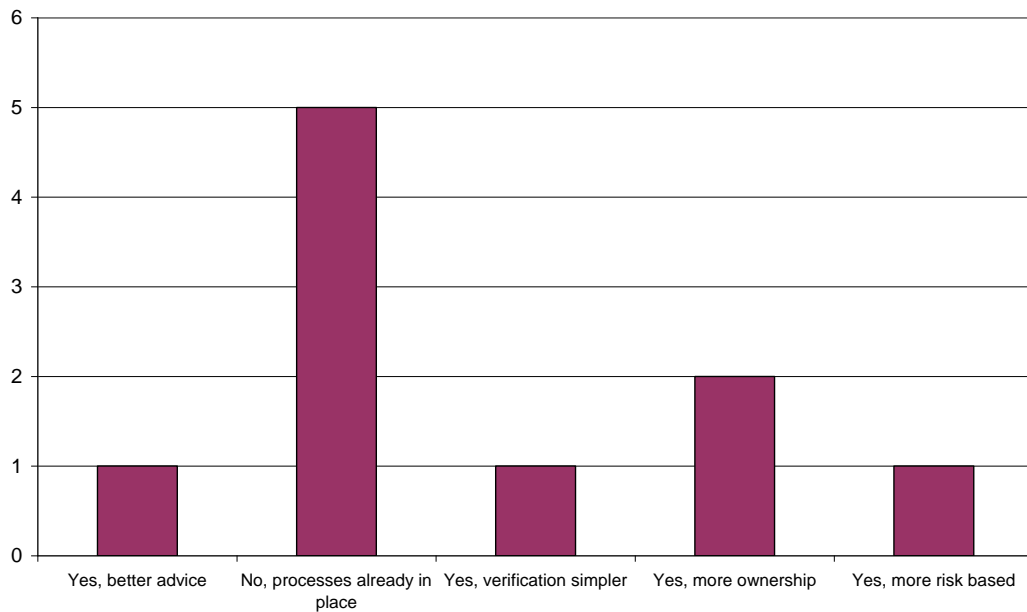
Respondents were also asked if ROGS had made any difference to safety-related decision making and their response is presented in Figure 15.



**Figure 15** Has ROGS made any difference to safety related decision making?

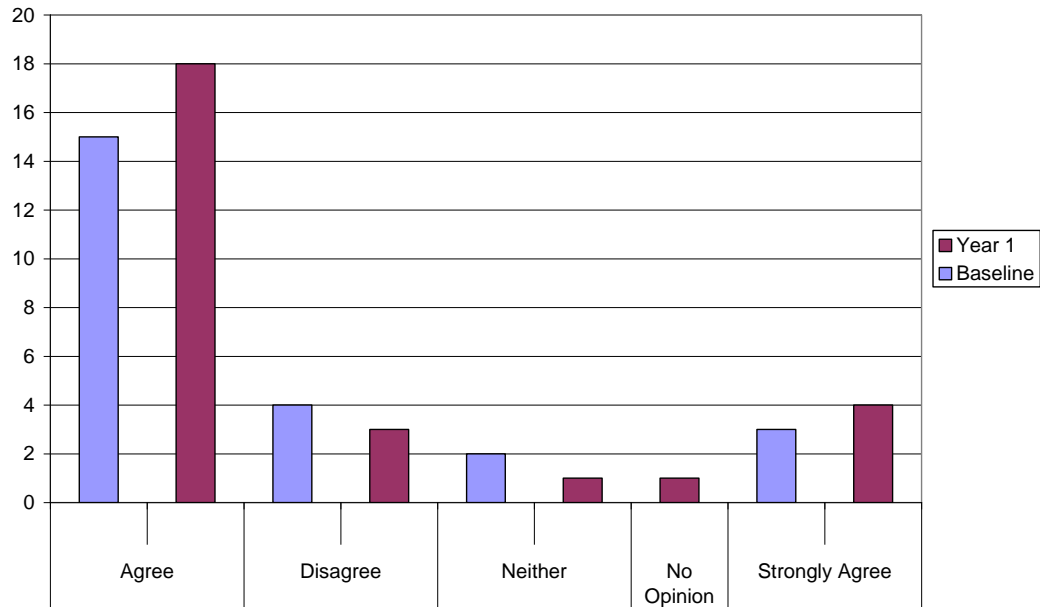
Figure 15 highlights that the majority of baseline respondents (54% - 14 out of 26) felt ROGS had made a difference to safety related decision making but this dropped to only 25% (7 out of 28) in the year one survey. Furthermore, 35% (9 out of 26) of the baseline respondents did not feel ROGS had made a difference but this increased to 54% (15 out of 28) in the year one survey.

Some of the reasons given by the baseline respondents for why they thought ROGS had made a difference to safety related decision making included that it clarified responsibilities, helped organisations re-focus and had simplified safety verification. Similar reasons were given by the year one respondents as shown in Figure 16. However, 5 year one respondents thought that ROGS had not made a difference to safety related decision making as they already had the necessary processes in place before ROGS.



**Figure 16** Year one survey reasons for answer to question “Has ROGS made any difference to safety related decision making?”

Respondents were asked to indicate their level of agreement with the statement “From experience, I believe that standards of safety are the same under ROGS”. Figure 17 highlights the feedback received.



**Figure 17** Respondents level of agreement with the statement “From experience, I believe that standards of safety are the same under ROGS”

Figure 17 highlights that the majority of baseline respondents (69% - 18 out of 26) agreed or strongly agreed that standards of safety are the same under ROGS and this has increased to 79% (22 out of 28 either ‘agree’ or ‘strongly agree’) in the year one survey. Only 15% (4 out of 26) disagreed that standards of safety were the same under ROGS and this decreased to 11% (3 out of 28) in the year one survey.

When asked about the administrative burden of the regulations, 42% of the baseline respondents (11 out of 26) felt more could be done to reduce the burden compared with only 32% (9 out of 28) in the year one survey. A further 38% of baseline respondents (10 out of 26) said they did not feel that any more could be done to reduce it which is similar to the figure of 39% (11 out of 28) in the year one survey who felt the same way.

Those baseline respondents that felt the administrative burden could be reduced made the following suggestions:

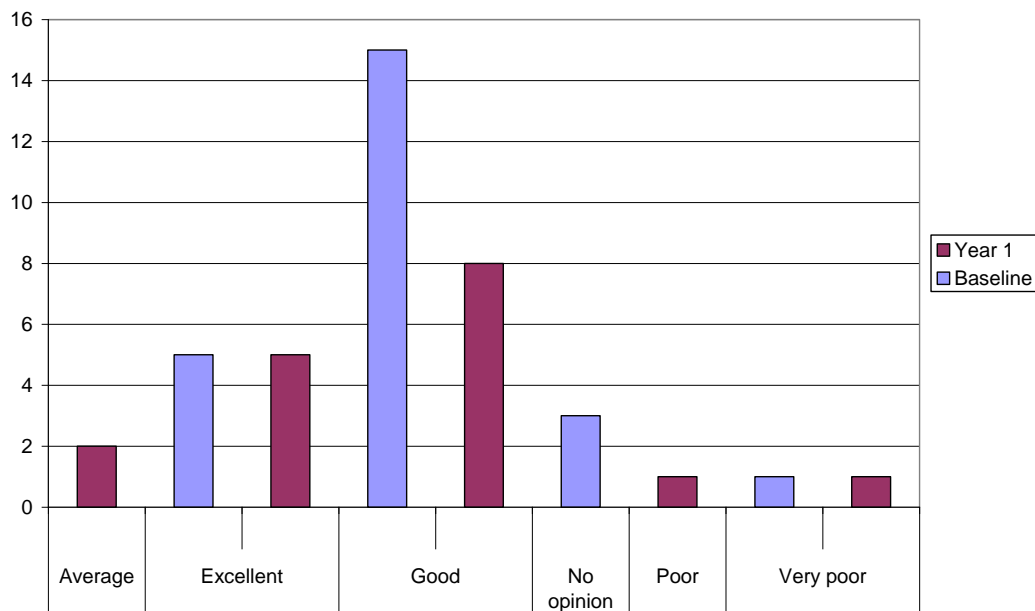
- Remove the Competent Person requirement and reinstate HMRI inspection.
- Retain "ROTS" for heritage sector.
- Remove annual safety reporting (felt unlikely to be of any benefit).
- Reduce high number of calculations required as part of the annual safety report.

- Provide user friendly guidance to assist operators with determining the level of detail required for Safety Certificate submission documents.

The main suggestion from the year one respondents for reducing the administrative burden was to reduce the amount of documentation required by ROGS. However, it is also worth noting that one baseline respondent did make the comment that the administrative burden has reduced considerably by comparison with the Railway Safety Case regime.

Respondents in the year one survey were asked if they had requested and / or received help from ORR regarding ROGS. Of the 17 respondents that had requested help, all but one had received support. There was no baseline data available for comparison to this question.

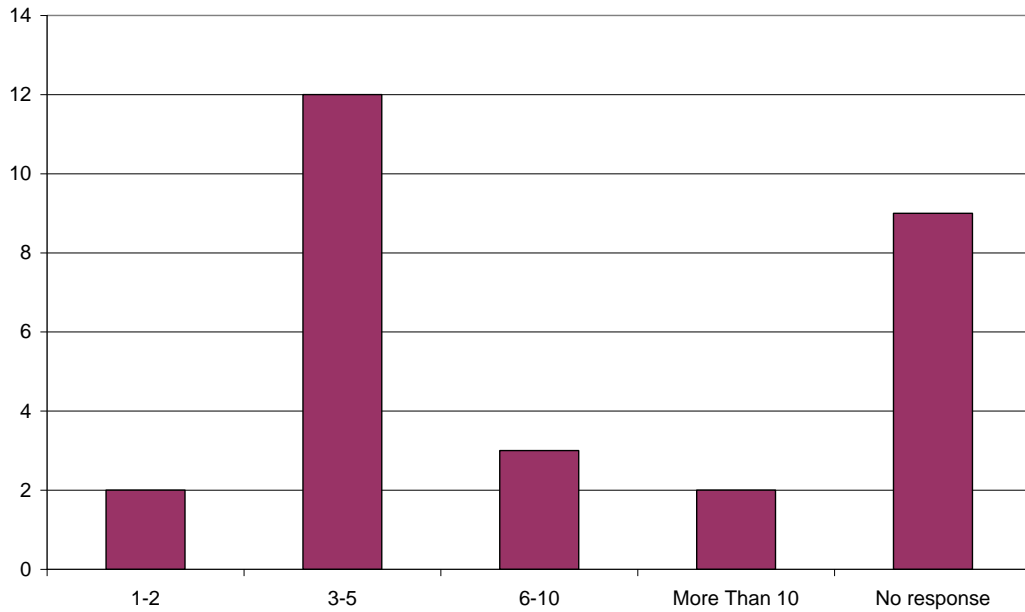
Respondents were asked how they would describe the help and support they have received from ORR and their feedback is highlighted in Figure 18.



**Figure 18** How would you describe the help and support you have received from ORR?

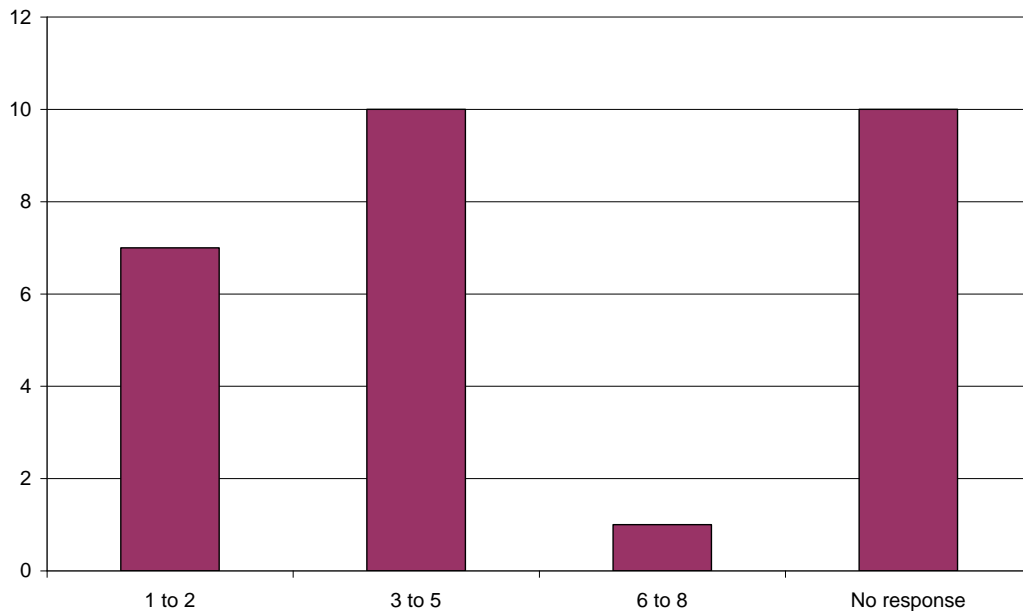
Figure 18 highlights that in total 83% respondents (20 out of 24 that received help) felt that the help and support received from ORR had been either excellent or good. In the year one survey, only 17 respondents indicated that they had received help and, of these, 76% (13 out of 17) felt this to be either excellent or good. Only one person in the baseline survey described the help as being very poor, although in the year one survey, one person felt the support was very poor and another thought it was poor.

The year one respondents were asked three questions relating to visits from ORR inspectors (there was no baseline data available for comparison to these questions). They were firstly asked how many times they had received a visit from an ORR inspector (HMRI) in 2007. It can be seen from Figure 19 that, of those who responded, the majority (63% - 12 out of 19) had received 3 to 5 visits. Two respondents had received only 1 to 2 visits but another 2 had received more than 10 visits.



**Figure 19** How many times have you received a visit from an ORR inspector in 2007?

Those who had received an inspector visit were asked typically how much time the inspector spent with the organisation on one visit (there were 18 responses). Figure 20 shows that most respondents (55% - 10 out of 18) had visits of 3 to 5 hours.



**Figure 20** Typically, how much time did the ORR inspector spend with your organisation on one visit (in hours)?

In terms of how a post-ROGS visit compared with a pre-ROGS visit, most respondents felt that about the same amount of time was spent on post-ROGS visits as were spent on visits before ROGS came into force (74% - 14 out of 19) while 21% (4 out of 19) thought more time was spent post-ROGS. One person felt that less time had been spent.

Finally, all respondents were asked what else ORR could do to help them with ROGS. Feedback from the year one group included:

- Get more involved with developing projects/ schemes (1 out of 14 comments).
- ORR could do more to provide contact details of parties that have to be consulted on Safety Certificates as a part of the agreement process (1 out of 14 comments).
- Provide briefing material suitable for next level managers, e.g. in PowerPoint format (1 out of 14 comments).
- Continue discussions relating to Safety Verification with heritage sector (1 out of 14 comments).
- Clearly defining the programme and scope of intervention audits (1 out of 14 comments).

- Focused inspection with quick feedback, particularly on examples of best practise they see elsewhere (1 out of 14 comments).
- There is nothing more ORR can do at this time (4 out of 14 comments).

One respondent also commented on how positive their relationship was with their lead inspector.

## **3.5 SURVEY FINDINGS – COMPLETED BY DUTY HOLDERS ONLY**

### **3.5.1 Number of duty holders responding to survey**

As described in Section 3.3, there were a total of 28 organisations who responded to the year one survey; 22 classed themselves as duty holders and 6 classed themselves as non-duty holders.

### **3.5.2 Safety Management System (SMS)**

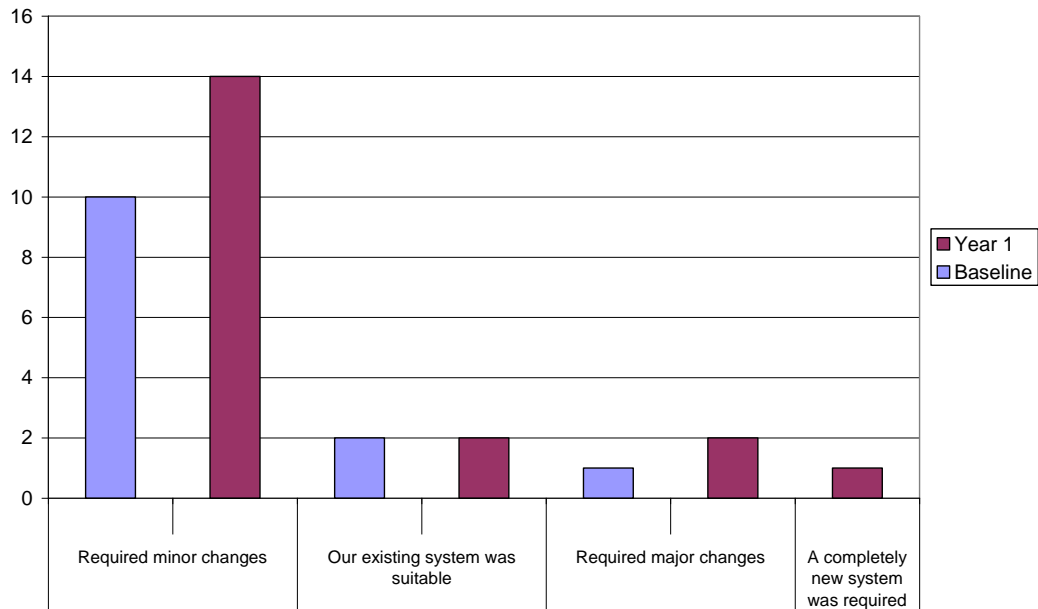
Duty holders only were asked a series of questions relating to safety management systems (SMS).

In order to ensure the SMS questions were relevant to the respondent, duty holders were firstly asked if they had a SMS which was ROGS compliant. In the baseline survey, a total of 12 organisations confirmed they had a ROGS compliant system in place with this increasing to 19 organisations in the year one survey. These organisations were asked additional questions relating to their SMS.

For comparison purposes, all responses relating to the SMS questions have been analysed in relation to the numbers of respondents who said they had a ROGS compliant SMS (12 baseline and 19 year one). It should be noted however, that, for some SMS questions, the number of responses does not match the number of organisations that confirmed they had a ROGS compliant system. This may be because an organisation felt the question was not relevant or they felt they could comment on it even without having a ROGS compliant system.



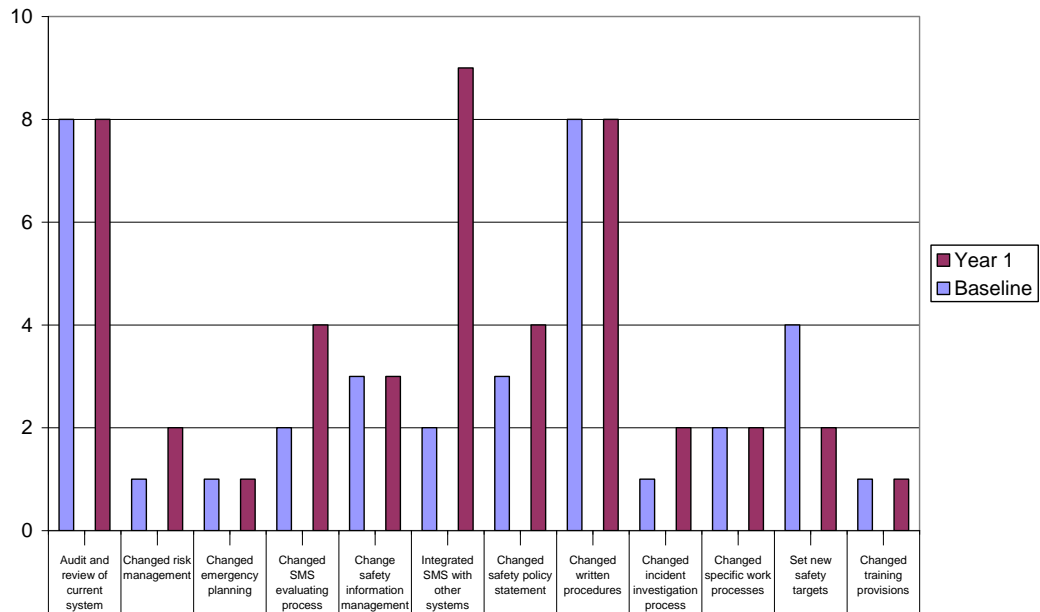
Figure 21 highlights the extent to which duty holders had to change or adapt their existing SMS in order to address the requirements under ROGS.



**Figure 21** To what extent have you had to change or adapt your existing safety management system in order to fully address the requirements for an SMS under ROGS?

Figure 21 highlights that the majority of baseline respondents (77% - 10 out of 13) stated that their existing SMS required minor changes to become ROGS compliant. This compares with 74% (14 out of 19) of the year one respondents expressing the same view. One baseline respondent said their existing SMS required major changes compared with two year one respondents. Two respondents from both surveys said their SMS was suitable in its current format. Finally, one of the year one respondents indicated that a completely new system was required.

Figure 22 highlights the action taken to change or adapt existing SMS's to ensure they fully address the requirements for an SMS under ROGS. It should be noted that respondents were asked to indicate all the changes they had made, not just provide one change.



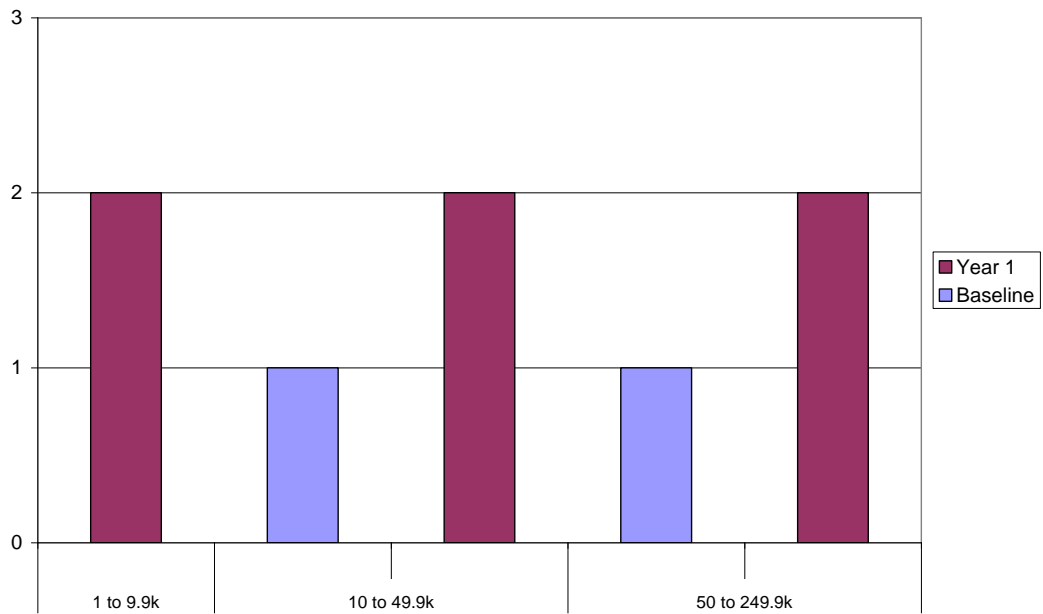
**Figure 22** Action required to change or adapt existing SMS to ensure it fully addresses the requirements for an SMS under ROGS

Figure 22 highlights that the most significant changes made to existing SMS's in both surveys were:

- Conducting an audit and review of the current SMS, indicated by 66% of companies with a ROGS compliant SMS in the baseline survey (8 out of 12) and 42% of such companies in the year one survey (8 out of 19)
- Changing the associated written SMS procedures, indicated by 66% of companies with a ROGS compliant SMS in the baseline survey (8 out of 12) and 42% of such companies in the year one survey (8 out of 19).

