NOBLE DENTON

Office of Rail Regulation

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

Monitoring Report 3 – Year 2 Survey 2009

Noble Denton Consultants Limited

NOBLE DENTON

NOBLE DENTON

OFFICE OF RAIL REGULATION

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

C12490\06\005R REV C JUNE 2009

Noble Denton Consultants Limited
Thames Central
90 Hatfield Road
Slough
Berkshire SL1 1QE

Telephone 01753 216800
Fax: 01753 216801

DOCUMENT CONTROL

Revision	Issue date	Purpose	Author	Checker	Approver
A	April 2009	Draft Monitoring Report 3	JLMT	NAP	NAP
B	May 2009	Draft Monitoring Report 3	JLMT	NAP	NAP
C	June 2009	Final Monitoring Report 3	JLMT	NAP	NAP

CONTENTS

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.

- **Year two respondents -** this term is used to refer to people who completed the 'Year 2' survey, the findings of which are presented in this report.

EXECUTIVE SUMMARY

EVALUATION OVERVIEW: A REMINDER

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 Limited (formerly 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 two activities have already been completed; the first involved gathering the baseline measure and the second gathered data approximately one and a half years after ROGS had fully come into force. This current report builds upon these measures and describes the third data gathering activity, the 'Year 2' survey. The survey is designed to explore how the rail industry is managing implementation of the regulations approximately two and a half years since ROGS was fully implemented.

YEAR 2 SURVEY METHODOLOGY

As with the baseline and Year 1 survey, the Year 2 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 originally developed to ensure the questions will be applicable over the three-year period, allowing it to be utilised again for the final data collection survey ('Year 3'). 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 February 2009.

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 2 survey was issued to 89 individuals working in the rail industry. 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 31% response rate), although one of the 28 respondents did not directly answer the survey questions and therefore the actual survey sample was 27 for the majority of questions. Of the 27 organisations that responded to the full Year 2 survey, 23 classed themselves as 'duty holders' and four 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 11 out of 27 (41%) TOCS responded to the survey. Other types of responding organisation included companies involved with rolling stock, metro systems, Freight Operating Companies (FOCS), infrastructure managers, on-track machine operation (OTM) companies, light railways, tram organisations and passenger groups.

KEY FINDINGS

The overall key findings were as follows:

- Encouragingly, the percentage of organisations that believe changes made as a result of ROGS are having a positive impact on their business has risen from year one (35%) to year two (52%).

- Furthermore, the proportion of duty holders agreeing that standards of safety are the same under ROGS also appears to be increasing (74% in year two, compared with 64% in year one and 62% at the baseline).

- 'Risk assessment', the 'annual safety report' and 'duty of co-operation' all showed an increase in the proportion of duty holders believing that these processes under ROGS had improved safety.

- 'Safety management systems' and 'safety authorisation' indicated a fairly consistent proportion of duty holders believing these processes under ROGS had improved safety.

- 'Safety verification', 'safety certification' and 'safety critical work' all showed a decrease in the proportion of duty holders believing these processes under ROGS had improved safety.

- Encouragingly, for each of the key safety management processes implemented under ROGS, there were some duty holders who felt these processes had improved safety.

- The number of organisations agreeing that the way safety is managed in their organisation has changed under ROGS has increased over the three surveys. Reasons for change include re-focusing the SMS and the onus for safety being more on the company than external agencies. Safety being less prescriptive and more structured was also noted.

- The majority of organisations in year two felt that ROGS had influenced safety related decision making, this was similar to the baseline but an increase compared with the year one survey.

- The safety culture findings were generally positive; the only area that did not score so favourably was in relation to the reporting of near misses.

- The number of people thinking that more could be done to reduce the administrative burden of ROGS has steadily decreased over the three surveys.

- All respondents who asked ORR for help in year two received help. Help was typically sought about general issues around the regulations. The majority of organisations described the help they received from ORR as either 'good' or 'excellent'.

NEXT STEPS

The final steps in the ongoing monitoring and evaluation of ROGS include a fourth and final survey during the 3rd to 4th quarter of 2009, followed by a second Influence Network workshop. A series of meetings will also be held with ORR representatives to gather any additional operational data. The data will then be analysed in the first quarter of 2010 in order to assess the extent to which ROGS has been successful in meeting its original aims and objectives.

1. INTRODUCTION

1.1 BACKGROUND

This report has been prepared by Noble Denton Consultants Limited (NDC) (previously BOMEL Limited) for the Office of Rail Regulation (ORR) and describes the third 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 NDC 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 spans 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'[1]). This was followed by a second survey (Year 1) to gather further safety performance measures from a range of rail industry stakeholders (published in 'Monitoring Report 2'[2]). The third survey (Year 2) and its results constitute this report. These measures will be followed by one further data gathering activity (Year 3). These data collection time points are as follows:

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

This current report constitutes the findings from the Year 2 ROGS 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. Furthermore, in Year 2, some questions were removed from the question set to avoid asking industry about historical issues already sufficiently captured in the baseline and Year 1 measures. Care was taken to ensure a core set of questions remained that could be compared across all three measurement time points. 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 NDC only and enables respondents to be contacted again if necessary.

- **Awareness and understanding of ROGS** – this section was developed in order to gauge whether the initial outcomes on the impact pathway have been achieved. Because 'awareness' and 'understanding' of ROGS are deemed to be initial outcomes, and industry had already been consulted on these issues in both the baseline and Year 1 surveys, it was felt that these early indicators had been sufficiently explored. This section was therefore streamlined to focus on the ROGS guidance industry was still using.

- **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)[3] 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** – in the Year 2 survey this just asked respondents to indicate what type of role best describes their organisation.

- **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). In the Year 2 survey, some questions were removed that related to the initial set up of systems and procedures.

- **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 NDC with input from ORR officials and final approval was given by ORR prior to issuing the Year 2 survey to industry.

Please see Appendix A for a copy of the Year 2 survey issued to the rail industry.

2.2.1 Issuing the Year 2 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 at the beginning of February 2009, with a response deadline of Friday 27th February 2009. This was almost two 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 NDC. 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. NDC was then able to analyse the responses using its NDC Consultation Response Analysis Tool (see Figure 1 for a diagram of the user interface).

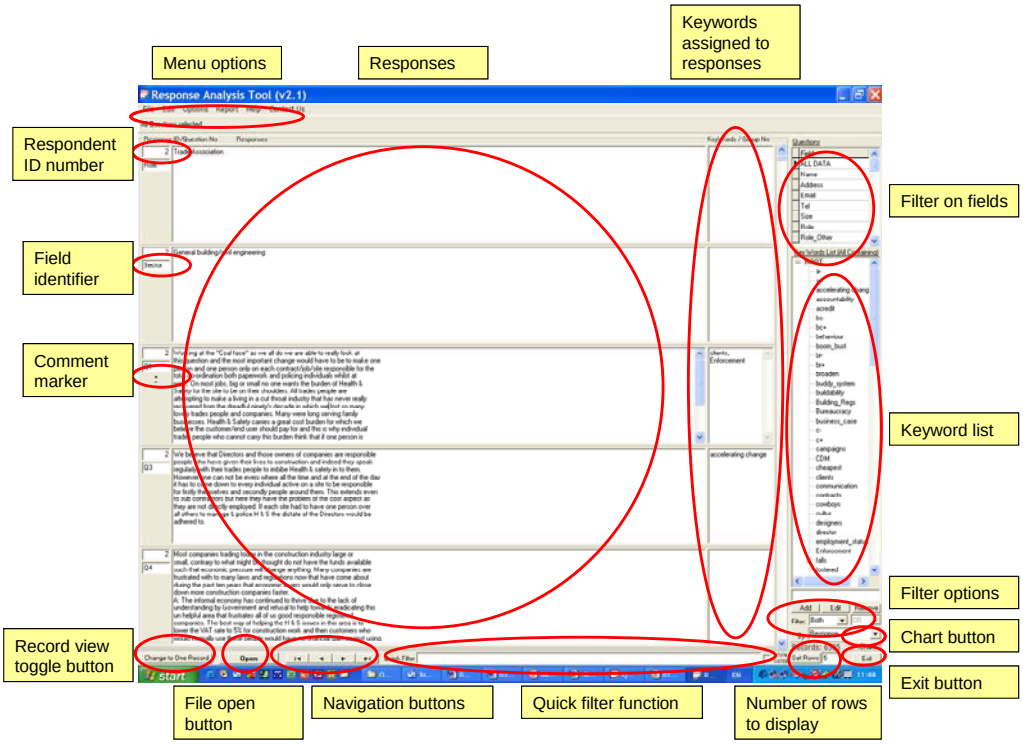

Figure 1 Response Analysis Tool user interface

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 and Year 1 survey, allowing direct comparisons to be made with the Year 2 survey.

3. YEAR TWO FINDINGS AND COMPARISON WITH THE BASELINE AND YEAR ONE

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% - six 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% - six 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.

- **Largest** – 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 second ROGS survey, the findings of which constituted the 'Year 1' survey.

- **Year two respondents –** this term is used to refer to people who completed the 'Year 2' 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 survey targeted organisations in the rail industry. Individuals with a responsibility for safety (such as safety managers, supervisors and safety representatives, etc.) were sent the survey to complete. To date, the following three surveys have been issued:

- **Baseline survey:** issued to 34 organisations (26 responded = 76% response rate)
- **Year one survey:** issued to 93 organisations (28 responded = 30% response rate)
- **Year two survey:** issued to an initial 89 organisations (27 responded[1] = 31% response rate)

Of the 27 organisations that responded in the year two survey, 23 organisations stated they were duty holders, and the remaining four organisations reported that they belonged to other rail industry organisations (i.e. 'non-duty holders' such as passenger groups, safety groups, other transport associations, trade unions, etc.).

In the baseline survey, 17 classed themselves as 'duty holders' and nine classed themselves as other rail industry organisations (i.e. non-duty holders). In the year one survey, 22 organisations classed themselves as duty holders and six classed themselves as non-duty holders.

Therefore, the proportion of duty holders responding to each survey has increased from the baseline (65%), to 79% in year one and 85% in year two.