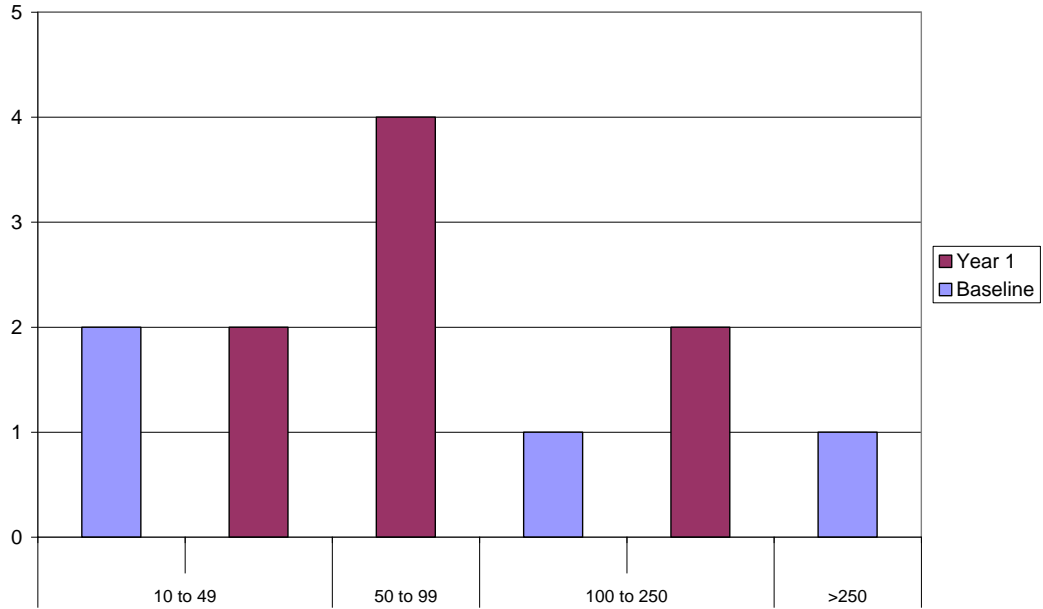
It is also of note that 47% (9 out of 19) of the companies with a ROGS compliant SMS in the year one survey indicated that they had 'integrated SMS with other systems', compared with only 17% (2 out of 12) of such companies in the baseline survey.

In order to understand the cost associated with SMS requirements, respondents were asked to estimate the costs (in GBP and number of working days spent) incurred by their organisation as a result of maintaining an SMS under ROGS per year. The findings are shown in Figure 23 and Figure 24. It can be seen from Figure 23 that a range of costs were incurred, from less than £10k for two of the year one respondents to 50 to 249.9k for two other year one respondents and one baseline respondent.



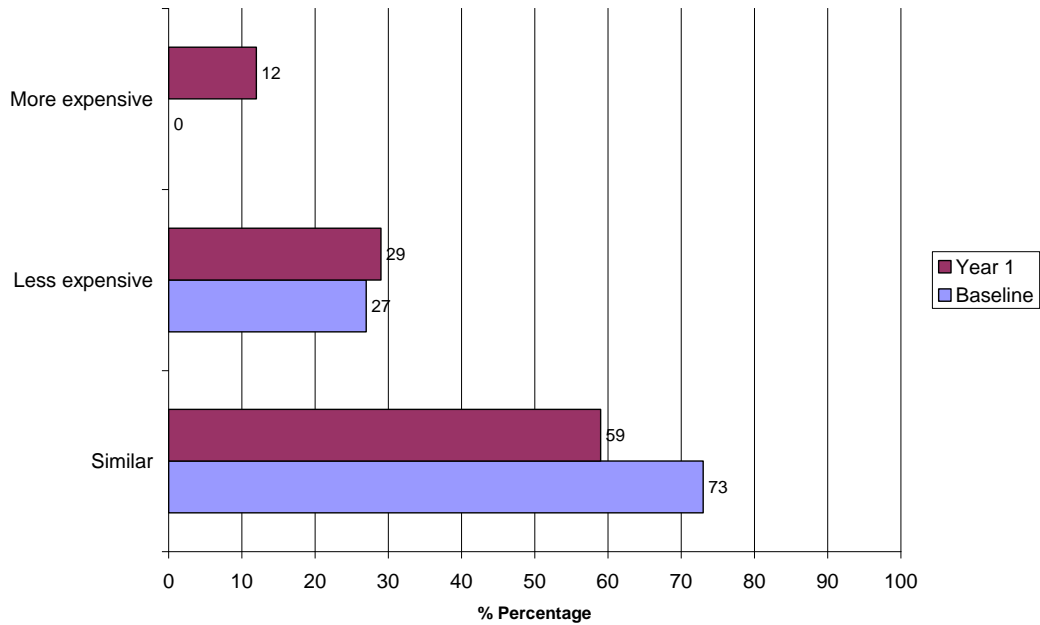
**Figure 23** Estimated cost of maintaining an SMS under ROGS per year (000s GBP)

The days spent by respondents in maintaining an SMS under ROGS per year are shown in Figure 24. It can be seen that the baseline responses ranged from between 10 to 49 days to more than 250 days. Most year one responses were in the 50 to 99 days category (4), although another two were only 10 to 49 days and two were 100 to 250 days.



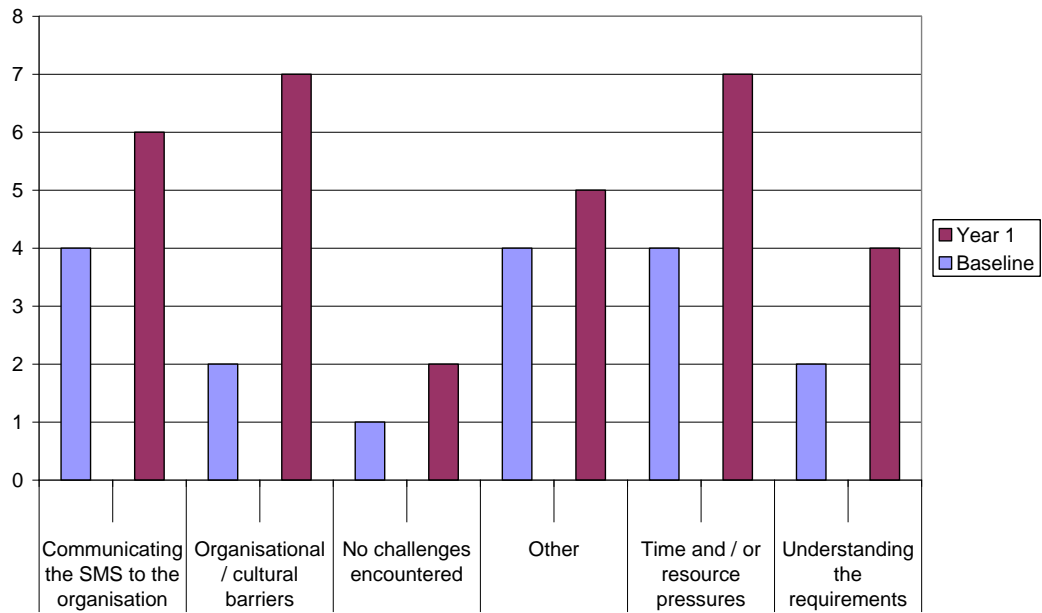
**Figure 24** Estimated days spent maintaining an SMS under ROGS per year

Figure 25 highlights how the respondents felt the costs of maintaining a safety case under the previous regulatory regime compare with current costs of maintaining an SMS under ROGS. It can be seen that the majority of baseline respondents (73% - 8 out of 11) felt the costs of maintaining a safety case under the previous regulatory regime were similar to the costs associated with maintaining an SMS under ROGS, although this fell to 59% (10 out of 17) in the year one survey. Two of the year one respondents felt that SMS maintenance costs were more expensive than safety cases.



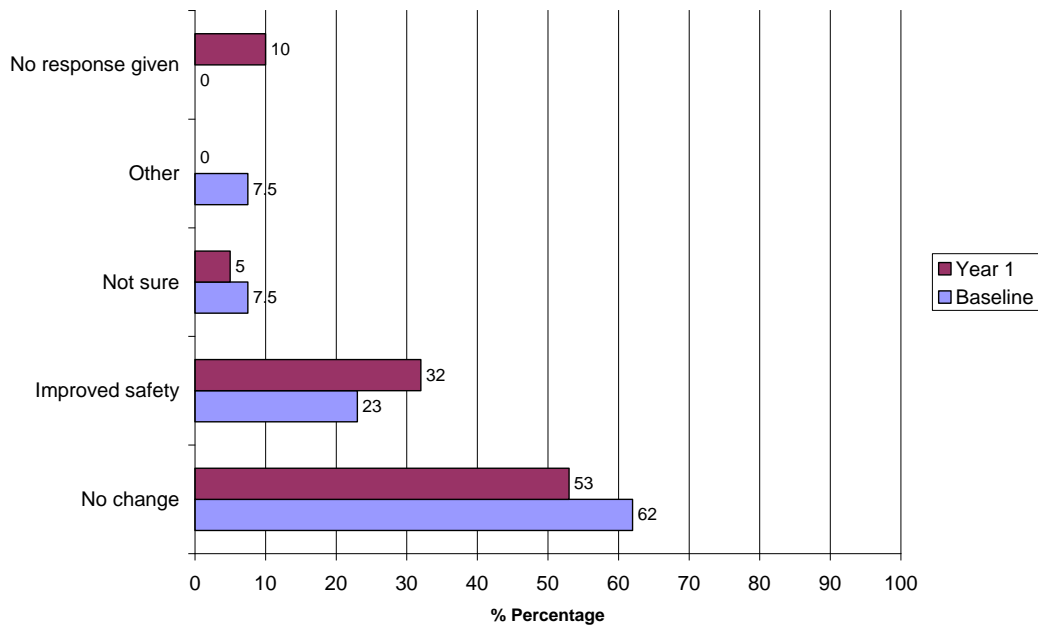
**Figure 25** Comparison of the costs associated with maintaining a safety case compared with the current costs of maintaining an SMS under ROGS

Respondents were asked to highlight the main challenges faced whilst maintaining an SMS under ROGS. Figure 26 shows that the main difference between the surveys is in relation to 'Organisational and cultural barriers' in that only 17% (2 out of 12) baseline respondents mentioned this factor compared with 37% (7 out of 19) year one respondents. Also of note is that 33% (4 out of 12) of baseline respondents chose 'Time and / or resource pressures' as a challenging factor which increased to 37% (7 out of 19) in the year one survey.



**Figure 26** Main challenges in maintaining an SMS under ROGS

Finally, respondents were asked to what extent they felt SMS under ROGS had affected safety. It can be seen from Figure 27 that the majority of baseline responses (62% - 8 out of 13 responses) indicated that SMS under ROGS had not caused any changes to safety. This dropped to 53% (10 out of 19) in the year one survey. Encouragingly 23% (3 out of 13) of baseline respondents said SMS under ROGS had improved safety which increased to 32% (6 out of 19) in the year one survey. There were no responses which indicated that SMS under ROGS had hindered safety.



**Figure 27** To what extent do you think SMS under ROGS has affected safety?

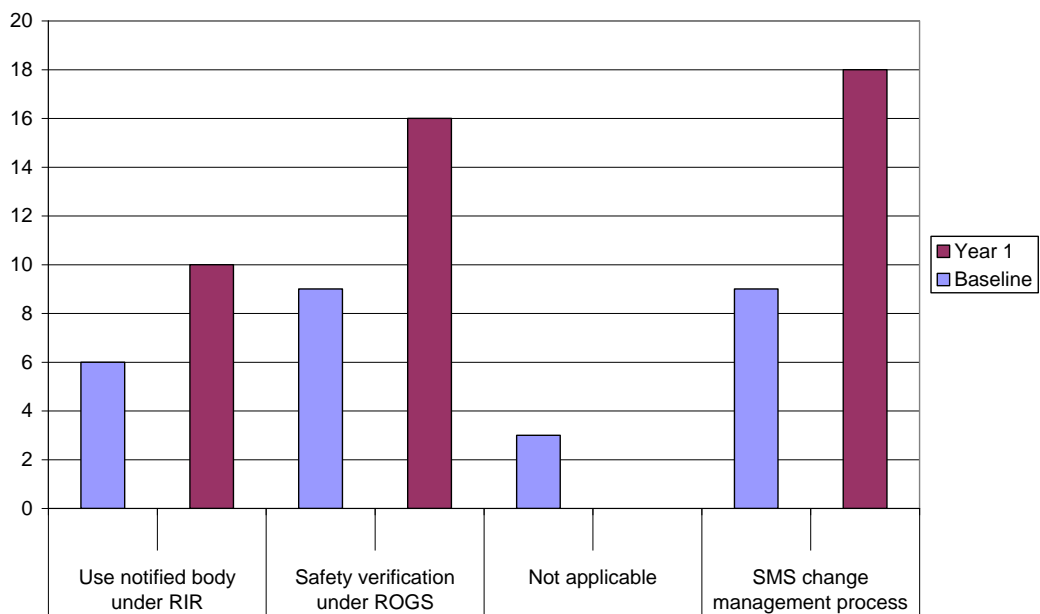
Other comments on the SMS and ROGS mentioned in the year one survey were as follows:

- *“ROGS is not the main driver for the safety management system”.*
- *“The greatest challenge is in getting managers to understand the company's greater responsibilities under ROGS and achieving a shift away from a compliance (with Regulations and Rules) culture towards a risk-based interdependent culture”.*
- *“In order to achieve authorisation and certification, no SMS changes were necessary, though lengthy application documents were prepared. However, this left us with an inadequate SMS with no intermediate documents between the application and low-level procedures. It has therefore been necessary to spend substantial time and effort in developing a new SMS document and standards framework in order to embrace the risk-based nature of ROGS. Although this has required substantial work it has delivered us a much more robust and effective management system than was in place under the Safety Case Regulations, and we see it as a wholly positive change”.*

### 3.5.3 Safety Verification

All duty holders were asked if they had processes in place for ensuring the safe introduction of new / altered infrastructure or rolling stock to their operation. It is worth noting that although ROGS are now in force, extensions to safety verification provisions have been granted to Heritage Railways and Tramways.

Figure 28 highlights all of the processes duty holders have in place. As duty holders were asked to identify all the processes that were applicable to their organisation, the responses sum to more than the number of companies surveyed in each sample. However, for comparison purposes, percentages are calculated from the number of companies in each sample based on the fact that all companies could have responded to an item, e.g. 6 baseline respondents selected 'use notified body under RIR' out of a possible 26 that could have done.

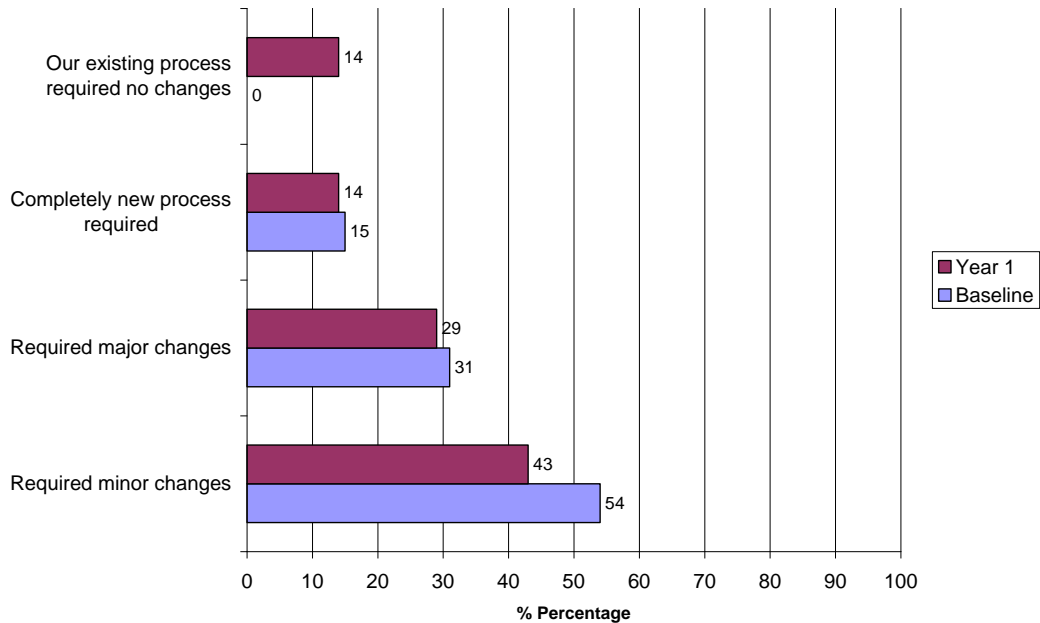


**Figure 28** Duty holder processes in place for the introduction of new / altered infrastructure or rolling stock

Figure 28 shows that companies indicated an increased use of all processes in the year one survey compared with the baseline. Use of “notified body” under RIR increased from 23% (6 out of 26) to 36% (10 out of 28), ‘safety verification under ROGS’ increased from 35% (9 out of 26) to 57% (16 out of 28) and ‘SMS change management process’ increased from 35% (9 out of 26) to 64% (18 out of 28).



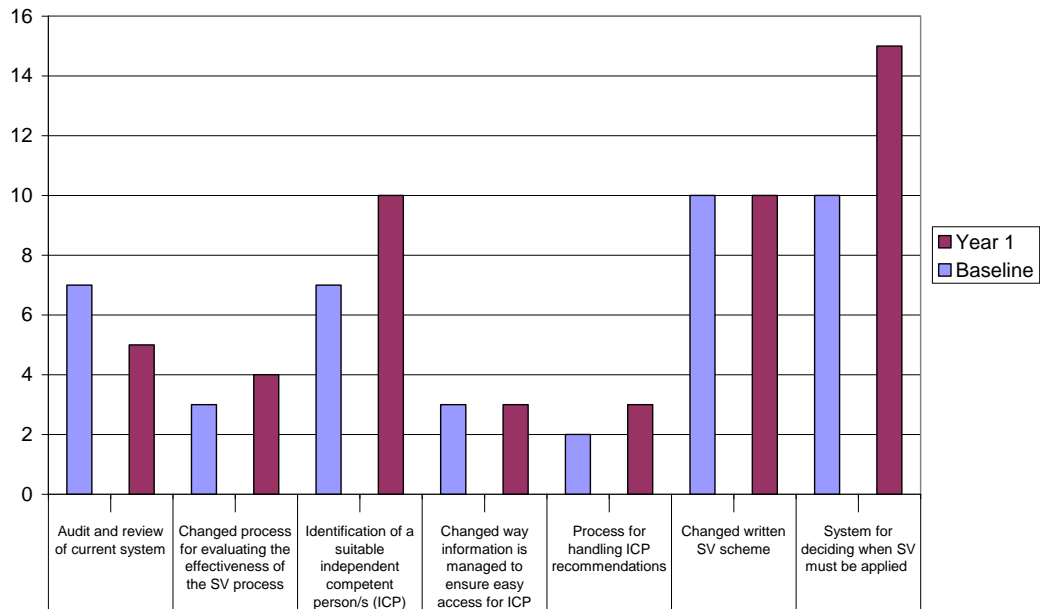
The duty holders that had indicated they used either ‘safety verification under ROGS’ and / or ‘SMS change management process’ were asked further questions on safety verification (11 in the baseline and 21 in year one). These respondents were firstly asked about the extent to which they have had to change or adapt existing processes in order to fully address safety verification requirements under ROGS (Figure 29). It should be noted that sometimes there are more responses to these questions than would be expected, perhaps due to some respondents not realising they were not required to provide a view.



**Figure 29** Extent to which duty holders have had to change or adapt existing processes in order to fully address safety verification requirements under ROGS

Figure 29 highlights that the majority of baseline respondents (54% - 7 out of 13) only required minor changes to their existing processes, compared with 43% (9 out of 21) in the year one survey. A further 31% of baseline respondents required major changes (4 out of 13) compared with only 29% (6 out of 21) in year one. A completely new process was required by 15% of baseline respondents (2 out of 13) and 14% (3 out of 21) in year one. Encouragingly, there was also 14% (3 out of 21) of year one respondents who stated that their existing process required no changes.

Duty holders were asked about the activities they undertook in order to fully address safety verification requirements under ROGS and the feedback is presented on Figure 30.



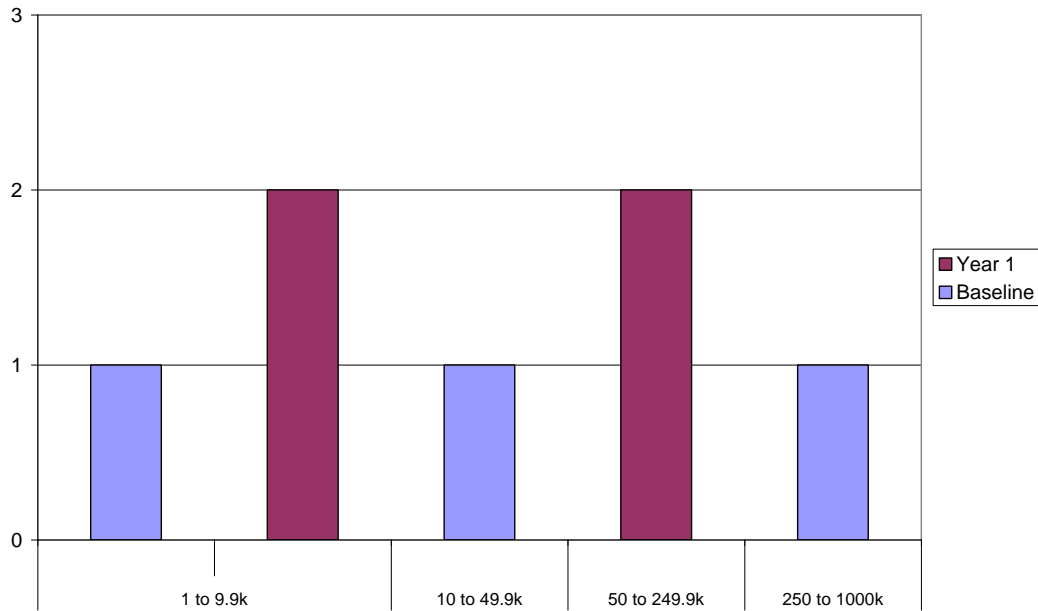
**Figure 30** Activities undertaken in order to fully address safety verification requirements under ROGS

Figure 30 highlights a similar pattern of responses as observed in the baseline survey. Key activities undertaken were:

- Developing a system for deciding when SV must be applied
- Changing the written SV scheme
- Identifying a suitable independent competent person (ICP)

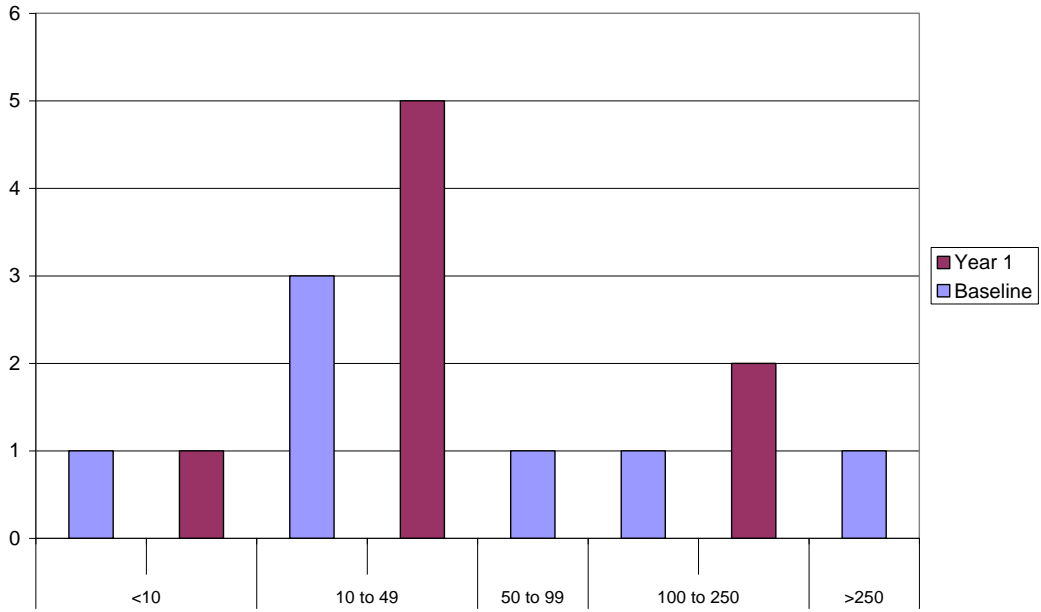
More respondents said they were undertaking these activities in the year one survey, however, this is likely to be partly attributable to more people responding to the year one survey (28 versus 26 in the baseline survey).

Duty holders were also asked to estimate the cost they would incur as a result of undertaking safety verification under ROGS per year (in GBP and in working days). Figure 31 shows that three baseline respondents had costs ranging from less than 10k to between 250-1000k. Two year one respondents had annual costs of 50 to 249.9k although the costs for a further two were less than £10k.



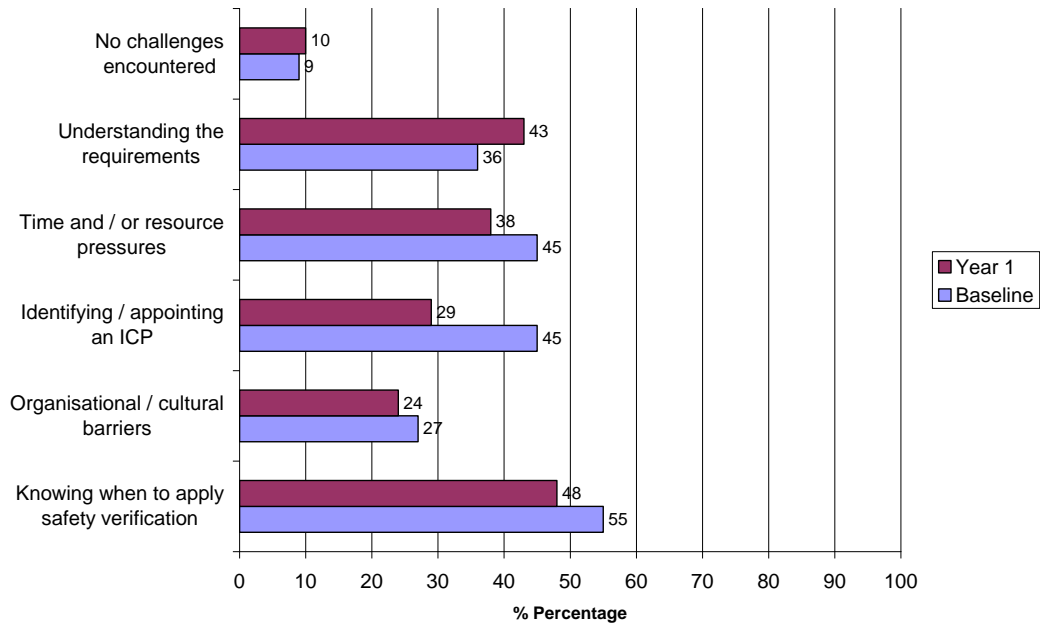
**Figure 31** Costs incurred as a result of safety verification under ROGS per year (000s GBP)

Figure 32 shows that the days spent on SV under ROGS by baseline respondents ranged from less than 10 to more than 250. The year one responses were mostly in the 10 to 49 days category (5).



**Figure 32** Days spent as a result of safety verification under ROGS per year

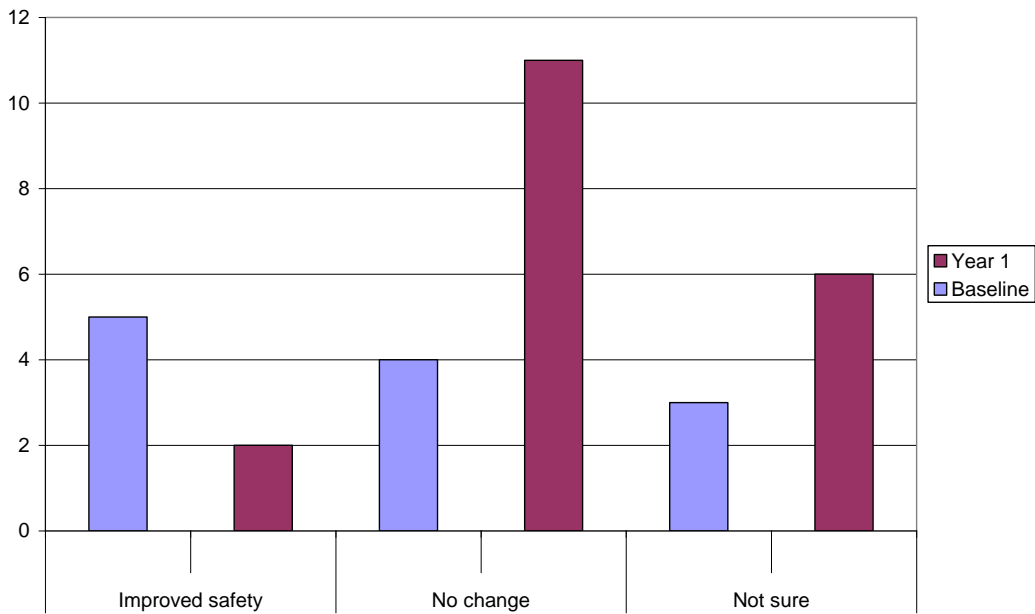
Figure 33 highlights the perceived main challenges in meeting the requirements of safety verification. It can be seen that the most significant challenge in the baseline survey was felt to be knowing when to apply safety verification, this was also the case in the year one survey. Other differences are with experiencing time and / or resource pressures (45% in the baseline survey (5 out of 11 respondents) decreasing to 38% in the year one survey (8 out of 21)); and understanding the requirements (36% in the baseline survey (4 out of 11) increasing to 43% in the year one survey (9 out of 21)).



**Figure 33** Main challenges in meeting the requirements of safety verification

NB. The total of the percentages presented for both the baseline survey and the year one survey does not equal 100%. This is because respondents could indicate more than one challenge each. A separate percentage has therefore been presented for each individual challenge.

Finally, respondents were asked the extent to which they felt safety verification had affected safety. Figure 34 highlights that the largest percentage of baseline respondents (45% - 5 out of 11) believed that safety verification had improved safety although this decreased to only 10% (2 out of 21) in year one. The majority of year one respondents (52% - 11 out of 21) felt that safety verification had made no change to safety, compared with only 36% (4 out of 11) of baseline respondents who felt this way.

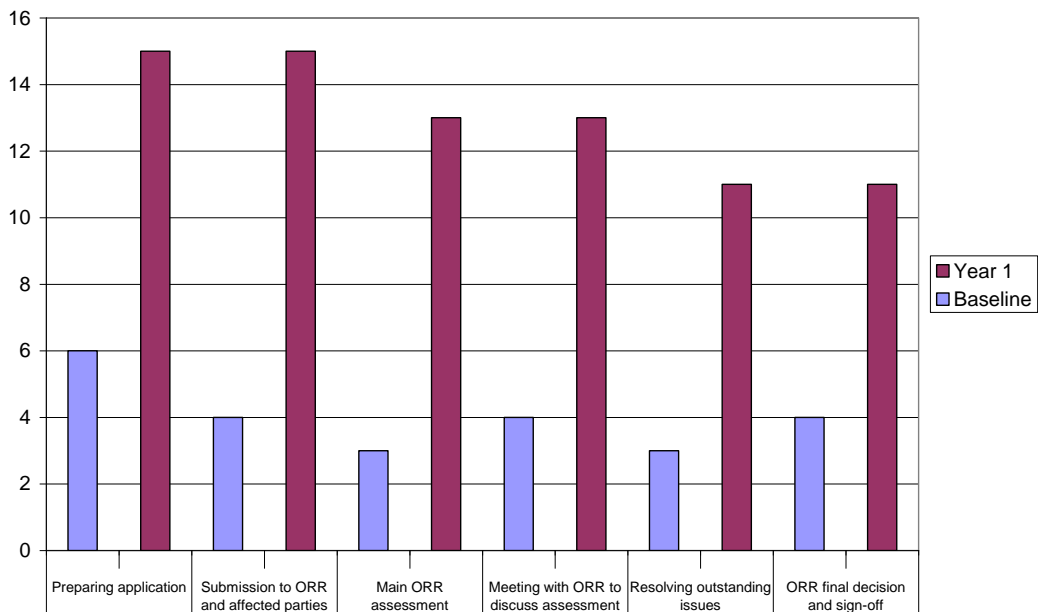


**Figure 34** To what extent do you think SV under ROGS has affected safety?

Perhaps most encouragingly, Figure 34 highlights that not one respondent from either the Year 1 or baseline survey felt that SV under ROGS had degraded safety.

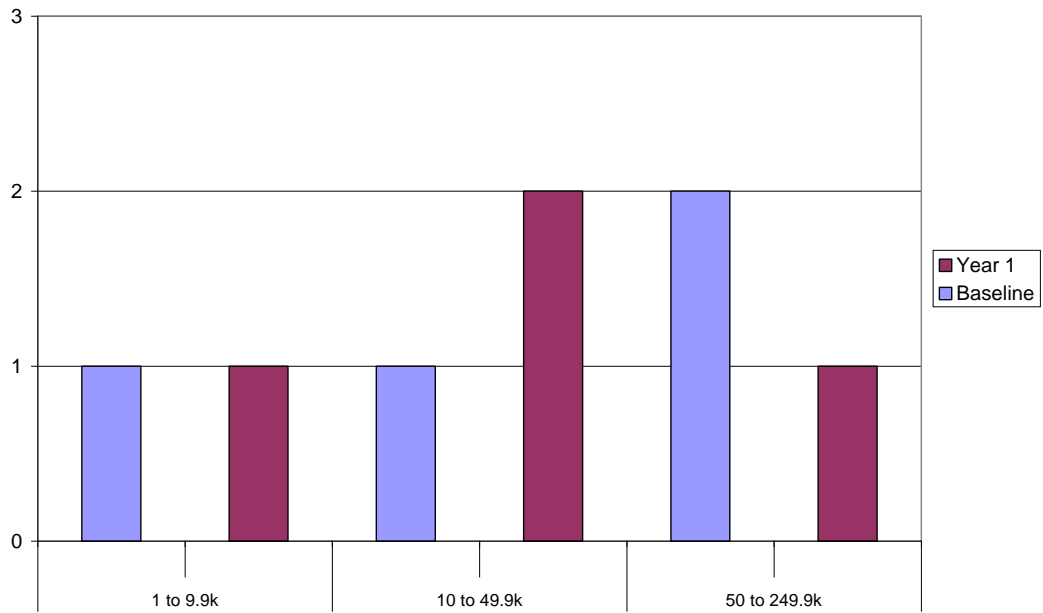
### 3.5.4 Safety Certification

All duty holders were asked if they held a safety certificate under ROGS; 44% of baseline respondents (7 out of 16) and 59% (13 out of 22) of year one respondents said they did have a certificate. Respondents were then asked what stages in the safety certification process they had completed. (NB: respondents were asked to highlight all the stages they had reached). Figure 35 highlights that 6 of the baseline respondents had prepared an application and 4 had submitted this to ORR. This compares with 15 respondents from the year one survey who had prepared an application. Analysis of the data shows that the same 15 companies had also submitted their applications and many had moved on to later stages such as meeting with ORR and resolving outstanding issues. Only 4 of the baseline respondents had reached the sign-off stage of the process compared with 11 in the year one sample.



**Figure 35** Stages in safety certification process completed by duty holders

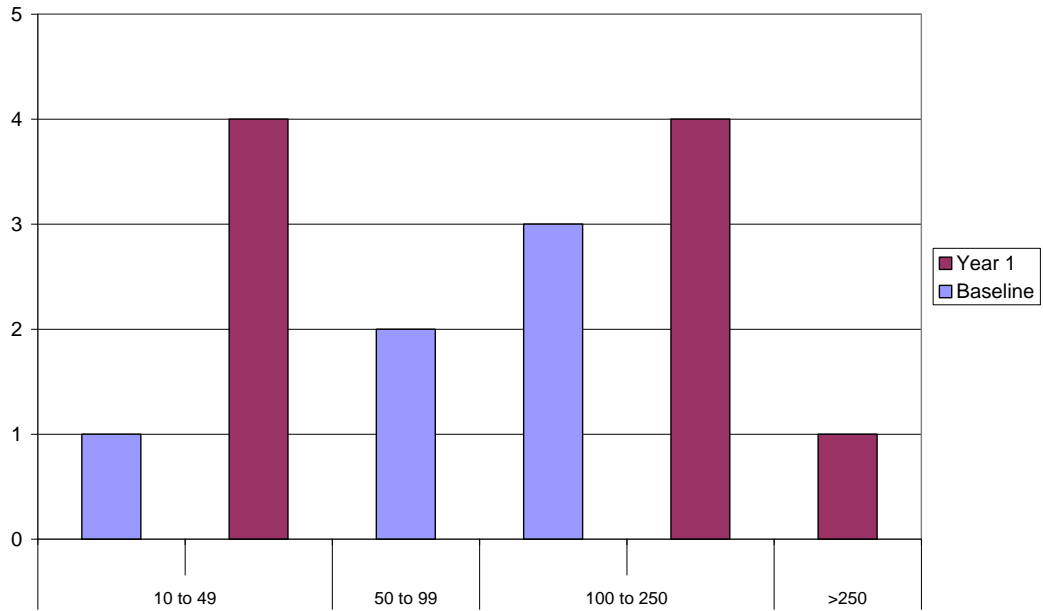
Duty holders were also asked to estimate the costs they incurred as a result of their initial application for a safety certificate under ROGS (in GBP and in working days). The estimated costs (£) are shown in Figure 36. The baseline respondents costs ranged from 1-9.9k to 50-249.9k as did the year one respondents costs.



**Figure 36** Costs incurred as a result of initial application for a safety certificate under ROGS (000s GBP)



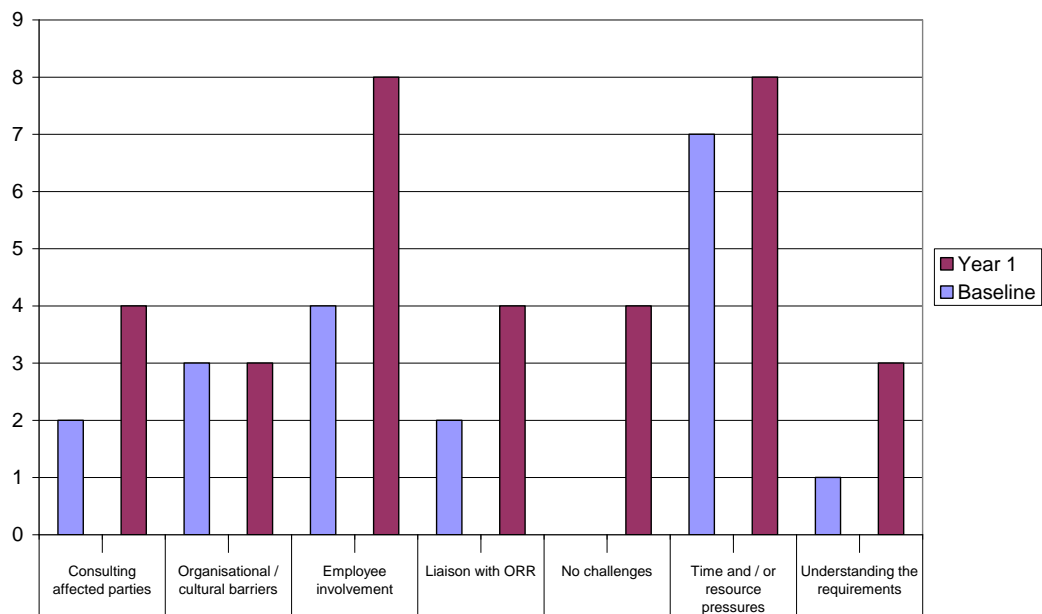
The days spent on the initial application for a safety certificate under ROGS are shown in Figure 37. Again there is a wide range with some organisations in both samples spending only 10-49 days while several others had to spend between 100 to 250 days. One year one respondent had to spend more than 250 days.



**Figure 37** Days spent on the initial application for a safety certificate under ROGS

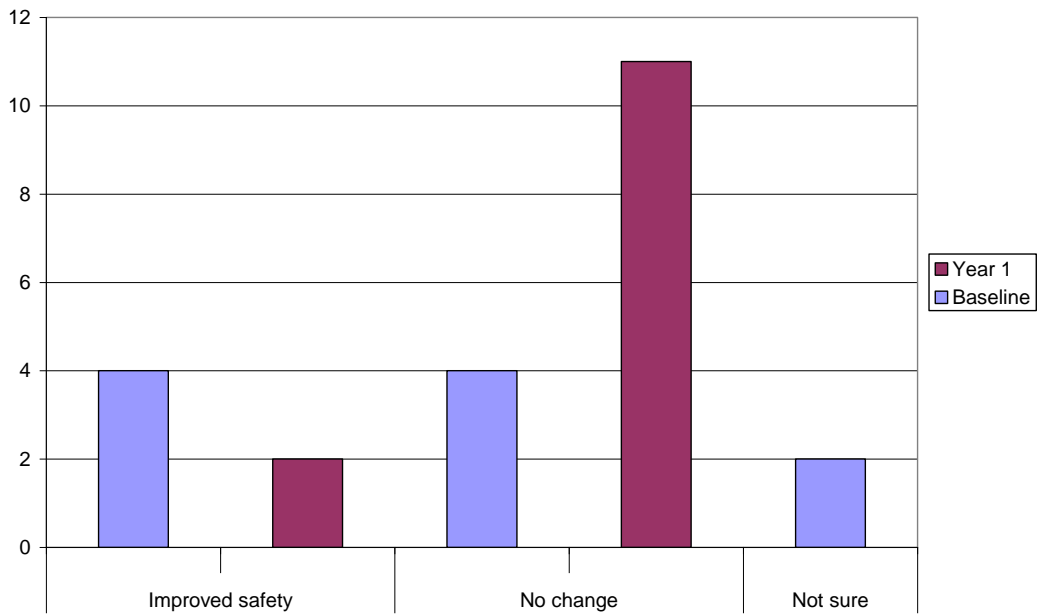
Duty holders were also asked how the time and cost invested in applying for safety certificates compared with the time and cost invested in railway safety case applications. A total of 50% of baseline respondents (5 out of 10) felt the time spent applying for a safety certificate under ROGS and the associated cost was less than the time and cost spent applying for a railway safety case. This compares with 47% (7 out of 15) of the year one respondents who also thought the time was less and 50% (7 out of 14) who also thought the cost was less. A further 40% of baseline respondents (4 out of 10) felt the time and cost of application in both regulatory regimes was about the same, compared with 47% of year one respondents who thought the time was the same and 50% who thought the cost was the same. One respondent in the baseline survey felt the new safety certification process was more expensive (in terms of both time and cost) and one respondent in the year one survey thought the process was more time consuming.

Duty holders were asked what the main challenges were with regard to gaining their safety certificates (Figure 38). It can be seen that the largest percentage of baseline responses (44% - 7 out of 16 possible responses) indicated time and / or resource pressures as being a challenge in applying for a safety certificate. This was also a common response in the year one survey with 36% (8 out of a possible 22) of duty holders selecting this category. Employee involvement (25% - 4 out of 16) was also prominent in the baseline responses and increased to 36% (8 out of 22) in the year one survey. Encouragingly, 4 year one respondents indicated that they found no challenges in the certification process.



**Figure 38** Main challenges in acquiring a safety certificate under ROGS

Finally, duty holders were asked to what extent they felt safety certification under ROGS has affected safety, shown in Figure 39. It can be seen that 40% (4 out of 10) of baseline respondents felt that safety certification had improved safety compared with only 15% (2 out of 13) in year one. In addition, 40% of baseline respondents felt it had not caused any change which increased to 85% (11 out of 13) in year one. Encouragingly, no one felt safety certification had hindered safety.