[1] An additional organisation (a trade union) responded (i.e. 28 in total = 31% response rate) but it did not directly complete the survey questions. Its comments have been incorporated at the end of Section 3.4.

The specific types of organisations who participated in each of the three surveys are reflected in Figure 2.

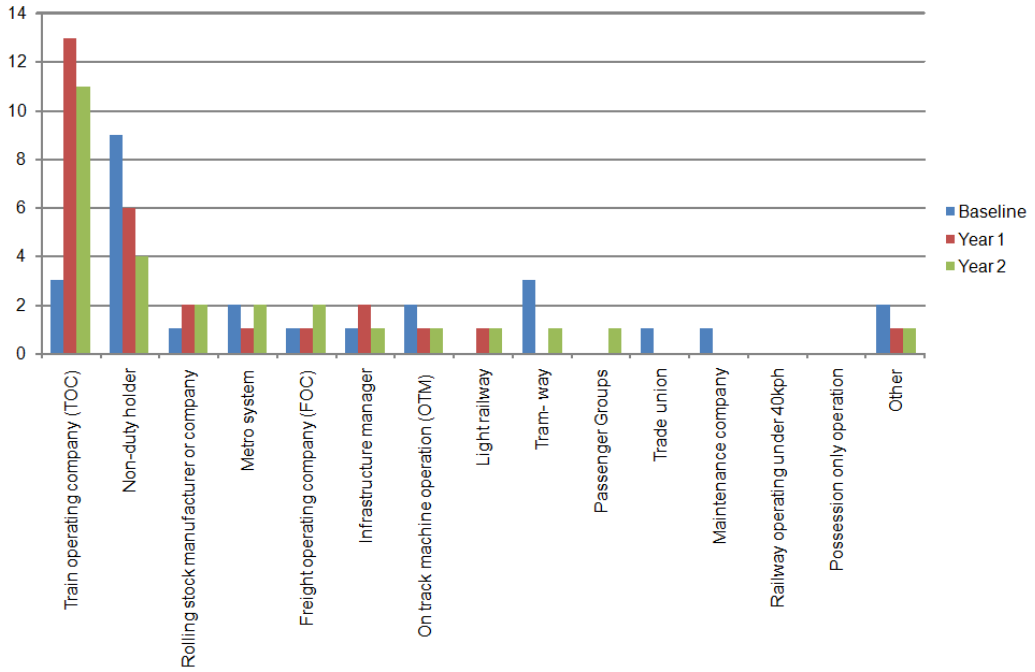

Figure 2 Types of survey respondent

Figure 2 highlights that year two respondents mainly came from train operating companies (TOCs) (41% - 11 out of 27). This is similar to the picture for the year one survey (46% - 13 out of 28) but much more than the baseline (12% - three out of 26). The remaining respondents in year two come from a range of other types of organisation, as was the case in the two previous surveys.

3.4 SURVEY FINDINGS – COMPLETED BY ALL SURVEY RESPONDENTS

3.4.1 Use of help in understanding and implementing ROGS

Respondents were asked whether they used guidance in understanding and implementing ROGS. This question was asked of all respondents regardless of duty holding status. Figure 3 highlights the findings.

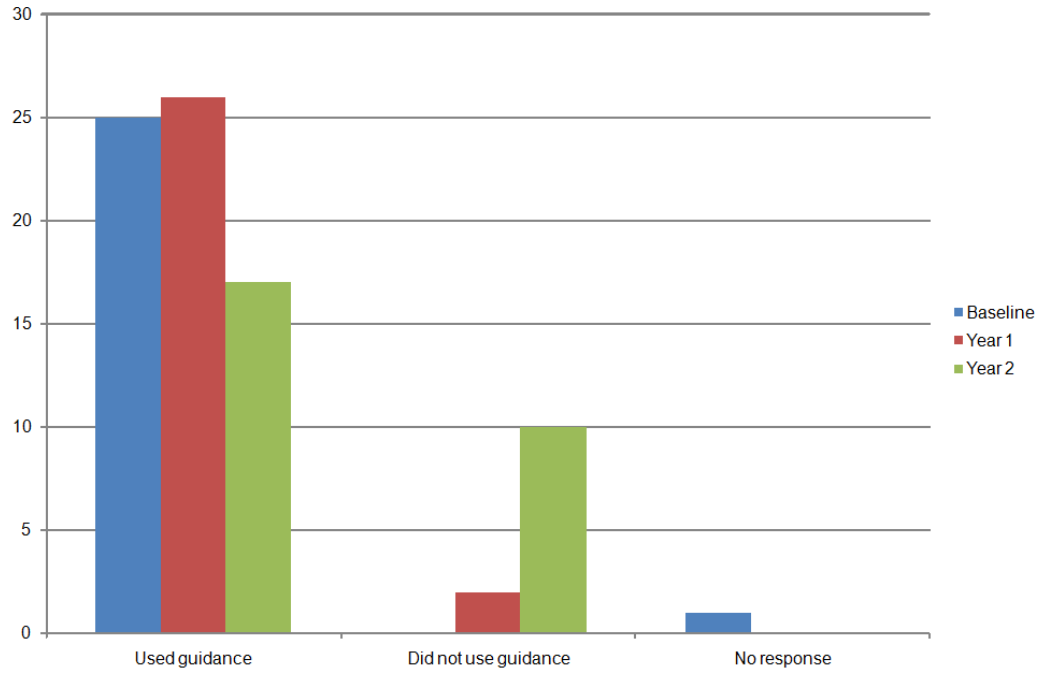

Figure 3 Number of respondents who did and did not use guidance to understand / implement ROGS

Positively, as can be seen in Figure 3, fewer respondents used help in year two than in year one or the baseline. Those using help amounted to 63% (17 out of 27) for year two, 93% (26 out of 28) for year one and 96% (25 out of 26) at baseline. In line with this finding, the proportion of those who said they did **not** need help has risen steeply from 7% (two out of 28) in year one to 37% (10 out of 27) by year two. It is likely that this indicates that ROGS is steadily being better understood by the industry. However, a high proportion of people still use the help and guidance that is available.

For the 17 who said they used guidance in understanding and implementing ROGS, further information was elicited in terms of the sources of help sought. Respondents were asked to indicate all the sources that they referred to (with some selecting more than one source). Figure 4 illustrates the various sources of help that were sought (at each of the three surveys).

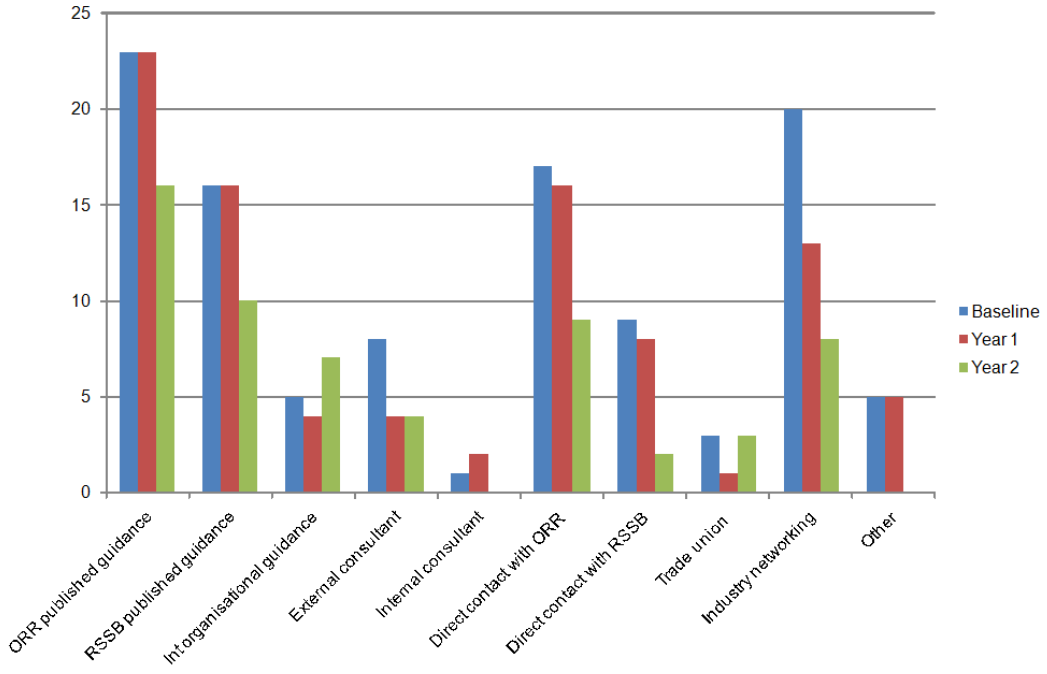

Figure 4 Sources used by respondents to help them understand and implement ROGS

Figure 4 highlights that for year two, the most common source was 'ORR published guidance'. A total of 94% of respondents (16 out of 17) used this source. This trend was the same at baseline and year one. The graph also shows that for year two, another significant source of guidance was 'direct contact with ORR' (53% - nine out of 17 respondents). A similar number of respondents (59% - 10 out of 17) also relied on 'RSSB published guidance'.

Around 62% (16 out of 26 respondents) for year one reported using 'direct contact with ORR', and also using 'RSSB published guidance'. For the baseline year, 68% (17 out of 25 respondents) used 'direct contact with ORR', and a slightly lower number of around 64% (16 out of 25 respondents) referred to 'RSSB published guidance'. This indicates these sources of guidance have remained significant over the course of time.

It is also interesting to note that 'industry networking' remains a popular source of guidance in helping individuals understand and implement ROGS. However, it can be seen that the use of this form of support has gradually diminished over the years with the 80% (20 out of 25 respondents) evident at baseline, reducing to 50% (13 out of 26 respondents) in year one, and reducing further to 47% (eight out of 17 respondents) by year two.

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 all three 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 nine 'positive' and four '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)[3] 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. These were also asked in the year two survey.

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 (i.e. out of 26 in the baseline survey, 28 in the year one survey and 27 in the year two survey). The baseline figures are shown on the first line of each table cell, year one figures on the second line and year two figures on the third lines. Year two figures are also **bolded**.

Note that a percentage increase (or decrease) could be positive or negative depending on whether the statement is positive or negative.