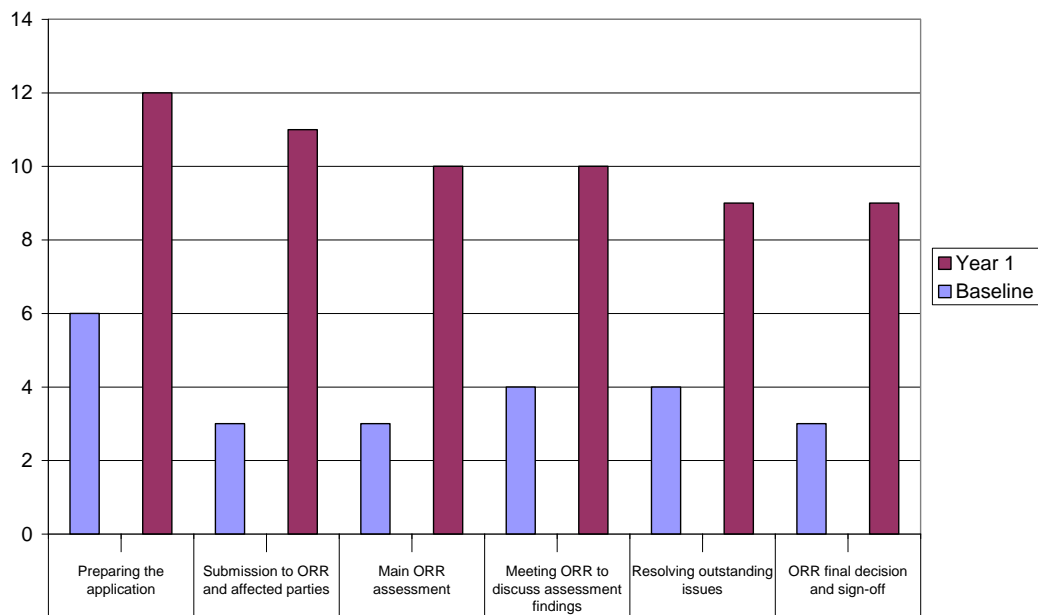


**Figure 39** To what extent do you think safety certification under ROGS has affected safety?

Perhaps most encouragingly, Figure 39 highlights that not one respondent from either the Year 1 or baseline survey felt that SV under ROGS had degraded safety.

### 3.5.5 Safety Authorisation

All duty holders were asked if they had safety authorisation under ROGS; 31% of baseline respondents (5 out of 16) and 45% (10 out of 22) year one respondents said they did have authorisation. Respondents were then asked what stages in the safety authorisation process they had completed. Figure 40 shows that all of the stages in the safety authorisation process had been reached by many of the responding duty holders in the baseline survey and this was the same in year one only in greater numbers. In the year one survey, most of the 12 companies that had prepared an application had also moved on to most of the later stages of the process. Three duty holders in the baseline indicated having reached the last stage compared with 9 in year one.

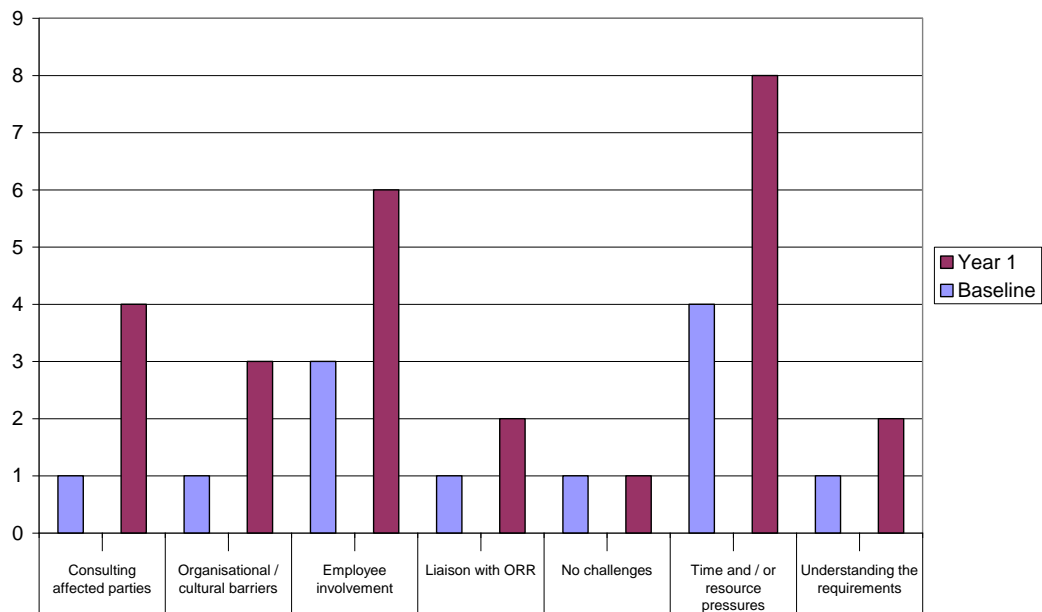


**Figure 40** Stages in safety authorisation process completed by duty holders

Duty holders were also asked to estimate the costs they incurred as a result of their initial application for a safety authorisation under ROGS (in GBP and in working days). It was found that very few organisations were able to estimate costs in monetary terms. One baseline respondent estimated a cost of £144,000 while their were only three year one responses which were less at £4k, £25k and £50k. Similarly, only a few respondents in each survey were able to estimate the days involved in applying for safety authorisation under ROGS and this ranged from 10 to 49 to more than 250 in both surveys.

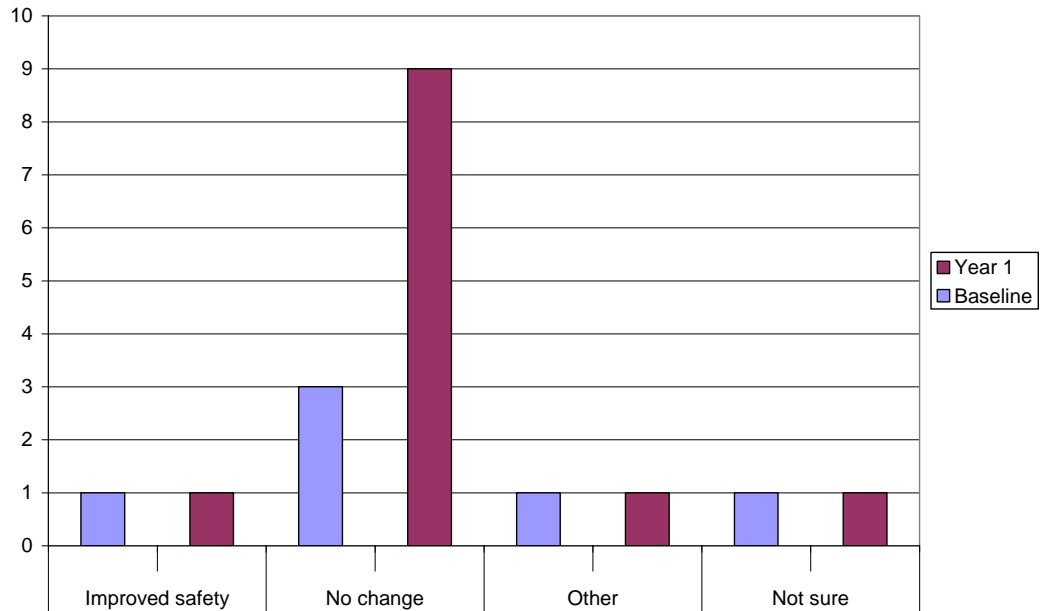
Duty holders were asked how the time and cost invested in applying for safety authorisation compared with the time and cost invested in railway safety case applications. A total of 50% of baseline respondents (3 out of 6) and 50% (6 out of 12) of year one respondents felt the time spent applying for safety authorisation under ROGS and the associated cost was the same as the time and cost spent applying for a railway safety case.

Duty holders were asked what the main challenges were with regard to gaining safety authorisation. The responses in Figure 41 show that the largest number of baseline responses (25% - 4 out of 16 possible responses) indicated time and / or resource pressures as being a challenge in applying for safety authorisation which increased to 36% (8 out of 22 possible responses) in year one. Employee involvement was mentioned by 19% (3 out of 16) of respondents in the baseline survey which increased to 27% (6 out of 22) in year one.



**Figure 41** Main challenges in acquiring safety authorisation under ROGS

Finally, duty holders were asked to what extent they felt safety authorisation under ROGS has affected safety. Figure 42 highlights that the predominant view was that safety authorisation had not affected safety; 50% (3 out of 6) of baseline respondents and 75% (9 out of 12) in year one indicated this view.



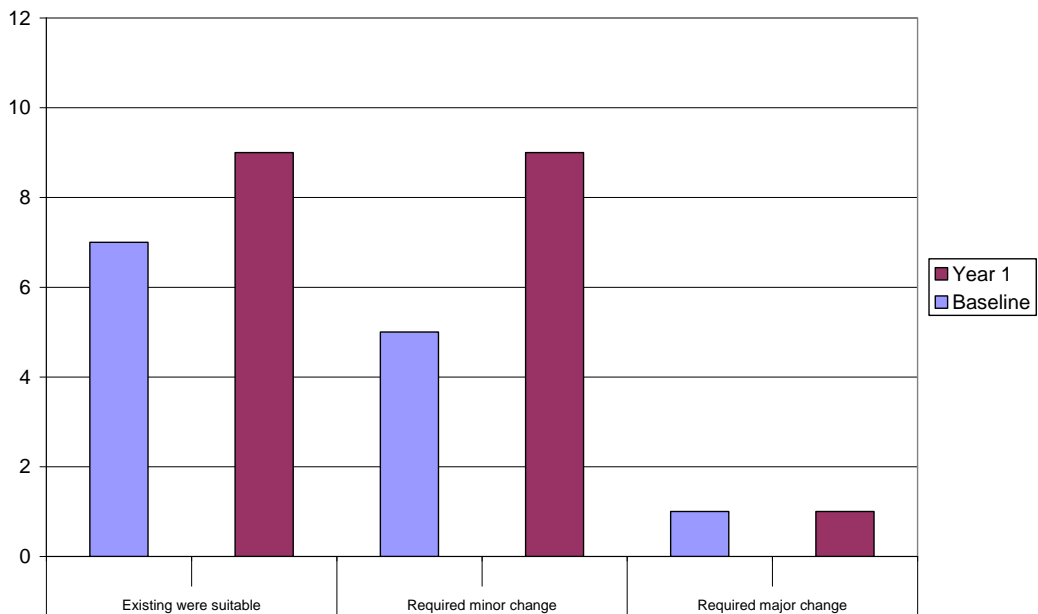
**Figure 42** To what extent do you think safety authorisation under ROGS has affected safety?

One further comment was provided on the safety authorisation process which was as follows:

*“The strong similarities between certification and authorisation has made us question whether the two aspects could have been more closely aligned to prevent duplication”*

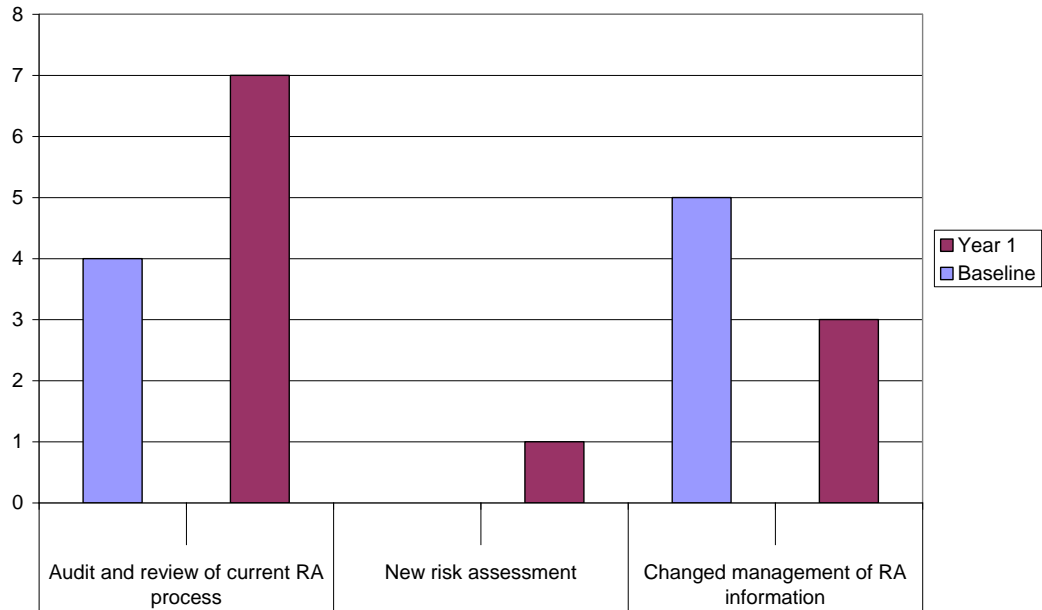
### 3.5.6 Risk Assessment

Duty holders were asked if the requirement for conducting a risk assessment in accordance with Regulation 19 of ROGS applied to their organisation. It was found that it did apply to 88% (14 out of 16) of baseline respondents and 86% (19 out of 22) in the year one survey. Duty holders were then asked about the extent to which they have had to change their existing arrangements for risk assessment in order to address the requirements under ROGS. Figure 43 highlights that the majority of baseline respondents (54% - 7 out of 13) felt their existing risk assessment arrangements were still suitable under ROGS and 41% (9 out of 22) from the year one survey felt the same. A further 38% (5 out of 13) of baseline respondents said their existing system required minor changes and 41% (9 out of 22) of year one respondents agreed. One respondent from each survey said their existing system required major changes.



**Figure 43** Extent to which existing risk assessment arrangements have had to change in order to address the requirements under ROGS

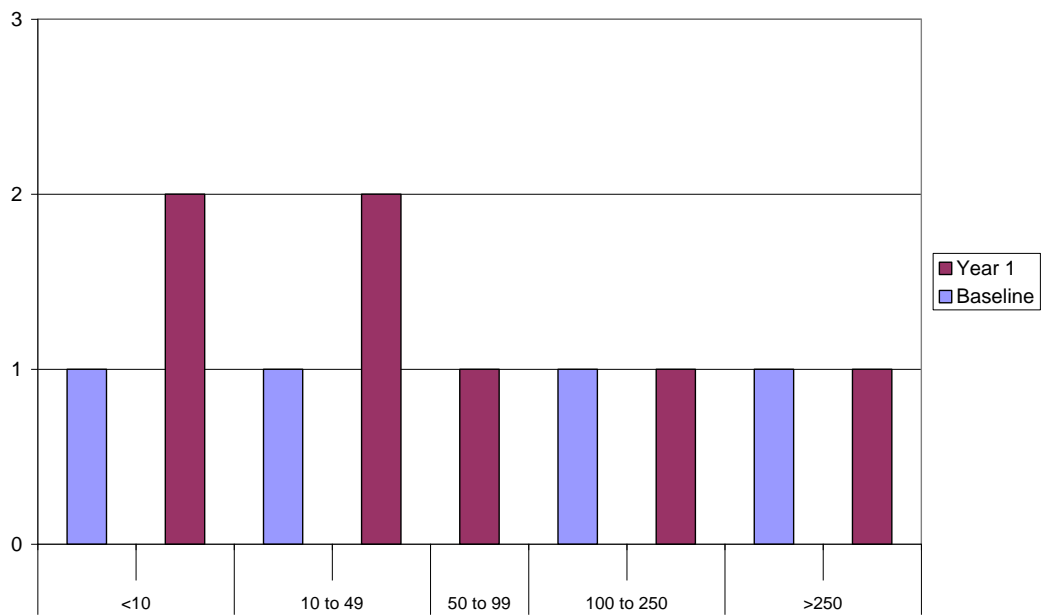
Respondents who indicated making some changes to their existing system were then asked what activities they had undertaken. Figure 44 highlights that 45% of baseline responses (5 out of 11) changed the management of their risk assessment information compared with 27% (3 out of 11) of year one respondents. In addition, 36% of baseline responses (4 out of 11 responses) undertook an audit and review of their current risk assessment process compared with 64% (7 out of 11) in year one. One of the year one respondents indicated conducting a completely new risk assessment.



**Figure 44** Activities undertaken to change existing risk assessment arrangements in order to address ROGS requirements

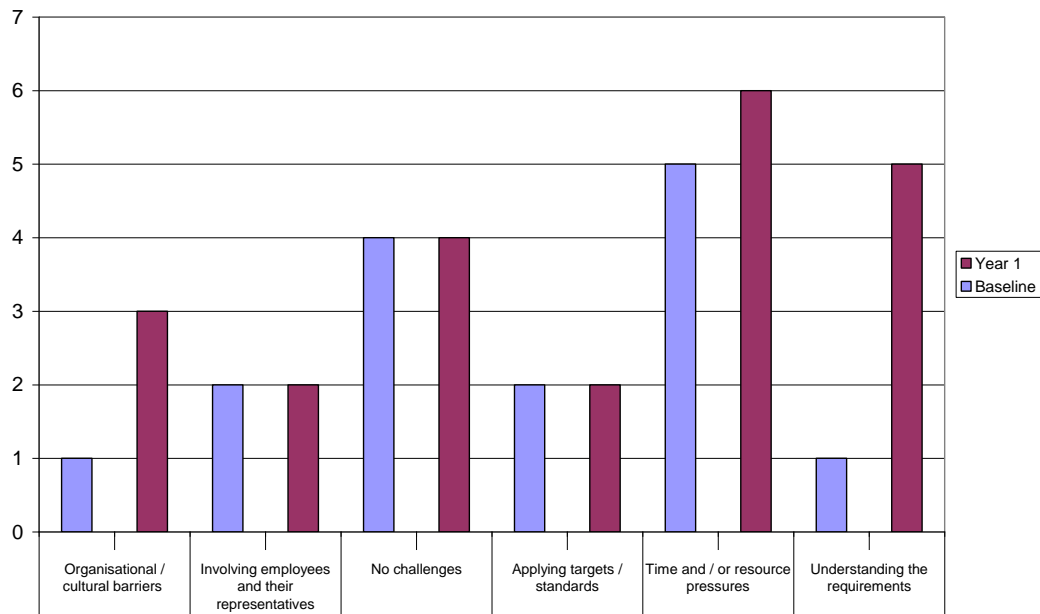


Duty holders were also asked to estimate the cost they had incurred as a result of implementing any new risk assessments or undertaking changes to existing risk assessment processes. Very few organisations were able to provide a monetary cost; one baseline respondent provided a cost of £10,000 and another £60,000. Two year one respondents indicated a cost of £12,000. Several more organisations were able to estimate the number of days spent on implementing new risk assessments or undertaking changes to existing risk assessment processes and this is shown in Figure 45. The baseline responses ranged from less than 10 days to more than 250 whereas the majority of year one responses were in the lower categories (4 out of 7 were less than 50 days).



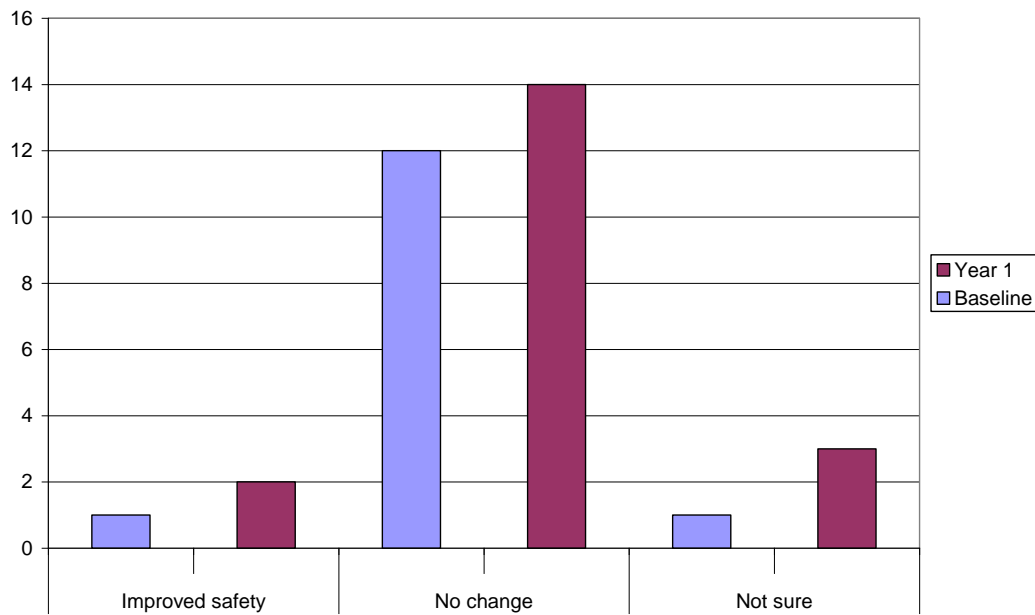
**Figure 45** Number of days spent on implementing new risk assessments or undertaking changes to existing risk assessment processes

Survey respondents were also asked what they felt the main challenges were in adapting their existing risk assessment arrangements to meet the requirements of Regulation 19. Figure 46 highlights that the biggest differences between the surveys is in relation to 'understanding the requirements' which only one baseline respondent mentioned (6%) compared with 23% (5 out of 22) of the year one respondents. Respondents in both surveys felt that time and / or resource pressures were a challenge, 31% (5 out of 16) in the baseline and 27% (6 out of 22) in year one. Four respondents from both surveys felt that they did not encounter any challenges (25% of baseline and 18% of year one responses).



**Figure 46** Main challenges faced in adapting existing risk assessment arrangements to meet the requirements of Regulation 19

Finally, respondents were asked about how the changes to risk assessment have impacted on safety. Figure 47 highlights that the majority of baseline respondents (86% - 12 out of 14) felt there had been no change to safety as a result of the changes brought about to risk assessment under ROGS and 74% (14 out of 19) of year one respondents agreed with this. However, one baseline and two year one respondents did feel that the changes had improved safety.