Table 1 Level of agreement with core organisational safety culture issues

POSITIVELY PHRASED SAFETY CULTURE STATEMENTS	*Year of survey*	Response					
		Strongly agree	**Agree**	**Neither**	**Disagree**	**Strongly disagree**	**No opinion**
3.1. There are good communications here about health and safety issues	Baseline Year 1 **Year 2**	19% (5) 25% (7) **41% (11)**	50% (13) 60% (17) **48% (13)**	8% (2) 4% (1) **4% (1)**	4% (1) 4% (1) **0**		19% (5) 7% (2) **7% (2)**
3.2. The company really cares about the health and safety of the people who work here	Baseline Year 1 **Year 2**	58% (15) 43% (12) **44% (12)**	23% (6) 50% (14) **41% (11)**	0 0 **4% (1)**	0 0 **4% (1)**		19% (5) 7% (2) **7% (2)**
3.3. My immediate boss often talks to me about health and safety	Baseline Year 1 **Year 2**	42% (11) 54% (15) **59% (16)**	27% (7) 29% (8) **15% (4)**	4% (1) 4% (1) **7% (2)**	8% (2) 0 **7% (2)**	0 4% (1) **0**	19% (5) 11% (3) **11% (3)**
3.4. Supervisors are good at detecting unsafe behaviour	Baseline Year 1 **Year 2**	4% (1) 4% (1) **4% (1)**	46% (12) 46% (13) **67% (18)**	23% (6) 32% (9) **15% (4)**	0 7% (2) **4% (1)**		27% (7) 11% (3) **11% (3)**
3.6. I trust my workmates with my health and safety	Baseline Year 1 **Year 2**	15% (4) 25% (7) **22% (6)**	54% (14) 61% (17) **63% (17)**	8% (2) 7% (2) **0**	4% (1) 0 **0**		19% (5) 7% (2) **15% (4)**
3.7. I am clear about what my responsibilities are for health and safety	Baseline Year 1 **Year 2**	35% (9) 57% (16) **56% (15)**	46% (12) 36% (10) **33% (9)**	0 0 **4% (1)**			19% (5) 7% (2) **7% (2)**
3.9. People here always work safely even when they are not being supervised	Baseline Year 1 **Year 2**	12% (3) 4% (1) **4% (1)**	27% (7) 54% (15) **52% (14)**	15% (4) 29% (8) **19% (5)**	23% (6) 7% (2) **19% (5)**		23% (6) 7% (2) **7% (2)**
3.12. There are always enough people available to get the job done according to the health and safety procedures/instructions/rules	Baseline Year 1 **Year 2**	0 7% (2) **4% (1)**	31% (8) 54% (15) **63% (17)**	19% (5) 25% (7) **19% (5)**	19% (5) 4% (1) **4% (1)**		31% (8) 11% (3) **11% (3)**

POSITIVELY PHRASED SAFETY CULTURE STATEMENTS	*Year of survey*	Response					
		Strongly agree	**Agree**	**Neither**	**Disagree**	**Strongly disagree**	**No opinion**
3.13. Near misses are always reported	Baseline	4% (1)	15% (4)	19% (5)	23% (6)	15% (4)	23% (6)
	Year 1	4% (1)	7% (2)	21% (6)	32% (9)	11% (3)	25% (7)
	Year 2	**4% (1)**	**15% (4)**	**22% (6)**	**37% (10)**	**7% (2)**	**15% (4)**

** Not all percentages sum 100% due to rounding*

NEGATIVELY PHRASED SAFETY CULTURE STATEMENTS	*Year of survey*	Response					
		Strongly agree	**Agree**	**Neither**	**Disagree**	**Strongly disagree**	**No opinion**
3.5. There is nothing I can do to further improve health and safety here	Baseline	0	4% (1)	0	31% (8)	46% (12)	19% (5)
	Year 1	0	0	11% (3)	0	25% (7)	64% (18)
	Year 2	**7% (2)**	**0**	**11% (3)**	**7% (2)**	**67% (18)**	**7% (2)**
3.8. People here do not remember much of the health and safety training which applies to their job	Baseline		8% (2)	8% (2)	62% (16)	0	23% (6)
	Year 1		4%(1)	18% (5)	54% (15)	7% (2)	18% (5)
	Year 2		**4% (1)**	**19% (5)**	**52% (14)**	**19% (5)**	**7% (2)**
3.10. People here think health and safety is not their problem – it's up to management and others	Baseline	0	4% (1)	8% (2)	46% (12)	23% (6)	19% (5)
	Year 1	0	4% (1)	7% (2)	61% (17)	21% (6)	7% (2)
	Year 2	**4% (1)**	**4% (1)**	**7% (2)**	**44% (12)**	**30% (8)**	**11% (3)**
3.11. Some people here have a poor understanding of the risks associated with their work	Baseline	0	35% (9)	12% (3)	35% (9)	0	19% (5)
	Year 1	4% (1)	18% (5)	18% (5)	36% (10)	14% (4)	11% (3)
	Year 2	**0**	**26% (7)**	**15% (4)**	**33% (9)**	**15% (4)**	**11% (3)**

** Not all percentages sum 100% due to rounding*

Table 1 highlights the following key points:

- Out of all 13 safety culture factors, 12 generated a positive response from the largest proportion of respondents.
- The only factor which did not receive a positive response was in relation to near miss reporting, with 44% of respondents (12 out of 27) either disagreeing or strongly disagreeing that near misses are always reported.
- Responses to six of the safety culture statements also showed a positive improvement in the year two survey compared with previous years; these statements were as follows:
    - *"There are good communications here about health and safety issues"*
    - *"My immediate boss often talks to me about health and safety"*
    - *"Supervisors are good at detecting unsafe behaviour"*
    - *"There are always enough people available to get the job done according to the health and safety procedures / instructions / rules"*
    - *"There is nothing I can do to further improve health and safety here"*
    - *"People here think health and safety is not their problem – it's up to management and others"*

Additional supplementary questions were added to the year one survey in order to explore industry safety culture in more detail. The responses for that year, as well as the responses for year two, are presented in Table 2.

Note that a percentage increase (or decrease) could be positive or negative depending on whether the statement is positive or negative.

Table 2 Supplementary safety culture questions and responses from year one and year two surveys

QUESTION	*Year of survey*	Response			
		Yes	**No**	**Not sure**	**Not answered**
Positively phrased questions					
Do management involve staff at all levels in safety related decision making?	Year 1 **Year 2**	61% (17) **63% (17)**	18% (5) **22% (**6)	18% (5) **11% (3)**	3% (1) **4% (1)**
Is there a message conveyed to all staff that safety is a key priority?	Year 1 **Year 2**	89% (25) **85% (23)**	0% (0) **4% (1)**	8% (2) **4% (1)**	3% (1) **7% (2)**
Negatively phrased questions					
Are there any circumstances where staff are placed under pressure to meet operational performance objectives?	Year 1 **Year 2**	64% (18) **52% (14)**	18% (5) **22% (6)**	14% (4) **19% (5)**	3% (1) **7% (2)**
If 'yes' to the above question, do you think this pressure affects safety?	Year 1 **Year 2**	18% (5) **15% (4)**	25% (7) **30% (8)**	29% (8) **22% (6)**	29% (8) **33% (9)**

** Not all percentages sum 100% due to rounding*

Table 2 highlights how since year one, perceptions around the additional safety culture issues remain largely consistent. There has been an improving trend, but the increases are often only by a few percentage points.

Respondents were also asked about who communicates the message that safety is a key priority. The results for year two were very similar to year one with most respondents 59% (16 out of 27 respondents) indicating that it was a mixture of senior/middle management, safety representatives, and site work supervisors. A further 22% (six out of 27) of respondents indicated that senior management fulfilled this role.

Respondents were asked if they felt that there were any circumstances where staff are placed under pressure to meet operational performance objectives (see Table 2). In year two, just over half of respondents (52% - 14 out of 27) said they felt staff were put under pressure, which is a decrease from the 64% (18 out of 28) who answered 'yes' to this question in year one. This positive trend is also reinforced by the number who said 'no' to this question, with around 22% (six out of 27) in year two, and a slightly lower percentage of 18% (five out of 28) in year one.

Respondents were then asked to explain why people were put under this pressure. The findings are presented on Figure 5.

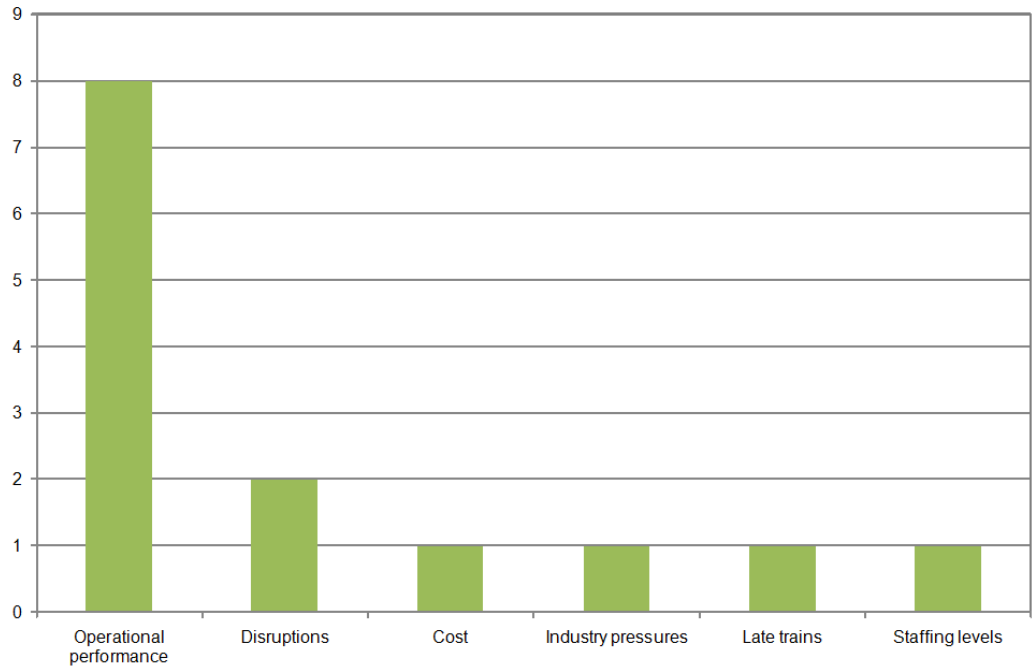

Figure 5 Year two survey responses to the question: "Why do you think staff are placed under pressure?"

Figure 5 highlights how attempting to meet operational performance standards was the most commonly cited reason for being put under pressure.

Respondents were also asked whether they felt that this pressure affected safety. Around 15% believed that this pressure does affect safety, 30% believed this pressure does **not** affect safety, 22% were 'not sure', and 33% did not answer this question. Note that there

was a total of four respondents who did not initially state 'yes' to the question about pressure, but who still went on to specify their response to the follow on question. These four respondents' views were still taken into account.

The respondents who believed that pressure did affect safety were asked to explain the relationship. One of the comments made was as follows:

"*Wherever there are pressures, there will always be an effect. In regards to pressure affecting safety, it can have an effect, the degree of effect, being related to the type of pressure being applied. Crowd control during the Christmas rush period, is one such occasion where front line staff are under additional pressure because of the sustained numbers of customers throughout the day*."

3.4.3 Feedback on ROGS and ORR

The survey asked respondents about their views on ORR and ROGS. 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 6 highlights the respondents' feedback to the question of whether ROGS has influenced the way safety is managed.

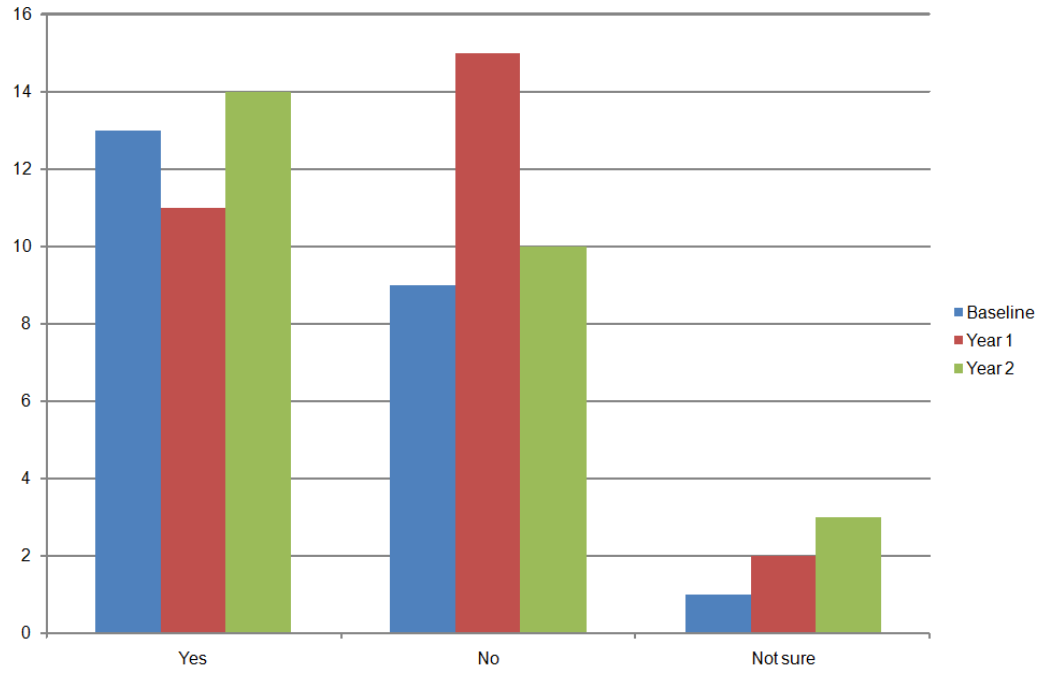

Figure 6 Responses to the question: "Has ROGS changed the way in which safety has been managed in your organisation?"

Figure 6 shows that ROGS has changed the way safety is managed with 52% (14 out of 27) of respondents in year two, which is higher than both the baseline (50% - 13 out of 26) and year one (39% - 11 out of 28). Conversely, the number who said ROGS has had **no** impact on safety management processes, has decreased from year one to year two from 54% (15 out of 28) down to 37% (10 out of 27).

Respondents were also asked to explain why they felt safety management had, or had not, changed under ROGS. The responses are presented in Figure 7.

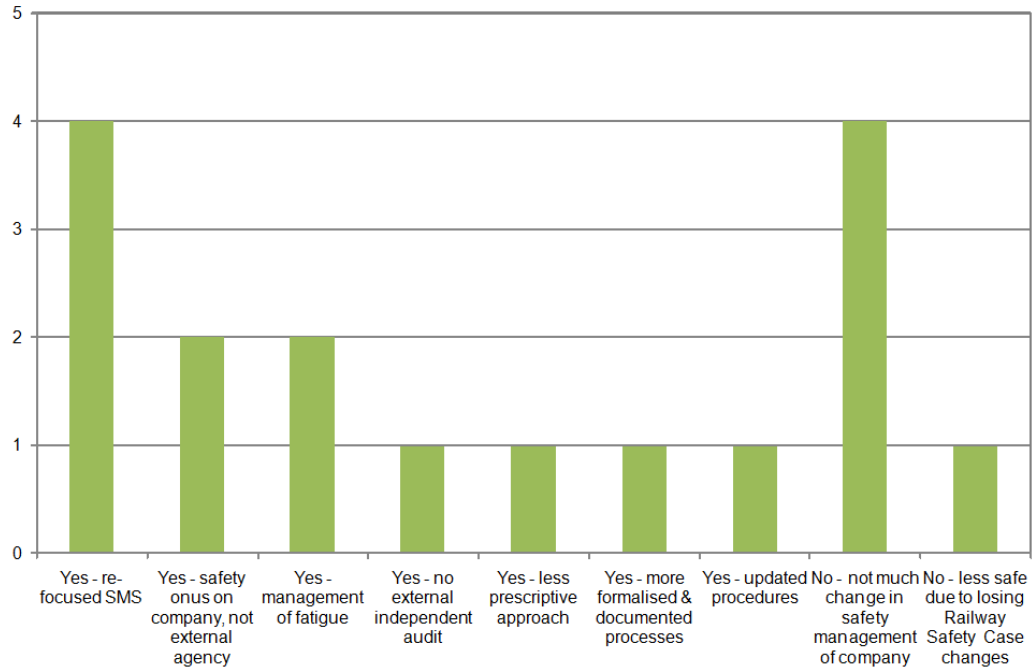

Figure 7 Year two survey reasons for answers to the question: "Has ROGS changed the way in which safety has been managed in your organisation?"

Figure 7 highlights that four respondents felt ROGS had not affected the way safety is managed in their companies because they already had strong safety management systems in place. An equal number of respondents stated that ROGS had refocused their safety management system.

In year one, most respondents thought their safety management system had become more risk based as a result of ROGS.

When asked if any changes made as a result of ROGS had impacted on business operations, respondents had to indicate whether this impact had been 'positive', 'neutral' or 'negative'. Their responses have been presented on Figure 8. (Note that this question was not asked in the baseline survey).

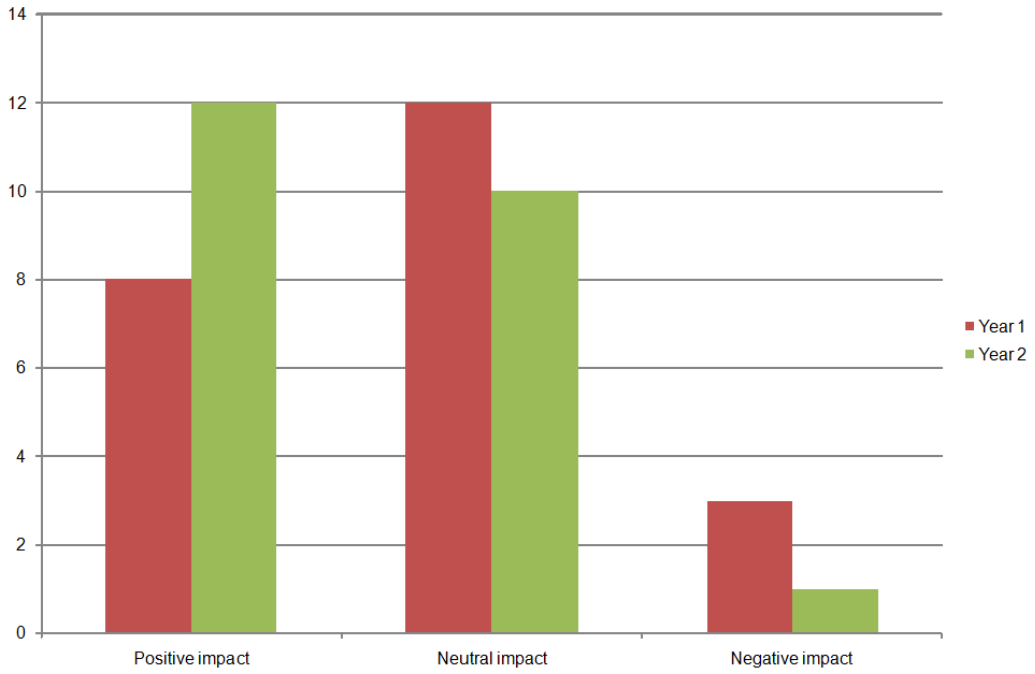

Figure 8 Responses to the question: "If changes have been required (due to ROGS), how have they impacted on your business operations?"

Figure 8 highlights that out of the 23 individuals that completed this question in year two (which is the same number as year one), there is an apparent positive trend. The percentage of respondents that feel that changes due to ROGS have had a favourable (positive) impact has risen from 35% in year one to 52% (12 out of 23) in year two. To reinforce this positive trend, only 4% of the sample (one out of 23) believe that changes due to ROGS has had a negative impact on operations in year two; a decrease from the original 13% in year one.

To understand what the positive effects have been year two respondents were asked to comment. These verbatim comments are as follows (each bullet point represents the views of one individual):

- "*Greater self-regulation*."
- "*We have been able to adopt a more flexible and risk-based approach which makes more sense to line managers*."
- "*Continual improvement being incorporated in our SMS.*"
- "*Has made us more hands on*."