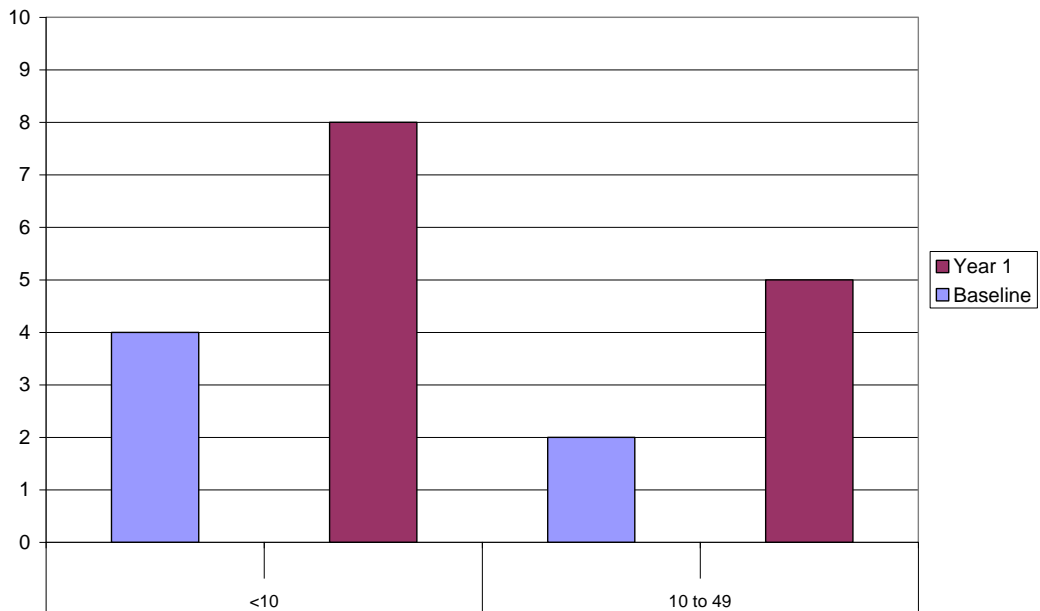


**Figure 47** To what extent do you think the changes to risk assessment under ROGS has affected safety?

### 3.5.7 Annual Safety Report

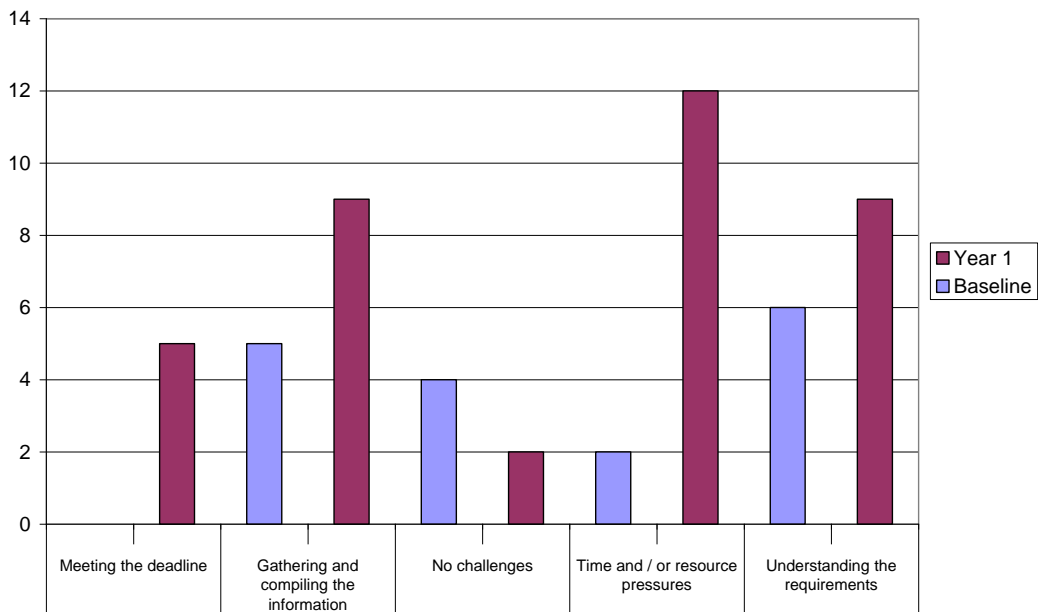
Respondents were initially asked if they were required to compile and submit an annual safety report under ROGS. It was found that 65% (11 out of 17) of baseline respondents said 'yes' as did 90% (19 out of 21) of year one respondents to this question.

Only eight organisations in both surveys were able to estimate the actual costs they incurred per year for compiling and submitting an annual safety report (2 in the baseline and 6 in year one). All estimated the costs to be less than £10k. There were more respondents who could make this estimation in the number of days spent per year and this is shown in Figure 48. It can be seen that the majority of baseline and year one respondents spent less than 10 days on this task (4 out of 6 baseline and 8 out of 13 in year one). A further two baseline respondents and five year one respondents spent between 10 to 49 days on the task.



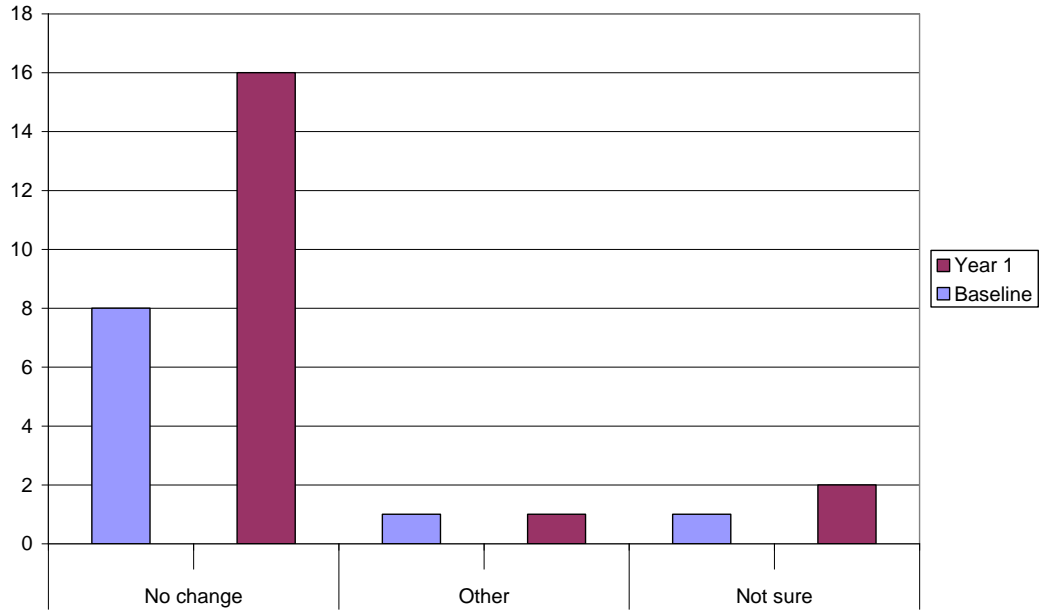
**Figure 48** Days spent per year for compiling and submitting an annual safety report

Figure 49 highlights the main challenges faced by respondents in report preparation and submission. It can be seen that the largest percentage of baseline responses (35% - 6 out of 17 responses) found the most challenging aspect actually understanding the requirements for preparing and submitting an annual safety report. This compares with 43% (9 out of 21) of year one respondents who shared this view. However, the biggest difference between the surveys is that only 12% (2 out of 17) of baseline respondents were facing time and / or resource pressures compared with 57% (12 out of 21) of the year one respondents. Four baseline respondents and two year one respondents indicated not encountering any challenges.



**Figure 49** Main challenges encountered in preparing and submitting an annual safety report

Finally, respondents were asked to comment on the extent to which they believed annual safety reports under ROGS have affected safety. It can be seen from Figure 50 that the majority of baseline respondents (80% - 8 out of 10) felt annual safety reporting under ROGS had not changed safety and this increased to 84% (16 out of 19) of year one respondents.

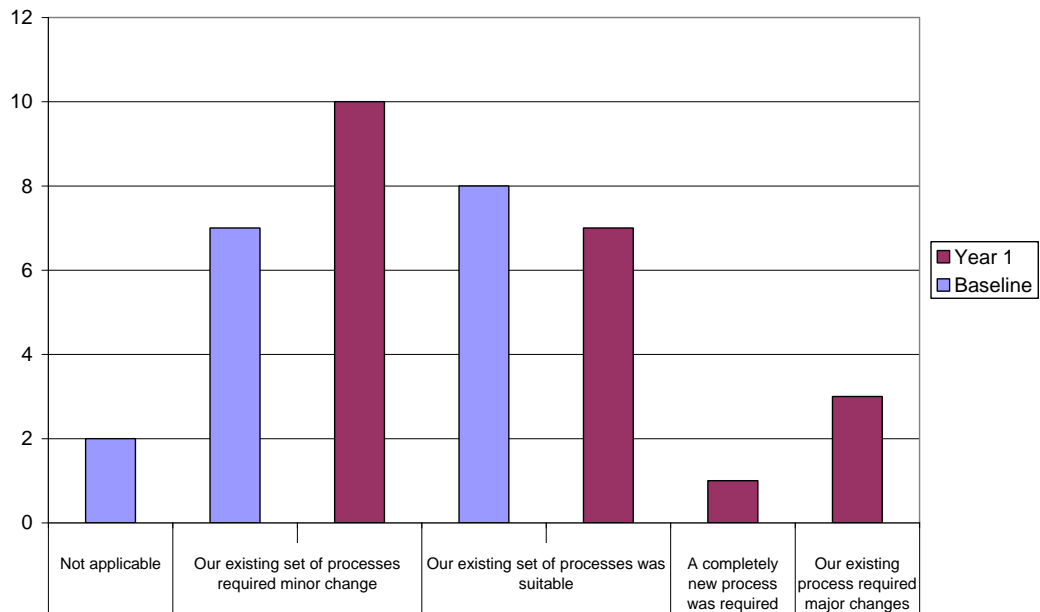


**Figure 50** To what extent do you think annual safety reports under ROGS have affected safety?

Two year one respondents made the additional comment that they felt annual safety reports added little value to safety, they just increased bureaucracy.

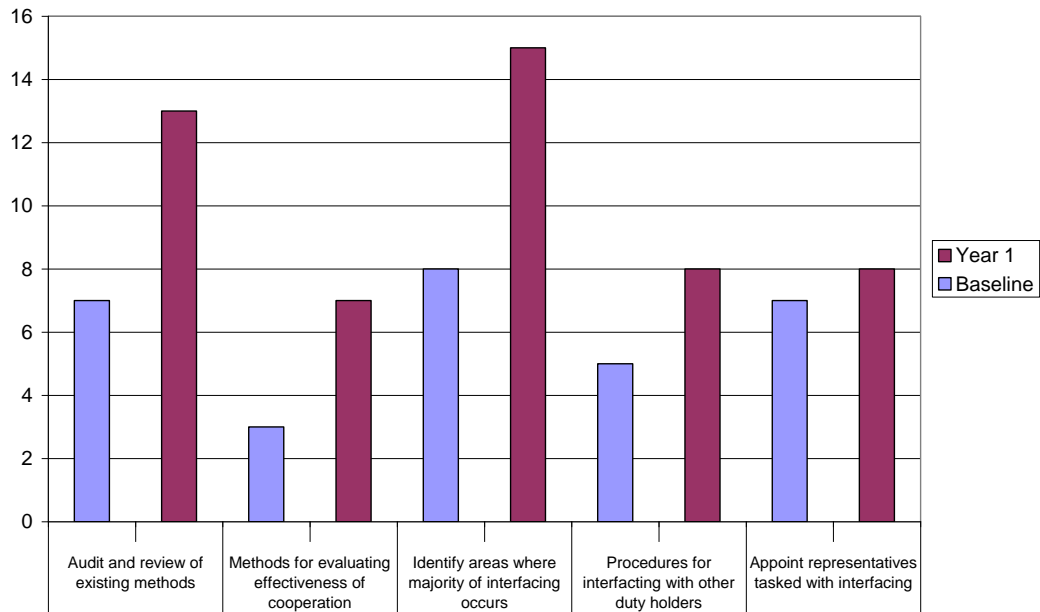
### 3.5.8 Duty of Co-Operation

Respondents were asked the extent to which the new duty of co-operation caused them to revise their existing processes for achieving co-operation. Figure 51 highlights that the largest percentage of baseline respondents (47% - 8 out of 17) felt their processes for achieving co-operation were suitable in their current format, compared with 33% (7 out of 21) of year one respondents who shared this view. A further 41% (7 out of 17) of baseline respondents said their existing processes required some minor changes which increased to 48% (10 out of 21) in the year one survey. Three year one respondents said their processes required major changes and one said a completely new process was required.



**Figure 51** Extent to which the new duty of co-operation caused duty holders to revise their existing processes for achieving co-operation

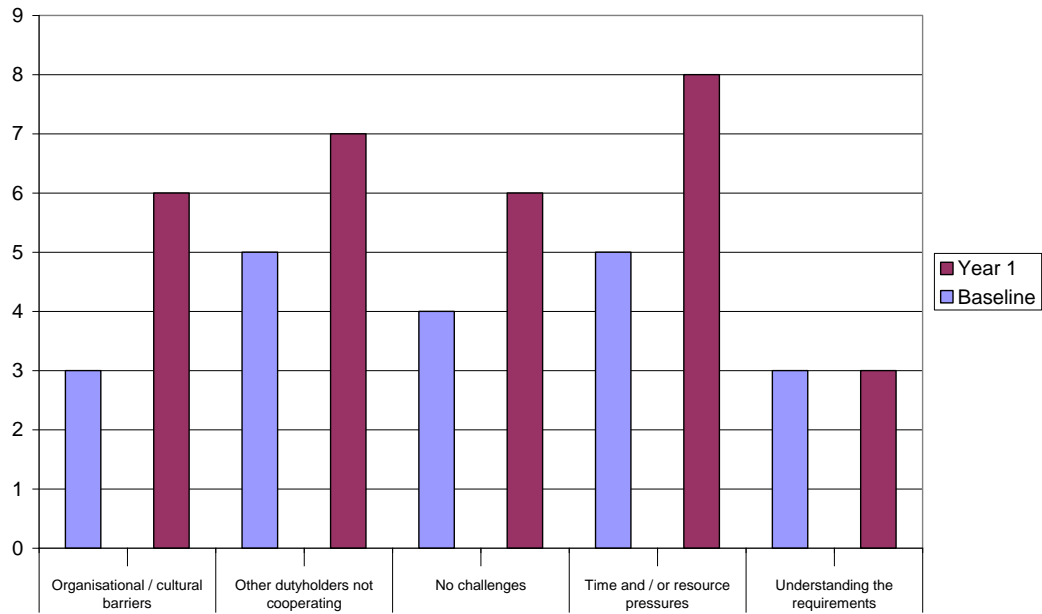
Figure 52 highlights the activities undertaken by respondents to comply with the duty of co-operation under ROGS. It can be seen that the largest difference between the samples is in relation to 'identify areas where majority of interfacing occurs' which was undertaken by 47% (8 out of 17 possible responses) of baseline respondents but 71% (15 out of 21 possible) of year one respondents. In addition, 41% (7 out of 17) of baseline respondents said they undertook an audit and review of their existing methods of co-operation, compared with 62% (13 out of 21) of year one respondents.



**Figure 52** Activities undertaken to comply with the duty of co-operation under ROGS

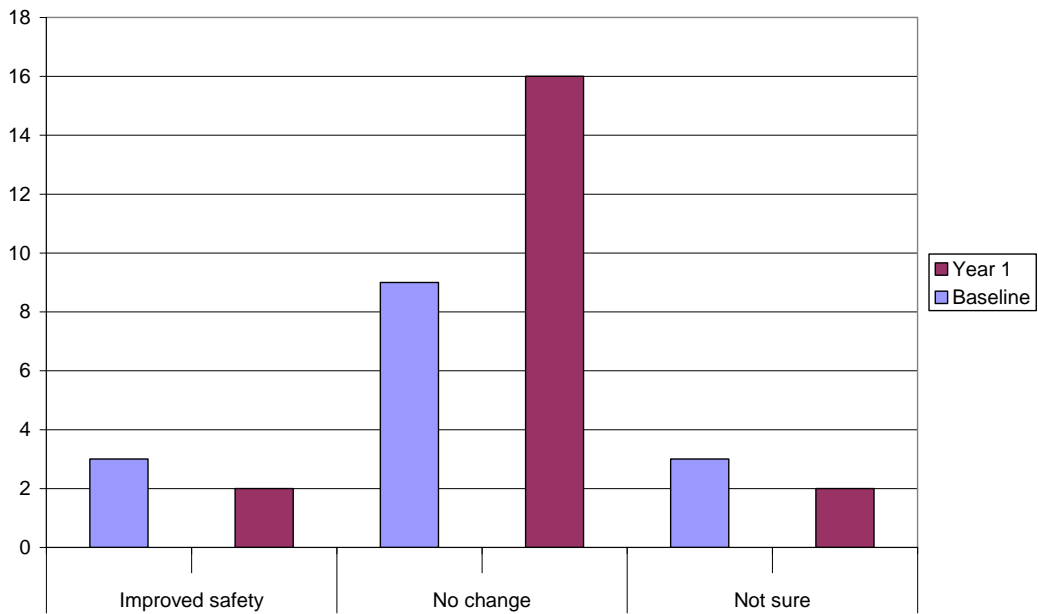


Respondents were then asked what the main challenges were in meeting the duty of co-operation. Figure 53 highlights that time and / or resource pressures were cited as a significant challenge by the baseline respondents (29% - 5 out of 17 responses) compared with 38% (8 out of 21) of year one respondents. Furthermore, organisational / cultural barriers were cited as a challenge by 18% of baseline respondents (3 out of 17) which increased to 29% of year one respondents (6 out of 21).



**Figure 53** Main challenges encountered in meeting the duty of co-operation

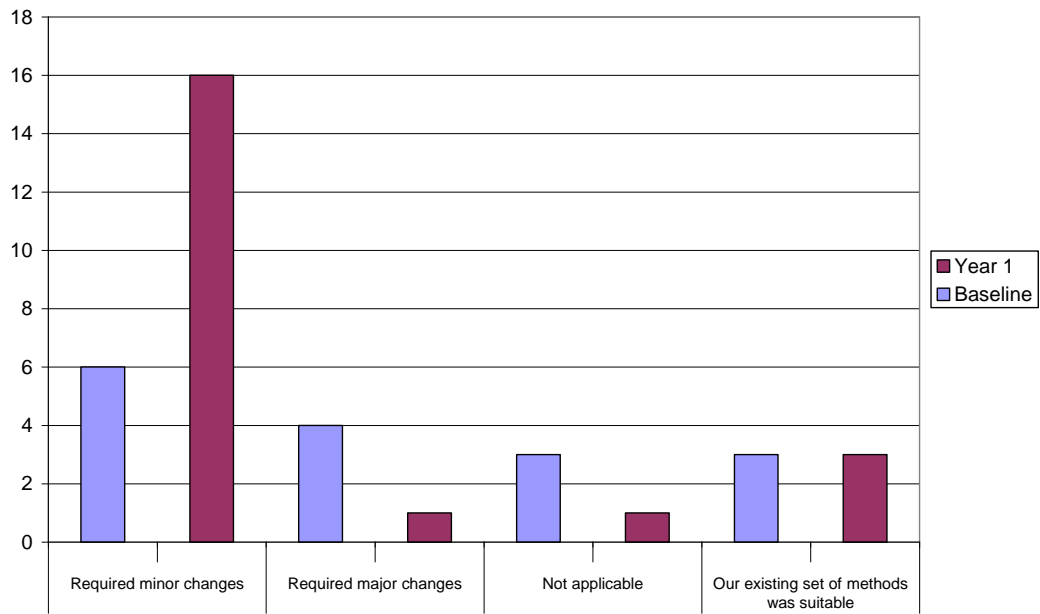
Finally, respondents were asked to what extent they felt the duty of co-operation had affected safety. Figure 54 highlights that the majority of baseline respondents (60% - 9 out of 15) felt that the new duty of co-operation had not caused a change in safety and this increased to 80% of year one respondents (16 out of 20) who shared this view. However, 20% of baseline respondents (3 out of 15) felt that the new duty of co-operation had improved safety but this dropped to only 10% (2 out of 20) of year one respondents.



**Figure 54** To what extent do you think the duty of co-operation under ROGS has affected safety?

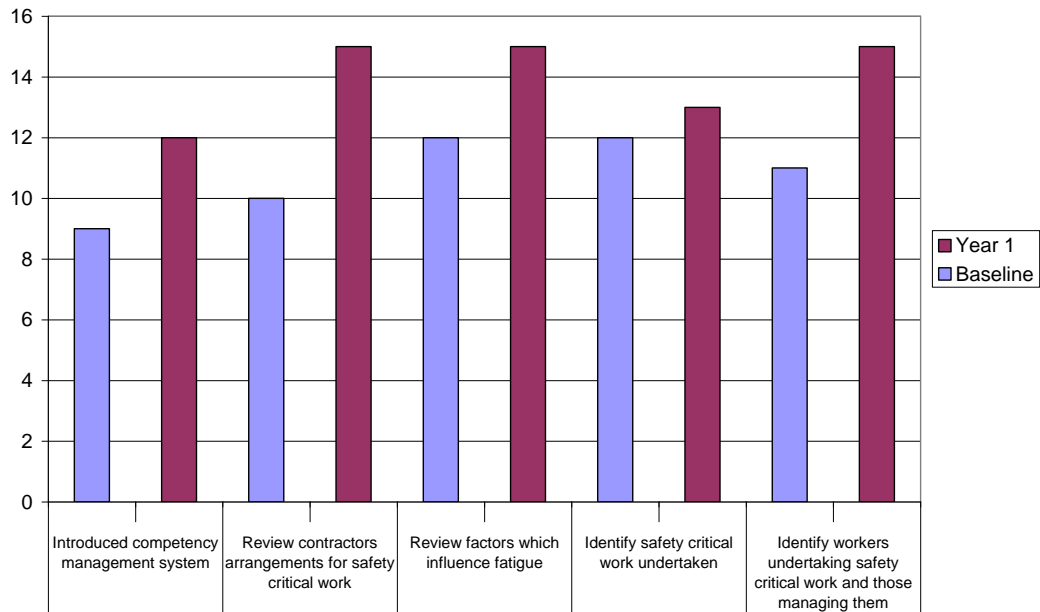
### 3.5.9 Safety Critical Work

Respondents were asked the extent to which the new safety critical work regulations have caused them to revise their existing methods of working in order to comply with ROGS. Figure 55 highlights that the main difference between the samples is that 38% of baseline respondents (6 out of 16) required minor changes to their existing methods compared with 76% (16 out of 21) of year one respondents. Furthermore, 25% (4 out of 16) of baseline respondents said they required major changes compared with only 5% (1 out of 21) of year one respondents.



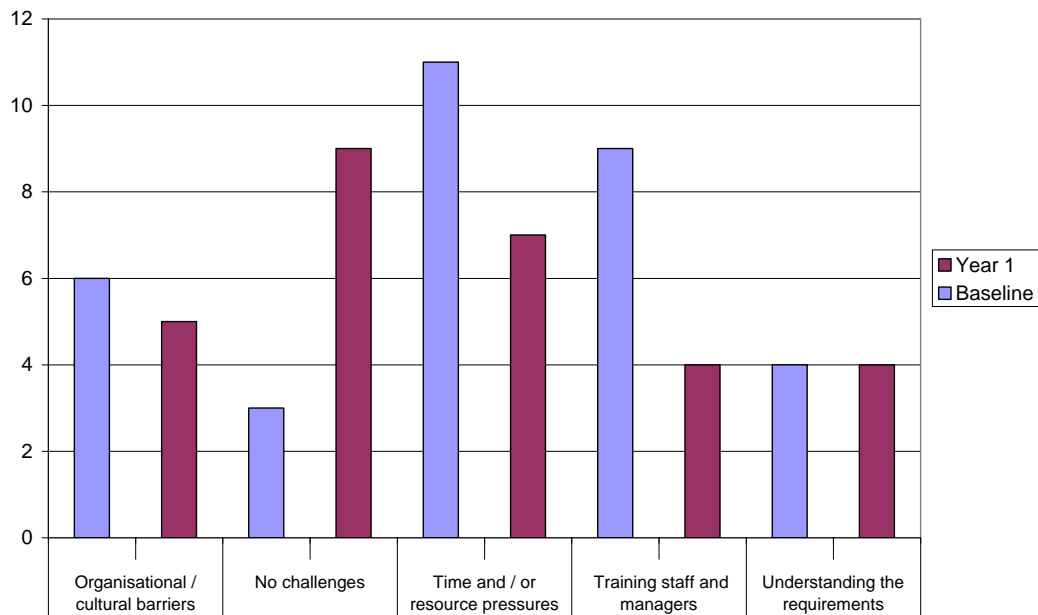
**Figure 55** Extent to which the new safety critical work regulations caused duty holders to revise their existing methods of working

Respondents were then asked what activities they undertook as a result of ROGS and the findings are presented in Figure 56. It can be seen that the majority of baseline and year one respondents were undertaking all activities listed to help them comply with the safety critical work regulations under ROGS. The largest difference is in relation to reviewing contractors arrangements for managing safety critical work which was reported by 56% of baseline respondents (10 out of 16 possible responses) compared with 71% (15 out of 21) of year one respondents.