- "*More practical structure and delivery*."
- "*Processes have been streamlined as a result of review, making them more efficient and achieving better compliance levels from staff*."
- "*New procedures*."

The one response which indicated that changes as a result of ROGS had created a negative impact gave the following reason:

- "*Adds to costs and financial risks*."

The survey also asked whether ROGS had made a difference to safety related decision-making. Responses are illustrated in Figure 9, which suggest that for year two, the majority of respondents (59% - 16 out of 27) do feel that ROGS has influenced safety related decision-making.

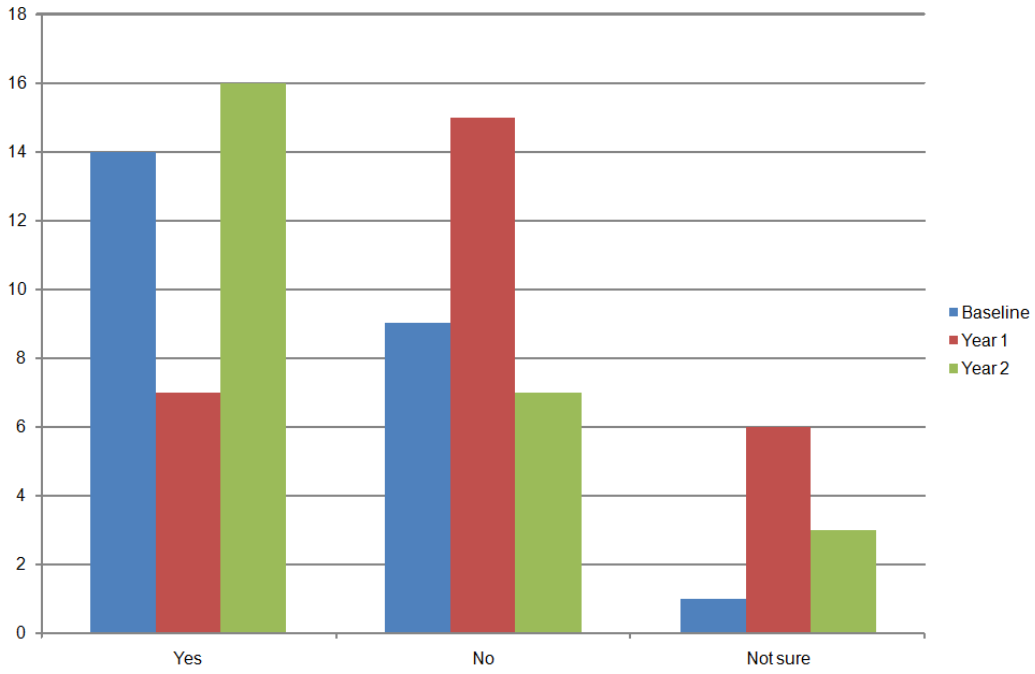

Figure 9 Responses to the question: "Has ROGS made any difference to safety related decision-making?"

Figure 9 also highlights the changes from year to year. Opinions in year two appear to be most similar to the baseline, where most people (54% - 14 out of 26) indicated that ROGS had influenced safety related decision-making. It was in year one that a dip in the 'yes' response was encountered where only 25% (seven out of 28) of people agreed with the question.

Year two respondents who agreed that ROGS had influenced safety related decision-making, gave the following reasons why (each bullet point represents the views of one individual):

- "*Simpler system for safety verification*."
- "*Safety verification is a new requirement but only needed for new or novel schemes so few are processed through this route. The replacement of ROTS has probably reduced bureaucracy and helped streamline lower level engineering changes*."
- "*Emphasised need to document decision process*."
- "*Enhanced validation of all aspects of the business*."

- "*Executive now takes a greater responsibility for making risk-based decisions as railway group standards are being stripped back and we are less driven by HMRI requirements*."

- "*When significant changes took place under the RSC, regulations approval was sought from the HMRI. Now it's a business decision and compliance with the safety validation process. This means a strong business stance needs to be made and challenges on validations made internally*."

- "*Recognition that the company is predominantly responsible for its own compliance*."

- "*Decision (safety) making is clearly defined, with process facilitating structured sponsorship and validation of change, the provision of audit trails directing decision and recording event histories*."

- "W*e are more directly accountable for the actions of our franchise and concessionaires*."

- "*We have become statutory consultees on ROGS applications*."

- "*By carrying out risk assessments*."

- "*The safety approvals processes have changed*."

- "*Varies depending on project*."

The year two respondents who disagreed that ROGS had made a difference to safety related decision-making elaborated by making the following comments:

- "*Safety decision-making model based on RSSB guidance has been in use for some time*."

- "*The same decision-making processes are used as were under the old safety case regime*."

- "*Safety has always been traditionally factored into our decision-making processes. ROGS hasn't fundamentally changed that approach*."

To understand whether standards of safety had altered as a consequence of introducing ROGS, respondents were asked to indicate their level of agreement with a related statement. The results indicate (as seen in Figure 10) that perceptions over the three surveys (baseline, year one and year two) are all approximately similar.

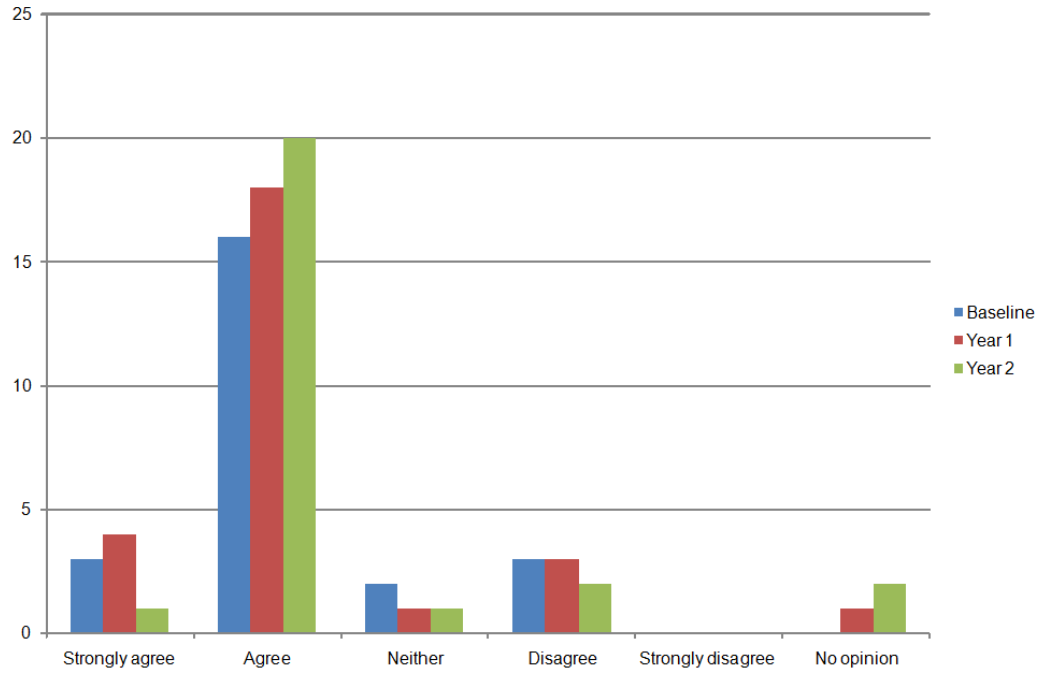

Figure 10 Level of agreement with the statement: "From experience, I believe that standards of safety are the same under ROGS"

Figure 10 highlights that the majority of respondents (74% - 20 out of 27) agreed that standards of safety are the same under ROGS. This was an increase from year one (64% - 18 out of 28) and the baseline (62% - 16 out of 26). However, this increase must be considered in relation to the proportion who 'strongly agreed' with the statement, which saw a marginal decline in year two.

No more than one or two respondents chose one of the other responses, with no one indicating that they 'strongly disagreed' with the statement, which was the same at previous measurement points.

Furthermore, one respondent (a TOC) indicated:

"*My general feeling is that our standards of safety are now higher than they were pre-ROGS because the new Regulations have required us to address risk much more thoroughly than was the case before*."

When questioned about the administrative burden of ROGS, Figure 11 highlights that 37% (10 out of 27) did not think any more could be done to reduce the burden. Only 22% felt that more could be done.

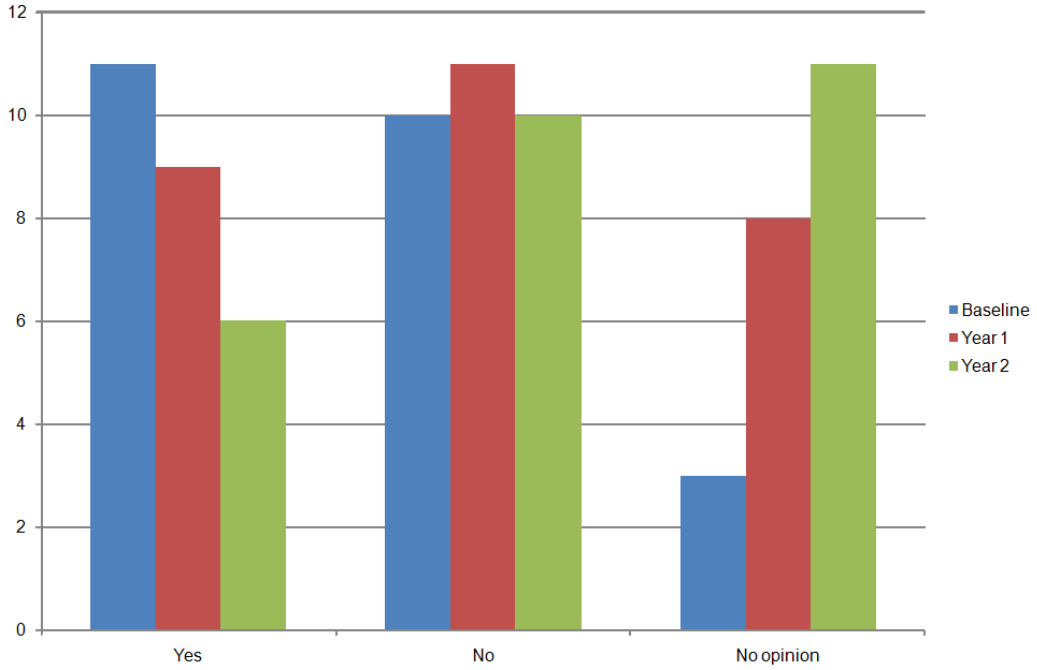

Figure 11 Responses to the question: "Could more be done to reduce the administrative burden of the regulations?"

Studying the trends highlighted in Figure 11, it is apparent that the number of people who feel that more could be done to reduce the administrative burden of ROGS (i.e. answered 'yes') has decreased steadily from the original baseline number of 42% (11 out of 26). Interestingly, the number of people selecting 'no' has remained largely the same throughout the three measurement time points, although those who had 'no opinion' has gradually increased from the baseline through to year two.

From those who indicated that more could be done to reduce the administrative burden, one respondent (a TOC) suggested integrating change validation with rail interoperability regulations and one respondent (a light railway) mentioned that currently two duty holders have been created, when only one was needed for the safety case regime.

To determine whether assistance was required from ORR in ROGS implementation, and gauge ORR's level of response, respondents were questioned in year one and two. Note that these questions were not asked in the baseline survey. The results are shown on Figure 12.

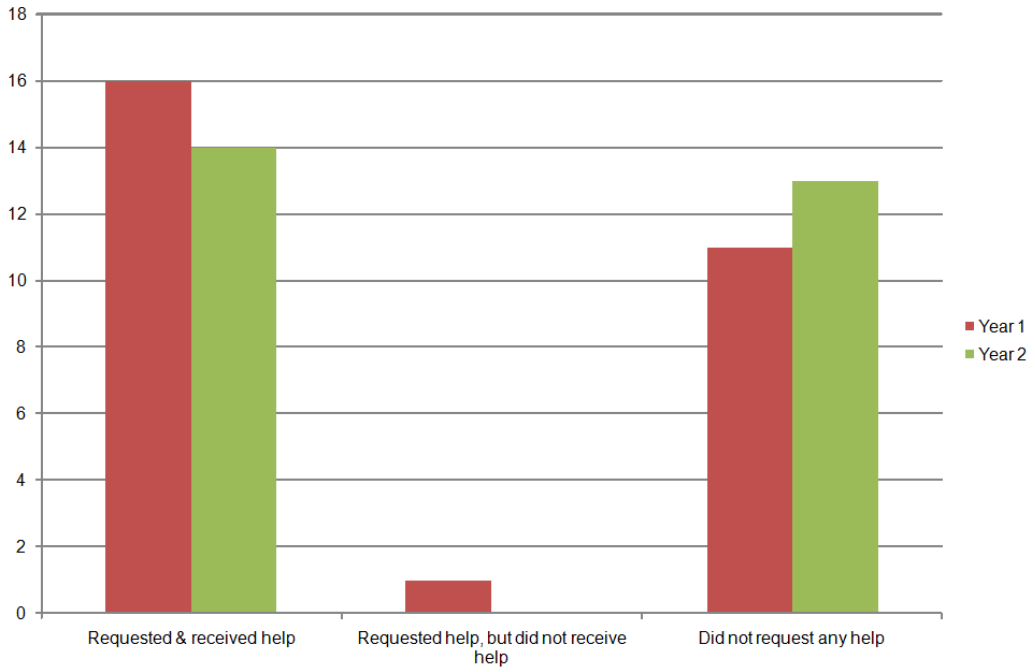

Figure 12 Responses to the question: "Did you request and / or receive help from ORR regarding ROGS?"

Figure 12 highlights that the number of people in year two who 'requested and received help' has decreased to 52% (14 out of 27) from year one (57% - 16 out of 28). It is also encouraging to see that for year two, no one 'requested help, but did not receive help' (whereas one person selected this response in year one).

Respondents were also asked about the type of help they requested. Their response is categorised and illustrated in Figure 13.

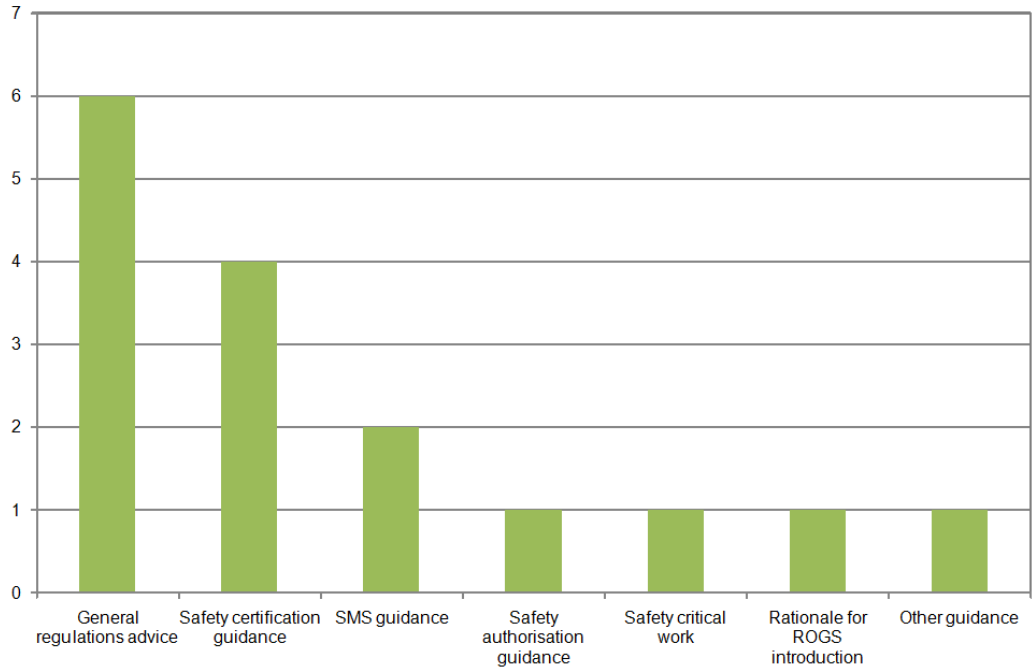

Figure 13 Type of help requested from ORR by year two respondents

As can be seen from the graph, the most common reason for seeking assistance from ORR related to asking for general advice about the regulations (six respondents). More specifically, four respondents requested safety certification guidance.

Respondents were also asked to rate the quality of the assistance they had received from ORR. The results are presented in Figure 14.

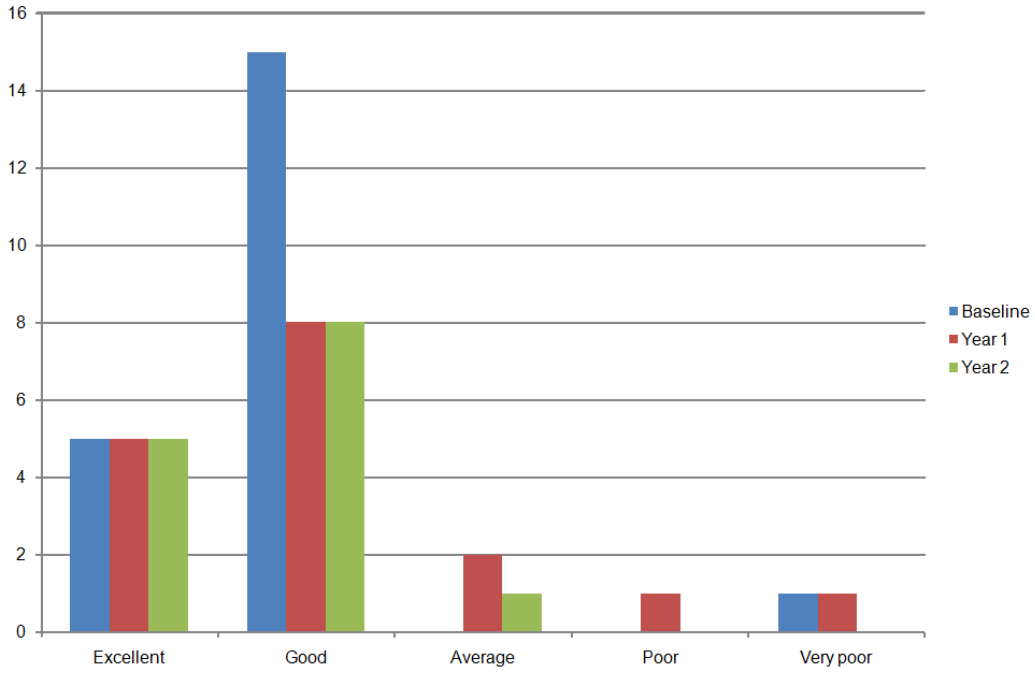

Figure 14 Responses to the question: "How would you describe the help you received from ORR?"

Figure 14 highlights how in year two the largest number of respondents (57% - 8 out of 14) described the help received from ORR as 'good'. Furthermore, not one respondent rated the help received as 'poor' or 'very poor'.

Respondents were asked to indicate how often they had received a visit from an ORR inspector in 2008 on a scale of 'no visits' through to 'more than 10' visits. Note that this question was not asked in the baseline survey. Results are shown in Figure 15.