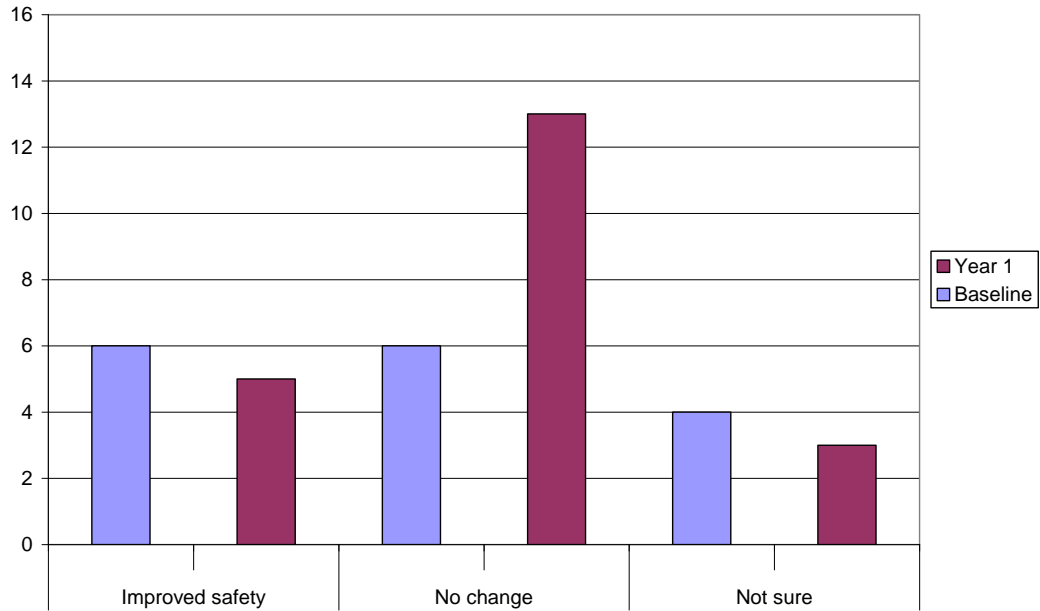
**Figure 56** Activities undertaken to comply with the safety critical work regulations under ROGS

Respondents were also asked what the main challenges were in addressing the safety critical work regulations and the findings are presented in Figure 57. It can be seen that the largest percentage of baseline responses (69% - 11 out of 16 possible responses) indicated time and / or resource pressures as being a challenge in addressing the safety critical work regulations although this dropped to 33% (7 out of 21) in the year one survey. A further 56% of baseline responses (9 out of 16) said training staff and managers were a challenge but this dropped to 19% (4 out of 21) in the year one survey. Conversely, 43% (9 out of 21) of year one respondents found no challenges compared with only 19% (3 out of 16) of baseline respondents.



**Figure 57** Main challenges encountered in addressing the safety critical work regulations

Finally, respondents were asked to what extent they felt the safety critical work regulations had affected safety. Figure 58 highlights that 38% of baseline respondents (6 out of 16) felt the new regulations had improved safety compared with only 24% (5 out of 21) of year one respondents. A further 38% of baseline respondents (6 out of 16) felt there had been no change, which increased to 62% (13 out of 21) in the year one survey.



**Figure 58** To what extent do you think the safety critical work regulations under ROGS have affected safety?

### 3.5.10 Additional comments

Following completion of Part 1 of the survey, all respondents (*both duty holders and non-duty holders*) were asked what further comments they had. The following comments were made in the year one study:

- *“My only concern under ROGS is that the permissioning regime level has been raised, and the requirements for documented controls in the safety certificate reduced compared to the safety case regime, which increases the level of trust vested in the industry...other parties could enter the industry with relatively minimal paper based safety management controls, which could be supported by little substance, and with the ORR safety intervention program being as limited as it is, it could be some while before very poor safety management system controls would be identified, creating a potential safety risk during this time”*
- *“We have a lot of problems with ROGS as they are drafted for the mainline rail network and some of the provisions are not appropriate for light rail. We have had a lot of discussion with ORR over the interpretation of the Safety Verification requirements”*
- *“The introduction of ROGS within the rail industry was managed by the industry in a proactive manner. This is pleasing and built upon lessons learnt from previous working relationships which at times were unsatisfactory”*

Following completion of Part 2, *duty holders only* were asked what further comments they had. The following comments were raised in the year one survey:

- *“Although the introducing of ROGS has not hindered safety as such, it has resulted in the sub division of safety hierarchy and moved away from the benefits of a vertically integrated railway”*
- *“It should also be noted that for (our organisation), it is still relatively early to identify any particular positives and negatives associated with ROGS - a more meaningful appraisal would probably follow 12-18 months under certification/authorisation”*
- *“For those of us that review and make representations to ORR as an affected 3rd party, it would be helpful to know if the representations have been accepted in full, part or not at all and then to know when the application has been finally accepted. Knowing whether an application has been accepted or not is rather patchy at present. Sometimes we receive a notification that the application has been accepted, other times we do not. Also we are not aware of what the final accepted document looks like, in comparison to the one reviewed at the start of the process”*
- *“As I am replying for a number of contracts, it is difficult to quantify the time spent on any area. Any additional works have been already planned and are seen as valuable. Much we already have in place like competency management systems, so ROGS just made us review the systems for further improvement”*

## **3.6 SUMMARY OF KEY FINDINGS: BASELINE COMPARED WITH YEAR ONE SURVEY**

### **3.6.1 Survey sample**

- The main difference between the samples was that several more train operating companies (TOCs) took part in the year one survey, in that 46% of the year one survey respondents were TOCs (13 out of 28) compared with only 13% (3 out of 24) of the baseline survey respondents. Overall, there was a higher proportion of duty holder in the year one survey (79%) compared with the baseline survey (62%).

### **3.6.2 Awareness and understanding of ROGS**

- There is very little difference in awareness of ROGS between the surveys, almost all respondents agreed that they were aware of ROGS and their content (one respondent disagreed in the baseline survey).
- There is very little difference in the understanding of ROGS between the surveys with almost all respondents agreeing that they understand the requirements of ROGS.
- All respondents in the baseline survey (96%) except for one said they used guidance to help them understand ROGS. However, a slightly lower percentage of respondents (89%) in the year one survey said they used guidance, perhaps because some respondents had become familiar with ROGS and no longer felt they required guidance.
- The type of guidance used and the views on that guidance were very similar between the surveys; the majority used the ORR and / or RSSB guidance and found this to be useful.

### **3.6.3 Industry safety culture indicators**

- There were relatively clear-cut positive swings in relation to the safety culture statements on good communications, 'my boss' talking about safety, feelings of trust towards workmates, having enough people to get the job done safely, and people having a poor understanding of safety. All these aspects received a more positive response in the year one survey compared with in the baseline.
- There were two safety culture statements that received a markedly less positive response in the year one survey compared with the baseline. These are the statements on near miss reporting and on what an individual feels they can do to further improve health and safety.
- Although several safety culture indicators appear to have improved between the baseline and year one surveys, this must be balanced against the finding that two indicators were scored less favourably in the year one survey. Further investigation would be required in order to explore the role of ROGS in relation to the changes to the



cultural indicators which have been recorded. However, it may be that ROGS has had subtle affects on culture in the industry without causing any major negative swings.

#### **3.6.4 Feedback on ROGS and ORR**

- Although there appears to be an increase in the numbers who feel ROGS has made no difference to safety, encouragingly, it would also appear that standards have not been affected adversely, with 69% of baseline respondents agreeing that safety standards are the same, increasing to 79% of year one respondents.
- There has been a shift from those who feel that ROGS has changed the way safety is managed in their organisation (50% in the baseline compared with only 39% in year one) to those who feel it has made no difference (54% in year one compared with only 35% in baseline).
- The majority of baseline respondents (54%) felt ROGS had made a difference to safety related decision making but this dropped to only 25% in the year one survey. Furthermore, 35% of the baseline respondents did not feel ROGS had made a difference but this increased to 54% in the year one survey. Five year one respondents thought that ROGS had not made a difference to safety related decision making as they already had the necessary processes in place before ROGS.
- When asked about the administrative burden of the regulations, 42% of the baseline respondents felt more could be done to reduce the burden compared with only 32% in the year one survey.

#### **3.6.5 Safety Management System (SMS)**

- The majority of baseline respondents (77%) required only minor changes to their SMS to take account of ROGS and this was similar in the year one survey.
- The most significant changes made to existing SMS's in both surveys were to do with audit and review and changing written procedures. It was notable that 47% of the companies with a ROGS compliant SMS in the year one survey indicated that they had 'integrated SMS with other systems', compared with only 17% of such companies in the baseline survey. This may indicate that companies are making progress with taking account of ROGS in their management systems.
- The majority of respondents in both surveys felt that the costs of maintaining an SMS under ROGS were about the same as under the previous regime. Encouragingly, 27% of baseline respondents felt SMS maintenance costs were less expensive than safety cases and 29% shared this view in the year one survey.
- A greater proportion of year one respondents (37%) appear to have encountered organisational and cultural difficulties in maintaining an SMS under ROGS compared with in the baseline (17%). This may require further investigation, depending on year two survey findings.

- The majority of respondents in both surveys indicated that SMS under ROGS had not caused any changes to safety, although, encouragingly 23% of baseline respondents said SMS under ROGS had improved safety which increased to 32% in the year one survey.

### **3.6.6 Safety verification**

- Companies indicated an increased use of all processes for ensuring the safe introduction of new / altered infrastructure or rolling stock to their operation in the year one survey compared with the baseline.
- It was found that most respondents in both surveys required only minor changes to existing processes in order to fully address safety verification requirements under ROGS. However, six year one respondents required major changes and three required a completely new process, although three also stated that their existing process required no changes.
- Knowing when to apply safety verification was identified as one of the main challenges in the baseline survey (55% of responses) and this remains the case after year one (48%).
- The majority of year one respondents (52%) felt that safety verification had made no change to safety, compared with only 36% of baseline respondents who felt this way. Only 10% felt it had made a difference in year one compared to 45% in the baseline.

### **3.6.7 Safety certification**

- The year one respondents would appear to be further forward in terms of safety certification than was the case in the baseline, (15 year one respondents had prepared an application compared with only four in the baseline, and 11 of these had reached the sign-off stage compared with only four in the baseline).
- The vast majority from both surveys felt that the time and costs involved in applying for safety certificates compared with the railway safety case applications was either less or the same.
- With regard to gaining safety certificates, employee involvement appears to be more of a challenge for the year one respondents compared with the baseline respondents (36% compared with 25%). Encouragingly, four year one respondents indicated that they found no challenges in the certification process.
- It was found that 40% of baseline respondents felt that safety certification had improved safety compared with only 15% in year one. In addition, 85% of the year one respondents felt that the process has not caused any change.

### **3.6.8 Safety authorisation**

- All of the stages in the safety authorisation process had been reached by many of the responding duty holders in the baseline survey and this was the same in year one only

in greater numbers. Nine duty holder had reached the last stage in the year one survey compared with only three in the baseline.

- The majority of respondents in both surveys felt that the time and cost involved in applying for safety authorisation compared with the time and cost invested in railway safety case applications was either the same or less.
- In gaining safety authorisation, it would appear that year one respondents found more of a challenge with resources and employee involvement compared with in the baseline.
- The predominant view in both surveys was that safety authorisation has not affected safety; 50% of baseline respondents and 75% in year one indicated this view, although no negative affect was reported.

### **3.6.9 Risk assessment**

- The majority of duty holders in both surveys indicated that their existing systems required either minor or no changes to address the requirements for risk assessment under ROGS.
- In both surveys, the most common changes that were required to risk assessment processes were related to how information was handled and audit and review.
- The biggest difference between the surveys in terms of risk assessment challenges under ROGS is in relation to 'understanding the requirements' which only one baseline respondent mentioned compared with 23% of the year one respondents.
- The majority of baseline respondents (86%) felt there had been no change to safety as a result of the changes brought about to risk assessment under ROGS and 74% of year one respondents agreed with this.

### **3.6.10 Annual safety report**

- The largest percentage of baseline responses (35%) found the most challenging aspect of doing an annual safety report was actually understanding the requirements for preparing and submitting the report. This had increased to 43% of the year one respondents.
- The majority of baseline respondents (80%) felt that annual safety reporting under ROGS had not changed safety and this increased to 84% of the year one respondents.

### **3.6.11 Duty of co-operation**

- The majority of duty holders in both surveys indicated that their existing systems required either minor or no changes to address the duty of co-operation requirements under ROGS.

- With regard to the duty of co-operation, the largest difference between the samples is in relation to 'identify areas where majority of interfacing occurs' which was undertaken by 47% of baseline respondents but 71% of year one respondents. This may indicate progress in addressing these ROGS requirements during the time between the baseline and the year one survey.
- Respondents from both samples indicated that time / resource pressures and organisational / cultural barriers were the main challenges in meeting the duty of co-operation requirements under ROGS.
- The majority of baseline respondents (60%) felt that the new duty of co-operation had not caused a change in safety and this increased to 80% of year one respondents.

### **3.6.12 Safety critical work**

- The majority of baseline and year one respondents were undertaking all activities listed in the questionnaire to help them comply with the safety critical work regulations under ROGS.
- It would seem that year one respondents were finding it easier to address the new safety critical work regulations under ROGS compared with the baseline respondents. For example, less year one respondents (5%) required major changes to their existing methods (25% in the baseline) and more required only minor changes (76% compared with 38% in the baseline).
- To support the above point, in relation to addressing the safety critical regulations, less year one respondents were finding time / resource an issue (33%, compared with 69% in the baseline) and less were finding training an issue (19% compared with 56% in the baseline). In fact, 43% of year one respondents found no challenges in this respect (only 19% in the baseline).
- A total of 38% of baseline respondents felt that the duties regarding safety critical work had made no change to safety, which increased to 62% in the year one survey.

## **4. CONCLUSIONS**

### **4.1 YEAR 1 SURVEY FINDINGS IN RELATION TO ROGS OBJECTIVES**

In order to clearly map the most appropriate Year 1 survey data gathered against ROGS objectives and outcome measures, each of the five main objectives were taken in turn and appropriate data extracted from the Year 1 survey findings. This is also compared alongside data gathered from the baseline survey. The results are shown in Table 3 to Table 7.

It should be noted that not all of the data gathered in the year one survey is relevant to each of the ROGS objectives and outcome measures. Additional data which addresses these objectives and outcome measures is in the process of being collected by other means. Where data is not available from the year one survey to address certain objectives, this has been shaded in grey on the tables.

Conclusions on the year one survey finding in relation to the ROGS objectives are drawn in Section 4.2.

**Table 3** Data for Objective 1

<b>Objective 1: Implement a large part of the safety management provisions of the EC Railway Safety Directive (RSD) (2004/49/EC), which is intended to harmonise the approach to regulating railway safety across the European Union (EU). This will include having a common approach to safety across the EU covering both passenger and worker safety.</b>		
<b>Subsidiary objectives</b>	<b>Outcome measures</b>	<b>Outcome measures: baseline data</b>
1a. transfer the mainline rail industry from a system of railway safety cases to a system of safety certification and authorisation	<ul style="list-style-type: none"> <li>• Number of mainline rail industry organisations in existence by end of 2008</li> <li>• Number of safety certification and authorisation applications received, processed and approved by end of 2008</li> </ul>	<ul style="list-style-type: none"> <li>• In order to gather this outcome data the number of safety certification and authorisation applications will need to be gathered from ORR. In order to ensure this provides the whole rail industry with sufficient time, this data will be captured by the end of 2008.</li> </ul>
1b. ensure that the UK can respond to Common Safety Targets (CSTs) in the future, to be achieved through Common Safety Methods set by the European Rail Agency	<ul style="list-style-type: none"> <li>• Creation of Common Safety Methods</li> <li>• Extent to which Annual Safety Reports submitted include details on Common Safety Indicators</li> </ul>	<ul style="list-style-type: none"> <li>• This data will also be required from ORR in 2008 and 2009. ORR will be required to provide insight into the extent to which Annual Safety Report submissions are detailing common safety indicators.</li> </ul>

**Table 4** Data for Objective 2

<b>Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.</b>			
<b>Subsidiary objectives</b>	<b>Outcome measures</b>	<b>Outcome measures: baseline data</b>	<b>Outcome measures: year one</b>
2a. reduce the number of railway operators that have to seek formal permission from the safety regulator to work on the railway	<ul style="list-style-type: none"> <li>Number of railway operators applying for formal permission from ORR to work on the railway by end of 2008 and 2009</li> </ul>	<ul style="list-style-type: none"> <li>In order to gather this outcome data the number of railway operators applying for formal permission from ORR to work on the railway by end of 2008 and 2009 will need to be gathered from ORR.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
2b. produce a set of minimum requirements for a safety management system as the basis of safety certification / authorisation that is more streamlined, better targeted, less bureaucratic, and quicker for duty holders	<ul style="list-style-type: none"> <li>Industry stakeholders' perceptions of the current quality of SMS's under ROGS in the rail industry</li> <li>Industry stakeholders' perceptions of the importance of SMS's under ROGS for maintaining safety in the rail industry</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholders at the Influence Network workshop rated existing SMS's between 8 to 9 out of 10 (0 being poor and 10 being excellent). They were generally in agreement that safety management systems (SMS's) were mature and effective in the rail industry as organisations had always been required to have them. The group agreed that a quality rating of between 8 and 9 was appropriate as there was still room for improvement in terms of integrating SMS's with other organisational functions. Safety management at a strategy level was thought to be of 'high' importance for influencing safety in the rail industry, although SMS at an organisational level were currently weighted of medium importance.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Cost of developing an SMS under ROGS</li> </ul>	<ul style="list-style-type: none"> <li>The cost of setting up an SMS ranged from £5,000 (an OTM) to £500,000 (a Metro system). Within this range, a TOC spent</li> </ul>	<ul style="list-style-type: none"> <li>A range of costs were incurred by year one respondents, although four were from £10k to £60k and one was £100k. The average was</li> </ul>

**Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.**

		£50,000 and another Metro system spent £40,000. The number of days spent per organisation ranged from 10 days (two OTM's) to 900 days (a Metro system) with an average total number of days per organisation of 272 days.	£45k. A range of days spend was also reported from 12 to 200 with the average being 97 days.
	<ul style="list-style-type: none"> <li>• Cost of maintaining an SMS under ROGS</li> </ul>	<ul style="list-style-type: none"> <li>• The estimated cost of maintaining an SMS per year was received from two Metro systems; one estimated it to be £40,000 and the other estimated it at £60,000. The number of days spent per organisation per year ranged from 10 days (an OTM) to 347 days (a Metro system) with an average total number of days per organisation per year of 156 days.</li> </ul>	<ul style="list-style-type: none"> <li>• A range of costs were incurred by the year one respondents, from less than £10k for two organisations to £50k-249.9k for two others. The average was £41k. Most year one responses were in the 50 to 99 days category (4), although another two were only 10 to 49 days and two were 100 to 250 days. The average was 95 days.</li> </ul>
	<ul style="list-style-type: none"> <li>• Challenges faced in maintaining an SMS under ROGS</li> </ul>	<ul style="list-style-type: none"> <li>• The most significant challenges associated with maintaining an SMS under ROGS were said to be communicating the SMS to the organisation (33%) and time and / or resource pressures (33%). Some respondents also cited understanding the requirements and organisational / cultural barriers as being a challenge.</li> </ul>	<ul style="list-style-type: none"> <li>• 'Organisational and cultural barriers' and 'Time and / or resource pressures' were the most common challenges in SMS development under ROGS in the year one sample, both receiving a response of 37% each.</li> </ul>
	<ul style="list-style-type: none"> <li>• Impact of ROGS SMS on safety</li> </ul>	<ul style="list-style-type: none"> <li>• The majority (62%) of respondents indicated that their SMS under ROGS had not caused any changes to safety. Encouragingly 23%, said their SMS under ROGS had improved safety and no respondents indicated that their SMS under ROGS had hindered safety.</li> </ul>	<ul style="list-style-type: none"> <li>• 53% of year one respondents thought ROGS SMS had made no change to safety. However, 32% thought this had improved safety.</li> </ul>



**Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.**

<p>2c. change the distribution of HMRI inspector resource from the assessment of safety cases, and redirect it towards checking by inspection 'on the ground' that operators are properly controlling the risks arising from their operations</p> <ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Amount of time booked by HMRI inspectors to assessing safety cases</li> </ul>	<ul style="list-style-type: none"> <li>• In order to gather the amount of time booked by HMRI inspectors to assessing safety cases and conducting site visits this data will need to be gathered from ORR.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>• Amount of time booked by HMRI inspectors to conducting site visits</li> </ul>	<ul style="list-style-type: none"> <li>• In order to gather the amount of time booked by HMRI inspectors to assessing safety cases and conducting site visits this data will need to be gathered from ORR.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>• Number of queries received by ORR with regard to RA etc.</li> </ul>	<ul style="list-style-type: none"> <li>• The number of queries received by ORR with regard to risk assessment will need to be gathered from ORR.</li> <li>• The types of challenges that duty holders are facing with regard to risk assessment were indicated as time and / or resource pressures (31%). Other challenges faced included involving employees and their representatives (13%) and applying targets / standards (13%). These may be areas where ORR receives queries.</li> </ul>	<ul style="list-style-type: none"> <li>• The year one respondents indicated 'understanding the requirements' was a challenge in dealing with the ROGS risk assessment requirements (23%). A further (27%) felt that time and / or resource pressures were a challenge.</li> </ul>