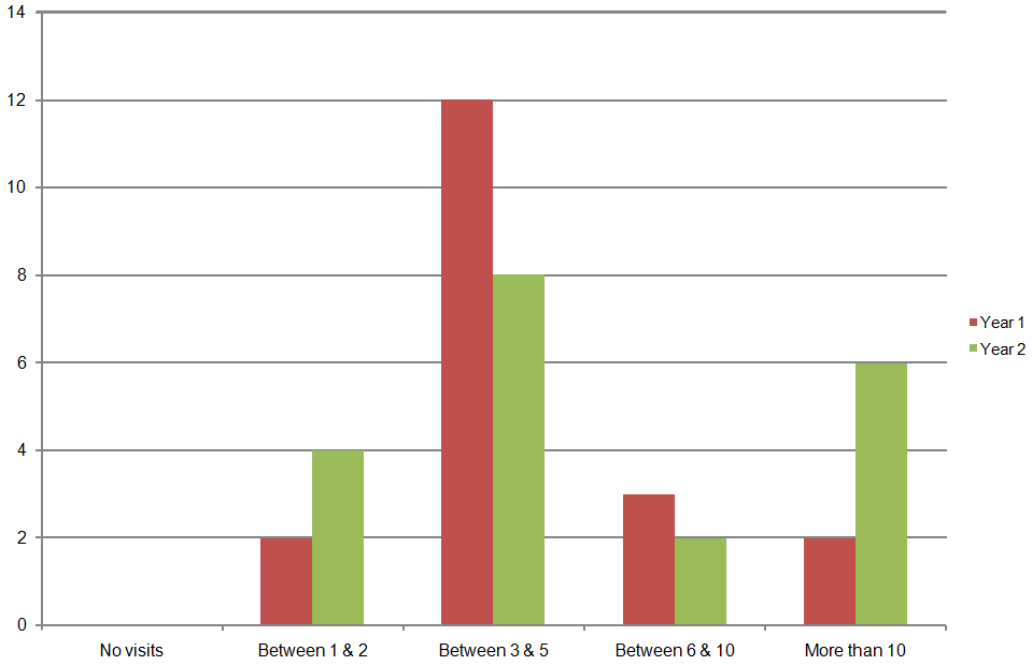

Figure 15 Responses to the question: "How many times have you received a visit from an ORR inspector in 2008?"

Figure 15 highlights that all respondents who replied to this question had received at least one visit (this is the same for year two and year one). For year two, the largest proportion of respondents stated that they received between 3 to 5 visits (40% - eight out of 20). This is similar for year one, where most of the respondents received a visit (63% - 12 out of 19). What has changed most from year one to two is that the number who specified that they received 'more than 10' visits has increased from 11% (two out of 19) to 30% (six out of 20).

After having asked for indications of the frequency of inspector visits, respondents then had to specify the length of such visits. Results are show in Figure 16.

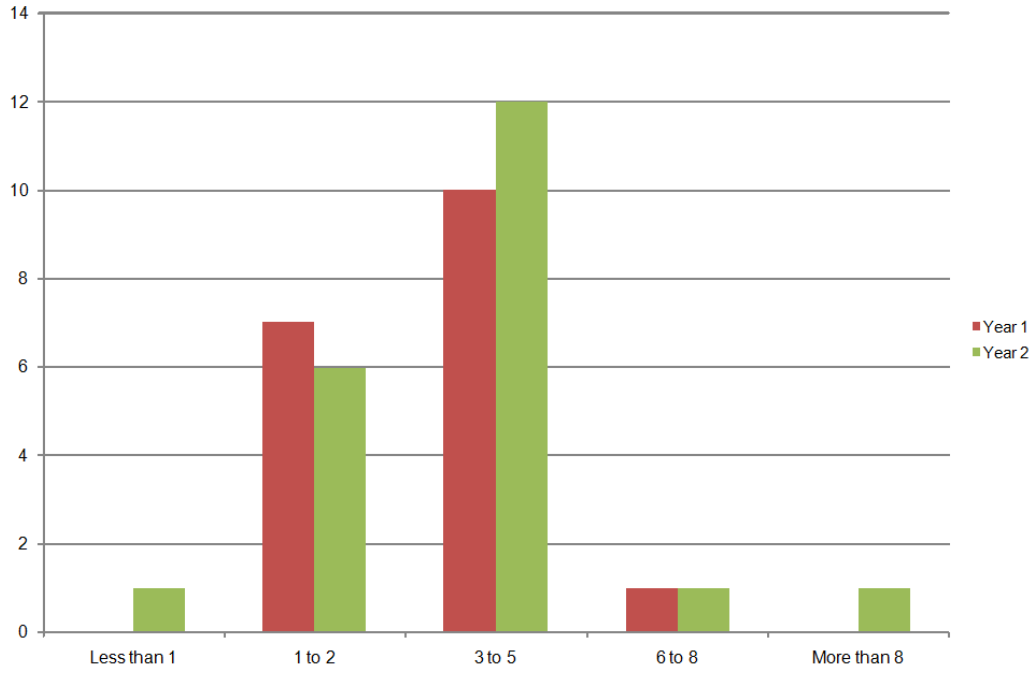

Figure 16 Responses to the question: "Typically, how much time did the ORR inspector spend with your organisation on one visit (in hours)?"

Figure 16 highlights how in year two, most respondents stated that each visit lasted between 3 - 5 hours (57% - 12 out of 21), which is very similar to 53% (10 out of 19) in year one. The next most common length of time for visits was 1 - 2 hours (29% - six out of 21) in year two compared to (37% - seven out of 19) in year one. For all other time categories, no more than one respondent had indicated that time.

It should be noted that although only 20 organisations said they needed a visit in 2008, a total of 21 organisations responded to this question.

To understand how the length of inspector visits under ROGS compared with inspector visits under the previous regime, respondents were asked to indicate whether the length of inspector visits under ROGS are 'more', the 'same' or 'less' than previous visits. Note that for the year one survey, respondents were comparing 2007 visits against pre-ROGS visits. The results are illustrated in Figure 17.

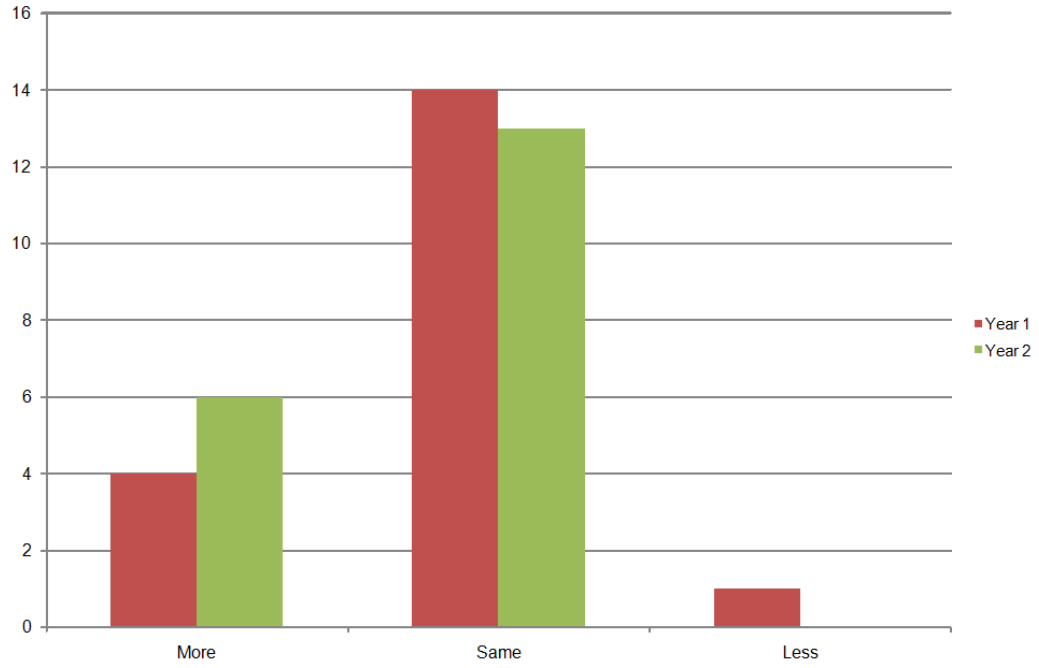

Figure 17 Responses to the question: "How does this compare with the time spent on a visit before ROGS came into force?"

Figure 17 highlights how both the year one and year two surveys indicate that the majority of respondents felt that the length of inspector visits were the same under both regulatory frameworks.

Finally, respondents were asked what else ORR could do to help them with ROGS. The suggestions made are summarised below (each bullet point represents the view of one respondent unless otherwise indicated):

- Inspectors should build good working relationships with operators.
- Improve the consistency in the way inspectors work.
- Facilitate the sharing of best practice between all TOCS.
- For ORR / HMRI to improve the understanding of roles and the purpose of local inspectors; to provide better strategic direction to inspectors, so that they can provide more 'value-add.'
- Work with DfT in drafting of the revised Interoperability Regulations, as it is important that RIRS Regulations are clear about what is subject to its authorisation, and what is subject to safety verification under ROGS. In addition, greater clarity over which Regulation should authorise projects falling partly under ROGS and partly under RIRS.
- Be clearer as to ORR's expectations about how things should happen in practice.
- Continue to provide guidance, updates, and help with interpretation on the Regulations (two respondents).
- Start providing duty holders with information about how the ORR is intending to handle the re-certification process that is due to start at the end of 2010.
- Ensure better understanding in the application of ROGS in the tramway sector.

Positively, the following comments were additionally made:

- There is nothing more ORR can do at this time (five respondents)
- Time with ORR inspectors is constructive and supportive (two respondents)

The views of the one respondent (a trade union) only provided qualitative data outside of the main question set. These views are summarised below:

- Operators focus on 'production' before health and safety – with staff being placed under pressure to meet operational performance. Operators' supervisors neither communicate properly with union representatives, nor are able to adequately detect unsafe behaviour.
- ROGS does have a favourable effect on health and safety. ORR is seen to relay all aspects of the legislation and duties and are supportive of the trade union activities related to ROGS. Inspectors have also involved union representatives.

- ‘Time / resource pressures’, ‘organisational / cultural barriers’ and ‘communicating / consulting’ are the most common challenges facing rail organisations in the implementation of ROGS.

- ROGS has improved safety, but at potential added cost and time.

- Safety reps consulted felt that certification and authorisation processes under ROGS are better than safety cases.

- The criteria regarding safety critical work is an area of concern. Serious problems have arisen due to safety critical work classifying work of a short duration to be safety critical. As such, safety is negatively affected where heavy maintenance work in depots is undertaken.

- Confusion between old group standards (e.g. RGSs, SWC) and ROGS and a lack of clarity regarding the stage at which an overhaul comes into SCW scope and the point at which ‘heavy maintenance’ becomes ‘light maintenance’.