**Table 5** Data for Objective 3

<b>Objective 3: Place a duty on operator companies and infrastructure managers to co-operate and ensure that the interface (in its widest sense) is being managed effectively to ensure system safety.</b>			
<b>Subsidiary objectives</b>	<b>Outcome measures</b>	<b>Outcome measures: baseline data</b>	<b>Outcome measures: year one</b>
3a. transport operators and infrastructure managers need to work together to ensure system safety	<ul style="list-style-type: none"> <li>Appointment of representatives in organisations tasked with interfacing with other duty holders</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Methods developed to evaluate effectiveness of co-operation</li> </ul>	<ul style="list-style-type: none"> <li>The largest percentage of baseline survey respondents (47%) felt their processes for achieving co-operation were suitable in their current format although a further 41% said their existing processes required some minor changes.</li> </ul>	<ul style="list-style-type: none"> <li>33% of year one respondents thought their processes for achieving cooperation were suitable in their current format. A further 48% said their existing processes required some minor changes.</li> </ul>
	<ul style="list-style-type: none"> <li>Identification of areas where majority of operator interfacing occurs</li> </ul>	<ul style="list-style-type: none"> <li>In terms of making changes, the largest percentage of baseline survey responses (47%) said they identified areas where the majority of operator interfacing occurs.</li> </ul>	<ul style="list-style-type: none"> <li>In terms of making changes, the largest percentage of year one survey responses (71%) said they identified areas where the majority of operator interfacing occurs.</li> </ul>
	<ul style="list-style-type: none"> <li>Development of written procedures for interfacing with other duty holders</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Impact of duty of co-operation on safety</li> </ul>	<ul style="list-style-type: none"> <li>The majority of respondents (60%) felt that the new duty of co-operation had not yet caused a change in safety.</li> </ul>	<ul style="list-style-type: none"> <li>The majority of respondents (80%) felt that the new duty of co-operation had not caused a change in safety.</li> </ul>
	<ul style="list-style-type: none"> <li>Challenges encountered in meeting duty of co-</li> </ul>	<ul style="list-style-type: none"> <li>The joint largest number of survey responses felt other duty holders not co-</li> </ul>	<ul style="list-style-type: none"> <li>Time and / or resource pressures were cited as a significant challenge by 38% of</li> </ul>

<b>Objective 3: Place a duty on operator companies and infrastructure managers to co-operate and ensure that the interface (in its widest sense) is being managed effectively to ensure system safety.</b>			
3b. transport operators should identify appropriate forms of co-operation that complement the measures they are taking to comply with their own safety duties	operation	operating would be a challenge in terms of addressing the duty of co-operation (29%) and also time and / or resource pressures were cited as a significant challenge (29%).	year one respondents. Furthermore, organisational / cultural barriers were cited as a challenge by 29% of respondents.
	<ul style="list-style-type: none"> <li>Industry stakeholders' perceptions of the current quality of interface management in the rail industry</li> </ul>	<ul style="list-style-type: none"> <li>In terms of the factor interface management, the Influence Network workshop group felt this to be very good at present. Relationships with ORR and RSSB were also cited as being particularly positive. The group came to a consensus that a high quality rating of 9 was therefore appropriate. However, the factor interface management was only given a medium-low weighting in terms of its importance in influencing safety.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Stakeholders' perceptions of the importance of interface management for maintaining safety in the rail industry</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>See Objective 3a outcome measures</li> </ul>	<ul style="list-style-type: none"> <li>See Objective 3a baseline data.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

**Table 6** Data for Objective 4

<b>Objective 4: Extend broadly similar requirements to railways not covered by the RSD (“non-mainline railways”), as well as to some other guided transport systems.</b>			
<b>Subsidiary objectives</b>	<b>Outcome measures</b>	<b>Outcome measures: baseline data</b>	<b>Outcome measures: year one</b>
4a. for the parts of the railway industry outside the mainline railway (i.e. the non-mainline railway including London Underground Ltd (LUL), tramways, heritage railways), remove the existing requirement for formal approval by the safety regulator before the introduction of new or altered works, plant or equipment	<ul style="list-style-type: none"> <li>Number of non-mainline railway organisations having difficulty without HMRI approval role</li> </ul>	<ul style="list-style-type: none"> <li>Outcome data on the number of non-mainline railway organisations having difficulty without the HMRI approval role will be explored with ORR (HMRI) in 2008.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Number of non-mainline railway organisations with process in place for introducing new or altered works, plant or equipment</li> </ul>	<ul style="list-style-type: none"> <li>In terms of the processes duty holders have in place for ensuring the safe introduction of new or altered infrastructure or rolling stock, 35% of respondents indicated they were undertaking the SMS change management process; 35% said they would go through the safety verification process under ROGS; and a further 23% indicated using a notified body under the Railways (Interoperability) Regulations 2006 (RIR).</li> </ul>	<ul style="list-style-type: none"> <li>64% were ‘SMS change management process’, 57% were ‘safety verification under ROGS’ and 36% of responses were ‘Use of “notified body” under RIR’</li> </ul>
	<ul style="list-style-type: none"> <li>Introduction of systems for deciding when safety verification must be applied</li> </ul>	<ul style="list-style-type: none"> <li>The majority (54% - 7 out of 13) of baseline survey respondents only required minor changes to their existing processes in order to fully address safety verification requirements; 31% of respondents required major changes (4 out of 13); and 15% of respondents (2 out of 13) required a completely new process.</li> </ul>	<ul style="list-style-type: none"> <li>43% required minor changes to their existing processes, 29% required major changes, a completely new process was required by 14% of year one respondents.</li> </ul>
	<ul style="list-style-type: none"> <li>Changes to written safety verification schemes</li> </ul>	<ul style="list-style-type: none"> <li>The most significant changes made were changing the written safety verification</li> </ul>	<ul style="list-style-type: none"> <li>The most common changes made were changing the written safety verification</li> </ul>

<b>Objective 4: Extend broadly similar requirements to railways not covered by the RSD (“non-mainline railways”), as well as to some other guided transport systems.</b>			
		<p>scheme (38%) and introducing a system for deciding when safety verification must be applied (38%).</p>	<p>scheme (36%) and introducing a system for deciding when safety verification must be applied (54%).</p>
	<ul style="list-style-type: none"> <li>Changed processes for evaluating the effectiveness of the safety verification process</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Challenges encountered in obtaining safety verification</li> </ul>	<ul style="list-style-type: none"> <li>The most significant safety verification challenge was felt to be knowing when to apply safety verification (55%). Other significant challenges were identifying and appointing an independent competent person (ICP) (45%); experiencing time and / or resource pressures (45%); and understanding the requirements (36%).</li> </ul>	<ul style="list-style-type: none"> <li>The most significant challenge was felt to be knowing when to apply safety verification (48%). Other differences are with experiencing time and / or resource pressures (38%), and understanding the requirements (43%).</li> </ul>
4b. replace this requirement with a more targeted requirement on duty holders to obtain safety verification from an independent competent person	<ul style="list-style-type: none"> <li>Identification of suitable independent competent person/s (ICP)</li> </ul>	<ul style="list-style-type: none"> <li>A significant challenge in safety verification was found to be identifying and appointing an independent competent person (ICP) (45%).</li> </ul>	<ul style="list-style-type: none"> <li>Identifying and appointing an independent competent person (ICP) was reported as a challenge by 29% of respondents.</li> </ul>
	<ul style="list-style-type: none"> <li>Changes in the way information is managed to ensure easy access for ICP's</li> </ul>	<ul style="list-style-type: none"> <li>The majority of baseline survey respondents (54%) were found to only require minor changes to their existing processes in order to fully address safety verification requirements; 31% of respondents required major changes and 15% of respondents required a completely new process.</li> </ul>	<ul style="list-style-type: none"> <li>Minor changes required by 43%, major changes required by 29% in year one. A completely new process was required by 14% of year one respondents.</li> </ul>
	<ul style="list-style-type: none"> <li>Introduction of processes</li> </ul>	<ul style="list-style-type: none"> <li>In terms of findings suitable workers in the</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

<b>Objective 4: Extend broadly similar requirements to railways not covered by the RSD (“non-mainline railways”), as well as to some other guided transport systems.</b>			
	for handling recommendations	ICP	<p>rail industry in general, the Influence Network workshop group agreed that day-to-day resourcing was good (hence the quality rating of 9), but one-off complex projects could be difficult to resource quickly (hence the quality rating of 4).</p>

**Table 7** Data for Objective 5

<b>Objective 5: Replace the Safety Critical Work Regulations 1994 (SCWR) and implement requirements on those carrying out all types of safety critical work. Under ROGS the legal scope has increased as a wider range of work is now covered.</b>			
<b>Subsidiary objectives</b>	<b>Outcome measures</b>	<b>Outcome measures: baseline data</b>	<b>Outcome measures: year one</b>
5a. change the definition of 'safety critical work' from broad job titles to the actual tasks that are safety critical to the safety of the railway	<ul style="list-style-type: none"> <li>Number of organisations identifying safety critical work undertaken in organisation</li> </ul>	<ul style="list-style-type: none"> <li>In terms of making changes, the joint largest percentage of responses to the baseline survey indicated duty holders reviewed the factors which influence worker fatigue (75%) and identified safety critical work undertaken in the organisation (75%).</li> </ul>	<ul style="list-style-type: none"> <li>Reviewing contractors arrangements for managing safety critical work was reported by 71% of year one respondents. Reviewing worker fatigue (71%) and identifying safety critical work (62%) were also reported.</li> </ul>
5b. safety critical tasks must be carried out by a person assessed as being competent and fit for work	<ul style="list-style-type: none"> <li>Number of organisations introducing competency management systems</li> </ul>	<ul style="list-style-type: none"> <li>In terms of competence throughout the industry, the Influence Network workshop group rated this factor in terms of individual's being competent to do their own jobs (i.e. jobs they are trained and experienced in) and not competence in general. It was felt that generally the factor should be rated as a 7, although it was also suggested that the competence of train drivers was higher than this (a 9 was suggested). A range of between 7 and 9 was therefore agreed upon across the group.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Number of organistations explicitly identifying workers undertaking safety critical work and those managing them</li> </ul>	<ul style="list-style-type: none"> <li>69% of respondents indicated that they identifying workers undertaking safety critical work and those managing them.</li> </ul>	<ul style="list-style-type: none"> <li>71% of respondents undertook this activity.</li> </ul>
	<ul style="list-style-type: none"> <li>Number of workers</li> </ul>	<ul style="list-style-type: none"> <li>In terms of finding suitable workers in the rail</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

**Objective 5: Replace the Safety Critical Work Regulations 1994 (SCWR) and implement requirements on those carrying out all types of safety critical work. Under ROGS the legal scope has increased as a wider range of work is now covered.**

	<p>accredited as competent</p>	<p>industry in general, the Influence Network workshop group agreed that day-to-day resourcing was good (hence the quality rating of 9), but one-off complex projects could be difficult to resource quickly (hence the quality rating of 4).</p>	
	<ul style="list-style-type: none"> <li>Industry's perception of the competence, health and overall fitness of rail industry workers</li> </ul>	<ul style="list-style-type: none"> <li>In terms of fatigue in the rail industry, the group underlined that the rail industry (with the exception of the heritage sector) is a 24/7 industry. Workshop participants also described some of the well-documented signals passed at danger (SPAD) incidents, which had been caused by microsleeps. The group went on to highlight how account needs to be taken of workers' lifestyle factors (e.g. ensuring people are rested for work etc.) in order to try and mitigate the risk of fatigue at work. Due to the nature of the industry, the group assigned the factor 'fatigue' a quality rating range of between 5 and 7.</li> <li>In terms of physical health the group highlighted how train drivers go through a rigorous selection process, which includes a full medical to ensure fitness to work. The heritage sector raised the issue of working with older individuals and taking into consideration their physical health requirements. In terms of psychological</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>



<b>Objective 5: Replace the Safety Critical Work Regulations 1994 (SCWR) and implement requirements on those carrying out all types of safety critical work. Under ROGS the legal scope has increased as a wider range of work is now covered.</b>			
		<p>health, the stress rail workers go through if they have been involved with a suicide was also raised during the discussion. A counselling service is provided for rail workers to help them deal with the trauma. The group agreed on a ratings range of between 6 and 8, with '6' representing the infrastructure and train operating companies parts of the rail industry and '8' representing train drivers.</p>	
<p>5c. remove the requirement for safety critical workers to carry a formal means of identification</p>	<ul style="list-style-type: none"> <li>• Number of safety critical workers carrying formal means of identification</li> </ul>	<ul style="list-style-type: none"> <li>• Outcome data on the number of safety critical workers carrying formal means of identification will be explored with ORR in 2008.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>5d. require a change in approach from simply controlling the number of hours for preventing fatigue to one of requiring arrangements to be implemented that control risks from a wide number of factors, such as the pattern of working hours and roster design</p>	<ul style="list-style-type: none"> <li>• Consideration of the pattern of working hours and roster design reflected in revised working schedules</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>• Industry's perception of the health and fatigue of rail industry workers</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>• Industry's perception of safe job design</li> </ul>	<ul style="list-style-type: none"> <li>• See objective 5b for industry's perception of the health and fatigue or rail industry workers.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

## 4.2 KEY CONCLUSIONS: YEAR 1 SURVEY FINDINGS IN RELATION TO ROGS OBJECTIVES

### 4.2.1 Objective 2

#### **2b - Cost of developing an SMS under ROGS**

The available data indicates a range of costs incurred both in terms of money and working days. The baseline costs ranged from £5k to £500k whereas in year one, no costs were above £100k. The average days spent on development in the baseline was 272 but only 97 in year one.

#### **2b - Cost of maintaining an SMS under ROGS**

Only limited data was available, e.g. costs were only estimated by two organisations in the baseline. Perhaps the best indicator is that the average days spent per year in the baseline was 156, whereas the average days spent per year in the year one survey was only 95.

#### **2b - Challenges faced in maintaining an SMS under ROGS**

A greater proportion of year one respondents (37%) appear to have encountered organisational and cultural difficulties in maintaining an SMS under ROGS compared with in the baseline (17%). This may require further investigation, depending on year two survey findings.

#### **2b - Impact of ROGS SMS on safety**

The majority of respondents in both surveys indicated that SMS under ROGS had not caused any changes to safety, although, encouragingly 23% of baseline respondents said SMS under ROGS had improved safety which increased to 32% in the year one survey.

#### **2c - Number of queries received by ORR with regard to RA etc.**

The biggest difference between the surveys in terms of risk assessment challenges under ROGS is in relation to 'understanding the requirements' which only one baseline respondent mentioned compared with 23% of the year one respondents.

### 4.2.2 Objective 3

#### **3a - Methods developed to evaluate effectiveness of co-operation**

The majority of duty holders in both surveys indicated that their existing systems required either minor or no changes to address the duty of co-operation requirements under ROGS.

#### **3a - Identification of areas where majority of operator interfacing occurs**

With regard to the duty of co-operation, the largest difference between the samples is in relation to 'identify areas where majority of interfacing occurs' which was undertaken by 47% of baseline respondents but 71% of year one respondents. This may indicate progress in addressing these ROGS requirements during the time between the baseline and the year one survey.

#### **3a - Impact of duty of co-operation on safety**

The majority of baseline respondents (60%) felt that the new duty of co-operation had not caused a change in safety and this increased to 80% of year one respondents.

### **3a - Challenges encountered in meeting duty of co-operation**

Respondents from both samples indicated that time / resource pressures and organisational / cultural barriers were the main challenges in meeting the duty of co-operation requirements under ROGS.

## **4.2.3 Objective 4**

### **4a - Number of non-mainline railway organisations with process in place for introducing new or altered works, plant or equipment**

Companies indicated an increased use of all processes for ensuring the safe introduction of new / altered infrastructure or rolling stock to their operation in the year one survey compared with the baseline.

### **4a - Introduction of systems for deciding when safety verification must be applied**

It was found that most respondents in both surveys required only minor changes to existing processes in order to fully address safety verification requirements under ROGS. However, six year one respondents required major changes and three required a completely new process, although three also stated that their existing process required no changes.

### **4a - Changes to written safety verification schemes**

A similar proportion of respondents in both surveys reported making changes to written safety verification schemes (just below 40% in each).

### **4a - Challenges encountered in obtaining safety verification**

Knowing when to apply safety verification was identified as one of the main challenges in the baseline survey (55% of responses) and this remains the case after year one (48%).

### **4b - Identification of suitable independent competent person/s (ICP)**

This factor appears to have been less of an issue in the year one survey, reported by only 29% of respondents compared with 45% in the baseline.

### **4b - Changes in the way information is managed to ensure easy access for ICP's**

As stated previously, it was found that most respondents in both surveys required only minor changes to existing processes in order to fully address safety verification requirements under ROGS.

## **4.2.4 Objective 5**

### **5a - Number of organisations identifying safety critical work undertaken in organisation**

The majority of baseline and year one respondents were undertaking all activities listed in the questionnaire to help them comply with the safety critical work regulations under ROGS.

It would seem that year one respondents were finding it easier to address the new safety critical work regulations under ROGS compared with the baseline respondents. For example, less year one respondents (5%) required major changes to their existing methods (25% in the baseline) and more required only minor changes (76% compared with 38% in the baseline).

To support the above point, in relation to addressing the safety critical regulations, less year one respondents were finding time / resource an issue (33%, compared with 69% in the baseline) and less were finding training an issue (19% compared with 56% in the baseline). In fact, 43% of year one respondents found no challenges in this respect (only 19% in the baseline).

**5b - Number of organisations explicitly identifying workers undertaking safety critical work and those managing them**

A relatively high proportion of respondents from both surveys were undertaking this activity, 69% in the baseline and 71% in year one.

## 5. REFERENCES

<sup>1</sup> <http://www.rail-reg.gov.uk/upload/pdf/rogs-monitor-bomel-reprt-feb08.pdf>

<sup>2</sup> Health and Safety Executive (HSE). '*Health and Safety Climate Survey Tool (HSCST)*', Byrom & Corbridge, 1997

## APPENDIX A

### YEAR 1 SURVEY ISSUED TO INDUSTRY

# YEAR 1 SURVEY

## THE RAILWAYS AND OTHER GUIDED TRANSPORT SYSTEMS (SAFETY) REGULATIONS 2006 (ROGS)

### ABOUT THIS SURVEY

- BOMEL is an independent research and consultancy organisation. We are carrying out research on behalf of the Office of Rail Regulation (ORR) to monitor and evaluate the impact of ROGS.
- This research involves a series of activities over three years designed to gather and analyse safety performance information in order to assess whether ROGS have met their original aims and objectives. This survey is the second of four that we will issue during the three year period.
- We appreciate you are busy and we have therefore tried to keep the survey as short and interesting as possible. We value your views and appreciate the time taken to complete this survey.

### WHO SHOULD COMPLETE THIS SURVEY

- We are seeking views from a representative sample of organisations within the rail industry regarding ROGS.
- This questionnaire is ideally intended for those with a responsibility for safety (e.g. Safety Managers, Supervisors, Safety Representatives etc.).
- The survey covers the following areas:

#### **PART 1 – FOR EVERYONE TO COMPLETE**

1. Organisational details
2. Awareness and understanding of ROGS
3. Industry safety culture
4. General feedback on ROGS and ORR
5. Additional comments

#### **PART 2 – FOR DUTY HOLDERS ONLY TO COMPLETE**

6. Specific duty holder details
7. Implementation of ROGS
8. Additional comments

### CONFIDENTIALITY

All responses will be treated in the strictest confidence. Your name will not be passed to the ORR or made available to any other parties without your consent. Responses are being obtained from a range of organisations. The results of this survey will be aggregated and presented so that individual respondents will not be identifiable. Likewise, our report will not name individual contributors.

### COMPLETING THE SURVEY

Please respond in terms of your own organisation. If your organisation is part of a larger group but essentially works independently, then please answer for your organisation about which you have direct knowledge, and not the group. Please provide as many answers as you can but leave blank those questions you cannot answer. The survey should take no longer than 30 minutes to complete.

### CONTACT DETAILS

BOMEL: Mandy Dow, [mandydow@bomelconsult.com](mailto:mandydow@bomelconsult.com), 01753 216800  
Thames Central, 90 Hatfield Road, Slough, Berkshire, SL1 1QE

***Thank you for your assistance with this important study.***

**PART 1 – FOR EVERYONE TO COMPLETE**

**1 Organisational details**

**This section (1 – Organisational details) will remain confidential to BOMEL only**

1.1 Your name:	
<b>If you participated in the first survey and your details have not changed you do not need to complete questions 1.2 to 1.6 again</b>	
1.2 Job title:	
1.3 Organisation name:	
1.4 Telephone No:	
1.5 Email:	
1.6 Website:	

**2 Awareness and understanding of ROGS**

	Strongly agree	Agree	Neither	Disagree	Strongly disagree	No opinion
2.1 Please provide your views on the following statement by ticking the box which most accurately reflects your opinion:  <b><i>“I am aware of ROGS and their contents”</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2 Please provide your views on the following statement by ticking the box which most accurately reflects your opinion:  <b><i>“I understand the requirements of ROGS”</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Do you use any guidance to help you understand ROGS?  (If No go straight to question 2.7)	Yes				<input type="checkbox"/>	
	No				<input type="checkbox"/>	
2.4 If Yes, please indicate what guidance you use. (Select all boxes that apply)  If <i>Other</i> , please specify:	ORR published guidance				<input type="checkbox"/>	
	RSSB published guidance				<input type="checkbox"/>	
	Internal organisational guidance				<input type="checkbox"/>	
	Other				<input type="checkbox"/>	



		Very useful	Useful	Not useful	Not sure	Not applicable	
2.5	If you indicated using any of the following pieces of guidance, please indicate how useful you find the guidance:	ORR published guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RSSB published guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Internal organisational guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Other (as specified above)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6	In relation to the answers you gave in Question 2.5, please briefly explain why you felt each piece of guidance is either 'very useful', 'useful', 'not useful' etc.	ORR published guidance					
		RSSB published guidance					
		Internal organisational guidance					
		Other (as specified above)					
2.7	Do you use any other help to assist you in understanding ROGS?  (If No go straight to question 3.1)	Yes				<input type="checkbox"/>	
		No				<input type="checkbox"/>	
2.8	If Yes, please specify what help you use. (Select all boxes that apply)	External consultant				<input type="checkbox"/>	
		Internal consultant				<input type="checkbox"/>	
		Direct contact with ORR				<input type="checkbox"/>	
		Direct contact with RSSB				<input type="checkbox"/>	
		Trade union				<input type="checkbox"/>	
		Industry networking				<input type="checkbox"/>	
		Other				<input type="checkbox"/>	
	If Other, please specify:						

### 3 Industry safety culture

PLEASE PROVIDE YOUR VIEWS ON THE FOLLOWING SAFETY STATEMENTS BY TICKING THE BOX WHICH MOST ACCURATELY REFLECTS YOUR OPINION

	Strongly agree	Agree	Neither	Disagree	Strongly disagree	No opinion
3.1 There are good communications here about health and safety issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2 The company really cares about the health and safety of the people who work here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3 My immediate boss often talks to me about health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4 Supervisors are good at detecting unsafe behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5 There is nothing I can do to further improve health and safety here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.6 I trust my workmates with my health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.7 I am clear about what my responsibilities are for health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.8 People here do not remember much of the health and safety training which applies to their job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.9 People here always work safely even when they are not being supervised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.10 People here think health and safety is not their problem – it's up to management and others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.11 Some people here have a poor understanding of the risks associated with their work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.12 There are always enough people available to get the job done according to the health and safety procedures/instructions/rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.13 Near misses are always reported	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.14 Do management involve staff at all levels in safety related decision making?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
Please explain why:		
3.15 Is there a message conveyed to all staff that safety is a key priority?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
Please explain why:		
3.16 If Yes to Question 3.15, who is responsible for communicating the safety priority message to all staff? (Select one box)	Senior management	<input type="checkbox"/>
	Middle management	<input type="checkbox"/>
	Safety representatives	<input type="checkbox"/>
	Site work supervisors	<input type="checkbox"/>
	A mixture of the above	<input type="checkbox"/>
	No one specifically has that responsibility	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> , please specify:		
3.17 If Yes to Question 3.15, how is the message communicated to staff that safety is a key priority? (e.g. verbally as part of normal working operations; in writing through newsletters; verbally in company and project meetings etc.)		
3.18 Are there any circumstances where staff are placed under pressure to meet operational performance objectives?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
Please explain why:		
3.19 If Yes to Question 3.18, do you think this pressure affects safety?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
Please explain why:		

<b>4 General feedback on ROGS and ORR</b>
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4.1 Has ROGS changed the way in which safety has been managed in your organisation?  Please explain why:	Yes	<input type="checkbox"/>				
	No	<input type="checkbox"/>				
	Not sure	<input type="checkbox"/>				
4.2 If changes have been required, how have they impacted on your business operations? (Select one box)  Please explain why:	Positive impact	<input type="checkbox"/>				
	Neutral impact	<input type="checkbox"/>				
	Negative impact	<input type="checkbox"/>				
4.3 Has ROGS made any difference to safety related decision making?  Please explain why:	Yes	<input type="checkbox"/>				
	No	<input type="checkbox"/>				
	Not sure	<input type="checkbox"/>				
4.4 Please provide your views on the following statement by ticking the box which most accurately reflects your opinion:  <b><i>“From experience, I believe that standards of safety are the same under ROGS”</i></b>	Strongly agree	Agree	Neither	Disagree	Strongly disagree	No opinion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5 Could more be done to reduce the administrative burden of the regulations?  Please explain why:	Yes	<input type="checkbox"/>				
	No	<input type="checkbox"/>				
	No opinion	<input type="checkbox"/>				
4.6 Did you request and / or receive help from ORR regarding ROGS? (Select one box)	Requested and received help	<input type="checkbox"/>				
	Requested help, but did not receive help	<input type="checkbox"/>				
	Did not request any help	<input type="checkbox"/>				
4.7 If you requested help, what did you require help with?						
4.8 If you received help, how would you describe the help you received from ORR? (Select one box)	Excellent	<input type="checkbox"/>				
	Good	<input type="checkbox"/>				
	Average	<input type="checkbox"/>				
	Poor	<input type="checkbox"/>				
	Very poor	<input type="checkbox"/>				
	No opinion	<input type="checkbox"/>				

4.9 Approximately how many times have you received a visit from an ORR inspector (HMRI) in 2007? (Select one box)	No visits in 2007	<input type="checkbox"/>
	Between 1 and 2	<input type="checkbox"/>
	Between 3 and 5	<input type="checkbox"/>
	Between 6 and 10	<input type="checkbox"/>
	More than 10	<input type="checkbox"/>
	If preferred, please estimate the number of times:	
4.10 If you have received an inspector visit in 2007, typically how much time did the ORR inspector spend with your organisation (on one visit)? (Select one box)	Less than 1 hour	<input type="checkbox"/>
	1 to 2 hours	<input type="checkbox"/>
	3 to 5 hours	<input type="checkbox"/>
	6 to 8 hours	<input type="checkbox"/>
	More than 8 hours	<input type="checkbox"/>
	If preferred, please estimate the time in hours:	
4.11 How does this compare with the time spent on a visit before ROGS came into force?	More time spent since ROGS	<input type="checkbox"/>
	About the same	<input type="checkbox"/>
	Less time spent since ROGS	<input type="checkbox"/>
4.12 What else could ORR do to help you with ROGS?		

<b>5 Additional comments</b>
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5.1	Are there any additional comments that you would like to make?

**PART 2 – FOR DUTY HOLDERS ONLY TO COMPLETE**

**6 Specific duty holder details**

<b>This section will be used to put cost data into context</b>		
6.1 What best describes the role of your organisation?: (Select <b>one</b> box only or specify below)	Infrastructure manager	<input type="checkbox"/>
	Train operating company (TOC)	<input type="checkbox"/>
	Freight operating company (FOC)	<input type="checkbox"/>
	On Track Machine operation (OTM)	<input type="checkbox"/>
	Possession only operation	<input type="checkbox"/>
	Maintainer of vehicles or infrastructure	<input type="checkbox"/>
	Rolling stock manufacturer or company (incl. Leasing companies)	<input type="checkbox"/>
	Metro system (e.g. London Underground, Tyne & Wear Metro)	<input type="checkbox"/>
	Light railway	<input type="checkbox"/>
	Tramway	<input type="checkbox"/>
	Railway (or other transport system) operating under 40kph	<input type="checkbox"/>
	Trade union	<input type="checkbox"/>
	Passenger groups	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> , please specify:		
6.2	If known, could you please indicate your organisation's annual turnover for 2007:	£
6.3	If known, could you please indicate your organisation's total number of direct employees (i.e. not including subcontractors) in 2007:	
6.4	If known, could you please indicate your organisation's total number of contracted workforce (i.e. not directly employed) in 2007:	
6.5	If applicable, could you please indicate the total number of passenger kilometres travelled by your organisation in 2007:	Tick here if non-applicable: <input type="checkbox"/>
6.6	If applicable, could you please indicate the amount of freight tonnage moved by your organisation in 2007:	Tick here if non-applicable: <input type="checkbox"/>

## 7 Implementation of ROGS

<b>SAFETY MANAGEMENT SYSTEM (SMS)</b>		
7.1 Do you have a safety management system which is ROGS compliant?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
<i>If No or Not sure please go straight to Question 7.9</i>		
7.2 To what extent have you had to change or adapt your existing safety management system in order to fully address the requirements for an SMS under ROGS? (Select one box)	A completely new system was required	<input type="checkbox"/>
	Our existing system required major changes	<input type="checkbox"/>
	Our existing system required minor changes	<input type="checkbox"/>
	Our existing system was suitable in its current format	<input type="checkbox"/>
7.3 If action was required, what new activities did you undertake as a result of ROGS? (Select all boxes that apply)	Audit and review of current system	<input type="checkbox"/>
	Changed specific work processes	<input type="checkbox"/>
	Changed written procedures	<input type="checkbox"/>
	Changed safety policy statement	<input type="checkbox"/>
	Changed the way risks are managed	<input type="checkbox"/>
	Set new safety targets	<input type="checkbox"/>
	Changed current training provisions	<input type="checkbox"/>
	Changed the way safety information is managed	<input type="checkbox"/>
	Changed accident / near miss investigation process	<input type="checkbox"/>
	Changed emergency planning process	<input type="checkbox"/>
	Changed process for evaluating the effectiveness of the actual SMS	<input type="checkbox"/>
	Integrated the SMS with other organisational system/s	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> actions were required, please specify:		

7.4	Please estimate the costs your organisation incurred as a result of developing an SMS under ROGS. Please provide details on at least one of the following costs:	Estimated number of hours spent	
		Estimated number of days spent	
		Estimated actual cost in £'s spent	
7.5	Please estimate the costs your organisation incurred as a result of maintaining an SMS under ROGS, <b>per year</b> . Please provide details on at least one of the following costs:	Estimated number of hours spent	
		Estimated number of days spent	
		Estimated actual cost in £'s spent	
7.6	Compared to your costs to maintain a safety case, please indicate whether SMS maintenance costs under ROGS are:	Similar	<input type="checkbox"/>
		More expensive	<input type="checkbox"/>
		Less expensive	<input type="checkbox"/>
7.7	What are the main challenges in maintaining an SMS under ROGS? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>
		Time and / or resource pressures	<input type="checkbox"/>
		Organisational / cultural barriers	<input type="checkbox"/>
		Communicating the SMS to the organisation	<input type="checkbox"/>
		No challenges encountered	<input type="checkbox"/>
		Other	<input type="checkbox"/>
		If <i>Other</i> , please specify:	
7.8	To what extent do you think SMS under ROGS has affected safety? (Select one box)	Improved safety	<input type="checkbox"/>
		Hindered safety	<input type="checkbox"/>
		No change	<input type="checkbox"/>
		Not sure	<input type="checkbox"/>
		Other	<input type="checkbox"/>
		If <i>Other</i> , please specify:	

<b>SAFETY VERIFICATION (SV)</b>			
7.9	Do you have processes in place for ensuring safe introduction of new / altered infrastructure or rolling stock to your operation? (Select all boxes that apply)	Use "notified body" under the Railways (Interoperability) Regulations 2006 (RIR)	<input type="checkbox"/>
		SMS change management process	<input type="checkbox"/>
		Safety verification under ROGS	<input type="checkbox"/>
		Not applicable	<input type="checkbox"/>
If only 'Use "notified body" under RIR' and / or 'Not applicable' apply to your organisation please go straight to Question 7.15.			



7.10	To what extent have you had to change or adapt your existing processes in order to fully address SV requirements under ROGS? (Select one box)	A completely new process was required	<input type="checkbox"/>
		Our existing process required major changes	<input type="checkbox"/>
		Our existing process required minor changes	<input type="checkbox"/>
		Our existing process was suitable in its current format	<input type="checkbox"/>
7.11	If action was required, what activities did you undertake as a result of ROGS? (Select all boxes that apply)	Audit and review of current system	<input type="checkbox"/>
		Introduced system for deciding when SV must be applied	<input type="checkbox"/>
		Identification of a suitable independent competent person/s (ICP)	<input type="checkbox"/>
		Changed written SV scheme	<input type="checkbox"/>
		Changed way information is managed to ensure easy access for ICP	<input type="checkbox"/>
		Introduced process for handling ICP recommendations	<input type="checkbox"/>
		Changed process for evaluating the effectiveness of the SV process	<input type="checkbox"/>
		Other	<input type="checkbox"/>
If <i>Other</i> actions were required, please specify:			
7.12	Please estimate the costs your organisation incurred as a result of undertaking SV under ROGS, <b>per year</b> . Please provide details on at least one of the following costs:	Estimated number of hours spent	
		Estimated number of days spent	
		Estimated actual cost in £'s spent	
7.13	What are the main challenges in meeting the requirements of SV? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>
		Time and / or resource pressures	<input type="checkbox"/>
		Organisational / cultural barriers	<input type="checkbox"/>
		Knowing when to apply safety verification	<input type="checkbox"/>
		Identifying / appointing an ICP	<input type="checkbox"/>
		No challenges encountered	<input type="checkbox"/>
		Other	<input type="checkbox"/>
If <i>Other</i> , please specify:			

7.14 To what extent do you think SV under ROGS has affected safety? (Select one box)	Improved safety	<input type="checkbox"/>
	Hindered safety	<input type="checkbox"/>
	No change	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
	Other	<input type="checkbox"/>
	If <i>Other</i> , please specify:	

SAFETY CERTIFICATION			
7.15 Do you have a safety certificate under ROGS? (Select one box)	Yes	<input type="checkbox"/>	
	No	<input type="checkbox"/>	
	Not sure	<input type="checkbox"/>	
If <i>No</i> or <i>Not sure</i> please go straight to Question 7.23			
7.16 Please tick <b>ALL</b> of the stages in the safety certification assessment process you have completed. (Select <b>ALL</b> boxes that apply)	Preparing the application	<input type="checkbox"/>	
	Submission to ORR and affected parties	<input type="checkbox"/>	
	Main ORR assessment	<input type="checkbox"/>	
	Meeting with ORR to discuss assessment findings	<input type="checkbox"/>	
	Resolving outstanding issues	<input type="checkbox"/>	
	ORR final decision and sign-off	<input type="checkbox"/>	
7.17 Please estimate the costs your organisation incurred as a result of your initial application for a safety certificate under ROGS or an amendment to it, <b>per year</b> . Please provide details on at least one of the following costs:		Initial application	Amend
	Estimated number of hours spent		
	Estimated number of days spent		
	Estimated actual cost in £'s spent		
7.18 What are the main challenges? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>	
	Time and / or resource pressures	<input type="checkbox"/>	
	Organisational / cultural barriers	<input type="checkbox"/>	
	Consulting affected parties	<input type="checkbox"/>	
	Liaison with ORR	<input type="checkbox"/>	
	Employee involvement	<input type="checkbox"/>	
	No challenges encountered	<input type="checkbox"/>	
	Other	<input type="checkbox"/>	
If <i>Other</i> , please specify:			

7.19 Compared to Railway Safety Case applications, the <b>time</b> spent on applying for a safety certificate was: (Select one box)	More	<input type="checkbox"/>
	Less	<input type="checkbox"/>
	About the same	<input type="checkbox"/>
7.20 Compared to Railway Safety Case applications, the <b>cost</b> of applying for a safety certificate was: (Select one box)	More	<input type="checkbox"/>
	Less	<input type="checkbox"/>
	About the same	<input type="checkbox"/>
7.21 Do you think that improvements could be made to the application process?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	No opinion	<input type="checkbox"/>
If Yes, please specify:		
7.22 To what extent do you think safety certification under ROGS has affected safety? (Select one box)	Improved safety	<input type="checkbox"/>
	Hindered safety	<input type="checkbox"/>
	No change	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> , please specify:		

<b>SAFETY AUTHORISATION</b>			
7.23 Do you have safety authorisation under ROGS? (Select one box)	Yes	<input type="checkbox"/>	
	No	<input type="checkbox"/>	
	Not sure	<input type="checkbox"/>	
If <i>No</i> or <i>Not sure</i> please go straight to Question 7.31			
7.24 Please tick <b>ALL</b> of the stages in the safety authorisation assessment process you have completed. (Select <b>ALL</b> boxes that apply)	Preparing the application	<input type="checkbox"/>	
	Submission to ORR and affected parties	<input type="checkbox"/>	
	Main ORR assessment	<input type="checkbox"/>	
	Meeting with ORR to discuss assessment findings	<input type="checkbox"/>	
	Resolving outstanding issues	<input type="checkbox"/>	
	ORR final decision and sign-off	<input type="checkbox"/>	
7.25 Please estimate the costs your organisation incurred as a result of your initial application for a safety authorisation under ROGS or an amendment to it, <b>per year</b> . Please provide details on at least one of the following costs:		Initial application	Amend
	Estimated number of hours spent		
	Estimated number of days spent		
	Estimated actual cost in £'s spent		

7.26	What are the main challenges? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>
		Time and / or resource pressures	<input type="checkbox"/>
		Organisational / cultural barriers	<input type="checkbox"/>
		Consulting affected parties	<input type="checkbox"/>
		Liaison with ORR	<input type="checkbox"/>
		Employee involvement	<input type="checkbox"/>
		No challenges encountered	<input type="checkbox"/>
		Other	<input type="checkbox"/>
If <i>Other</i> , please specify:			
7.27	Compared to Railway Safety Case applications, the <b>time</b> spent on applying for a safety authorisation was: (Select one box)	More	<input type="checkbox"/>
		Less	<input type="checkbox"/>
		About the same	<input type="checkbox"/>
7.28	Compared to Railway Safety Case applications, the <b>cost</b> of applying for a safety authorisation was: (Select one box)	More	<input type="checkbox"/>
		Less	<input type="checkbox"/>
		About the same	<input type="checkbox"/>
7.29	Do you think that improvements could be made to the application process?	Yes	<input type="checkbox"/>
		No	<input type="checkbox"/>
		No opinion	<input type="checkbox"/>
If Yes, please specify:			
7.30	To what extent do you think safety authorisation under ROGS has affected safety? (Select one box)	Improved safety	<input type="checkbox"/>
		Hindered safety	<input type="checkbox"/>
		No change	<input type="checkbox"/>
		Not sure	<input type="checkbox"/>
		Other	<input type="checkbox"/>
If <i>Other</i> , please specify:			

<b>RISK ASSESSMENT</b>			
7.31	Do the regulations for conducting a risk assessment in accordance with Regulation 19 of ROGS apply to your organisation?	Yes	<input type="checkbox"/>
		No	<input type="checkbox"/>
		Not sure	<input type="checkbox"/>
If <i>No</i> or <i>Not sure</i> please go straight to Question 7.37			

7.32	To what extent have you had to change your existing arrangements for risk assessment to address the requirements under ROGS? (Select one box)	Completely new risk assessments were required	<input type="checkbox"/>
		Our existing risk assessments required major changes	<input type="checkbox"/>
		Our existing risk assessments required minor changes	<input type="checkbox"/>
		Our existing risk assessments were suitable	<input type="checkbox"/>
		Not applicable	<input type="checkbox"/>
7.33	If action was required, what activities did you undertake as a result of ROGS? (Select all boxes that apply)	Audit and review of current risk assessment process	<input type="checkbox"/>
		Conducting new risk assessment	<input type="checkbox"/>
		Changed management of risk assessment information	<input type="checkbox"/>
		Other	<input type="checkbox"/>
		If <i>Other</i> actions were required, please specify:	
7.34	If new risk assessments or changes were required, please estimate the costs to your organisation incurred as a result of these activities. Please provide details on at least one of the following costs:	Estimated number of hours spent	
		Estimated number of days spent	
		Estimated actual cost in £'s spent	
7.35	What were the main challenges you faced in adapting your arrangements to meet the requirements of Regulation 19? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>
		Time and / or resource pressures	<input type="checkbox"/>
		Organisational / cultural barriers	<input type="checkbox"/>
		Involving employees and their representatives	<input type="checkbox"/>
		Applying targets / standards	<input type="checkbox"/>
		No challenges encountered	<input type="checkbox"/>
		Other	<input type="checkbox"/>
		If <i>Other</i> , please specify:	
7.36	In summary, how do you feel about the changes brought about to risk assessment by ROGS? (Select one box)	Improved safety	<input type="checkbox"/>
		Hindered safety	<input type="checkbox"/>
		No change	<input type="checkbox"/>
		Not sure	<input type="checkbox"/>
		Other	<input type="checkbox"/>
If <i>Other</i> , please specify:			

ANNUAL SAFETY REPORT		
7.37 Are you required to compile and submit an annual safety report under ROGS? (Select one box)	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
If <i>No</i> or <i>Not sure</i> please go straight to Question 7.42		
7.38 Please estimate the costs your organisation incurred as a result of submitting an annual safety report, <b>per year</b> . Please provide details on at least one of the following costs:	Estimated number of hours spent	
	Estimated number of days spent	
	Estimated actual cost in £'s spent	
7.39 Please describe briefly the activities that you undertook in incurring these costs:		
7.40 What are the main challenges in preparing and submitting a report? (Select all boxes that apply)  If <i>Other</i> , please specify:	Understanding the requirements	<input type="checkbox"/>
	Time and / or resource pressures	<input type="checkbox"/>
	Gathering and compiling the information	<input type="checkbox"/>
	Meeting the deadline	<input type="checkbox"/>
	No challenges encountered	<input type="checkbox"/>
	Other	<input type="checkbox"/>
7.41 To what extent do you think annual safety reports under ROGS have affected safety? (Select one box)  If <i>Other</i> , please specify:	Improved safety	<input type="checkbox"/>
	Hindered safety	<input type="checkbox"/>
	No change	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
	Other	<input type="checkbox"/>

DUTY OF CO-OPERATION		
7.42 To what extent does the new duty of co-operation cause you to revise your processes for achieving co-operation? (Select one box)	A completely new set of processes was required	<input type="checkbox"/>
	Our existing set of processes required major changes	<input type="checkbox"/>
	Our existing set of processes required minor changes	<input type="checkbox"/>
	Our existing set of processes was suitable in their current format	<input type="checkbox"/>
	Not applicable	<input type="checkbox"/>
7.43 What activities do you undertake to comply with the duty under ROGS? (Select all boxes that apply)	Audit and review of existing methods of co-operation	<input type="checkbox"/>
	Identify areas where the majority of operator interfacing occurs	<input type="checkbox"/>
	Develop written procedures for interfacing with other duty holders	<input type="checkbox"/>
	Appoint representatives tasked with interfacing with other duty holders	<input type="checkbox"/>
	Develop methods for evaluating effectiveness of co-operation	<input type="checkbox"/>
	Other	<input type="checkbox"/>
	If <i>Other</i> , please specify:	
7.44 What are the main challenges in meeting the duty? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>
	Time and / or resource pressures	<input type="checkbox"/>
	Organisational / cultural barriers	<input type="checkbox"/>
	Other duty holders not co-operating	<input type="checkbox"/>
	No challenges encountered	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> , please specify:		
7.45 To what extent do you think the duty of co-operation has affected safety? (Select one box)	Improved safety	<input type="checkbox"/>
	Hindered safety	<input type="checkbox"/>
	No change	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> , please specify:		

SAFETY CRITICAL WORK		
7.46 To what extent have the duties relating to managing the competence, fitness and fatigue of individuals performing safety critical tasks caused you to revise current methods of working in order to comply with ROGS? (Select one box)	A completely new set of methods was required	<input type="checkbox"/>
	Our existing set of methods required major changes	<input type="checkbox"/>
	Our existing set of methods required minor changes	<input type="checkbox"/>
	Our existing set of methods was suitable in their current format	<input type="checkbox"/>
	Not applicable	<input type="checkbox"/>
7.47 What activities do you undertake as a result of ROGS? (Select all boxes that apply)	Identify safety critical work undertaken in organisation	<input type="checkbox"/>
	Identify workers undertaking safety critical work and those managing them	<input type="checkbox"/>
	Introduce competency management system	<input type="checkbox"/>
	Review factors which influence worker fatigue (e.g. shift patterns, frequency of breaks, commute time etc.)	<input type="checkbox"/>
	Review contractors arrangements for managing safety critical work	<input type="checkbox"/>
	Other	<input type="checkbox"/>
If <i>Other</i> , please specify:		
7.48 What are the main challenges in meeting the duty? (Select all boxes that apply)	Understanding the requirements	<input type="checkbox"/>
	Time and / or resource pressures	<input type="checkbox"/>
	Organisational / cultural barriers	<input type="checkbox"/>
	Training staff and managers	<input type="checkbox"/>
	No challenges encountered	<input type="checkbox"/>
	Other	<input type="checkbox"/>
	If <i>Other</i> , please specify:	
7.49 To what extent do you think duties regarding safety critical work have affected safety? (Select one box)	Improved safety	<input type="checkbox"/>
	Hindered safety	<input type="checkbox"/>
	No change	<input type="checkbox"/>
	Not sure	<input type="checkbox"/>
	Other	<input type="checkbox"/>
	If <i>Other</i> , please specify:	



**8 Additional comments**

8.1 Are there any additional comments that you would like to make?

***Please save the completed questionnaire to your desktop and then email it as an attachment to [mandydow@bomelconsult.com](mailto:mandydow@bomelconsult.com), marking the email subject as “ROGS survey” by 5pm on Friday 30<sup>th</sup> May 2008.***

***Thank you, again, for your help and assistance in this important study***