3.5 SURVEY FINDINGS – COMPLETED BY DUTY HOLDERS ONLY

3.5.1 Presentational change from earlier monitoring reports

In previous monitoring reports, when presenting the time duty holders have spent fulfilling various safety management aspects under ROGS, only the number of days estimated by respondents has been used. In order to incorporate more data, this report also incorporates details provided by duty holders on the estimated number of hours they have spent on these aspects. Therefore, if comparing graphs between this report and the previous monitoring reports, graphs of this nature may be slightly different in the numbers presented.

3.5.2 Number of duty holders responding to survey

As detailed earlier, out of the 27 organisations who participated in the year two survey, 23 classed themselves as duty holders, and the remaining four classed themselves as non-duty holders.

3.5.3 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 year two a total of 19 organisations confirmed they had a ROGS compliant system in place, which was the same number as year one, compared with just 12 organisations at the baseline. These organisations were then asked additional questions relating to their SMS.

It should be noted that for some SMS questions the number of responses does not match the number of organisations that confirmed they had a ROGS compliant SMS in place (i.e. 19). Where responses were less than 19, it may be because the organisation felt the question was not relevant for them. Where the responses were more than 19, it may be because respondents felt they could comment despite not having a ROGS compliant SMS in place.

A series of questions were asked to measure the cost and time taken by organisations to maintain a SMS under ROGS. Respondents were firstly asked to estimate the approximate cost (in GBP) of maintaining a SMS per year. The findings are illustrated in Figure 18.

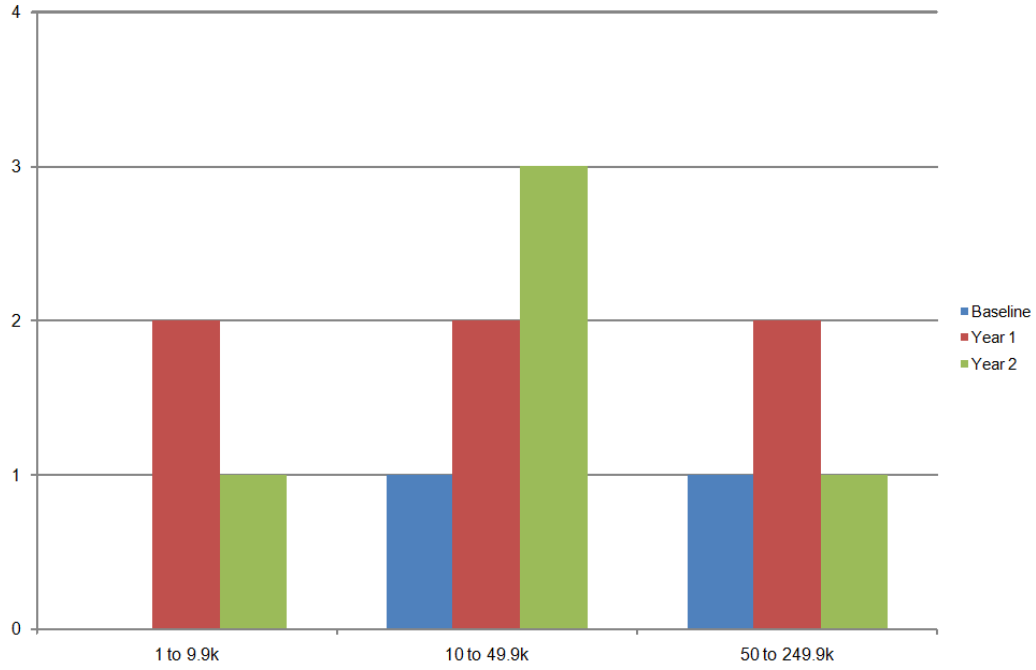

Figure 18 Estimated cost of maintaining a SMS under ROGS per year (000s GBP)

Figure 18 highlights that of those who were able to provide an estimate, in year two most suggested it had cost their organisation between £10k and £49.9k. One respondent indicated it had cost between £1k and £9.9k and one other quoted a cost of between £50k and £249.9k. Due to the small number of respondents that provided an estimate, it is difficult to draw any firm conclusions about the change in cost over time.

Respondents were also asked to specify whether such costs were 'less', 'similar', or 'more' than the costs associated with maintaining a safety case (18 responses were received). The results are shown in Figure 19. Note that Figure 19 illustrates the percentage of respondents who answered the question rather than the number of respondents, to facilitate direct comparisons between the three surveys.

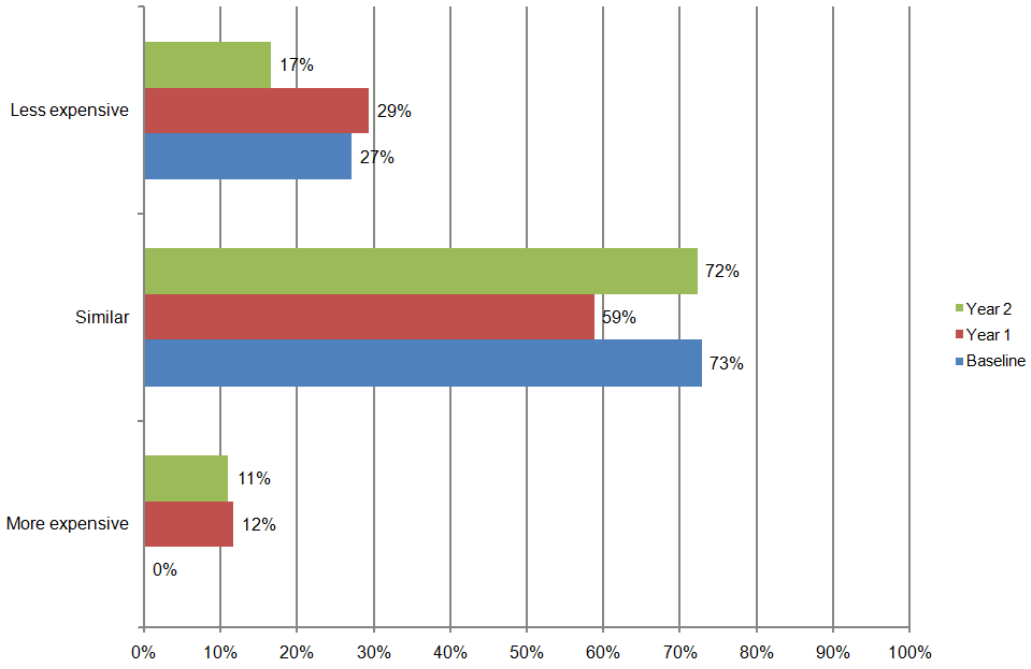

Figure 19 Comparison of the costs associated with maintaining a safety case compared with the current costs of maintaining a SMS under ROGS.

Figure 19 highlights that in year two around 72% (13 out of 18) respondents felt that the costs associated with maintaining a SMS under ROGS is actually about the same as the costs that were incurred as a result of maintaining a safety case. A much lower proportion felt that costs are less with ROGS (17% - 3 out of 18) and the lowest proportion felt that SMS under ROGS is more than safety case maintenance (11% - 2 out of 18). The results for year two largely reflect the pattern observed for year one and at the baseline.

One respondent (a Metro system) also made the following related comment:

"The costs for the maintenance of the SMS are extremely rough estimates and are based upon time spent reviewing and updating standards and policies only, it does not even consider the cost of training interventions as a consequence or the auditing process. The reality in an organisation like ours is that the safety directorate spends all its time on work one way or another related to maintenance of the SMS."

Respondents were also asked to estimate the number of days they spent on maintaining the SMS under ROGS. Their responses are presented in Figure 20.

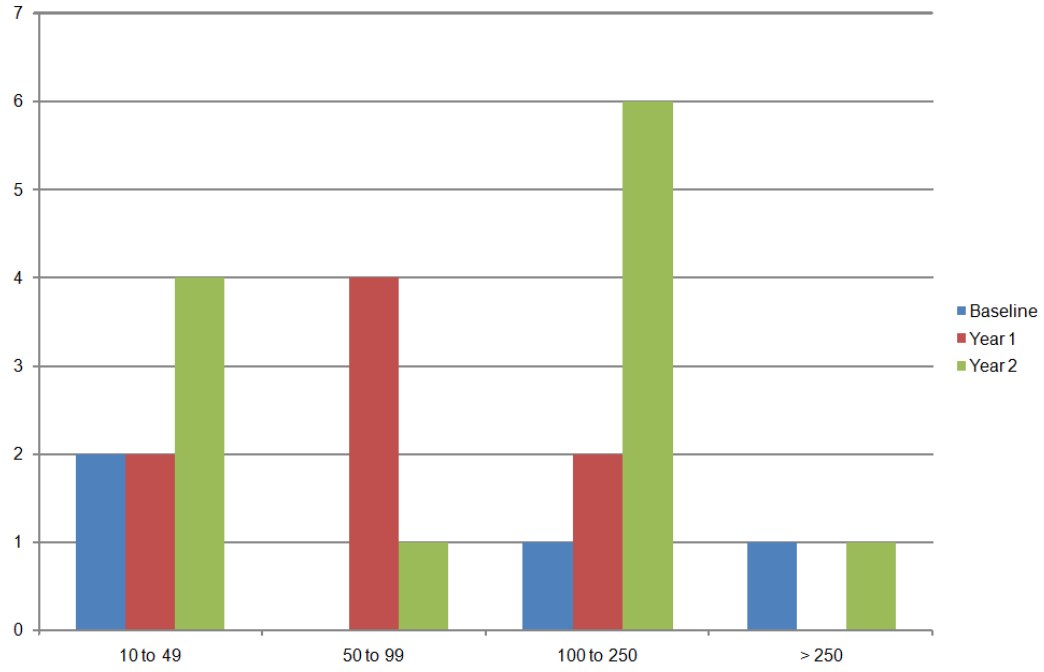

Figure 20 Estimated number of days spent maintaining a SMS under ROGS per year

Figure 20 highlights that the majority of respondents (six) have indicated that they have spent between 100 to 250 days in maintaining their SMS per year. However, four respondents have indicated that their organisation has spent 10 to 49 days. Although caution must be applied when interpreting such small numbers, it appears that the number of days spent on the maintenance of SMSs is gradually increasing.

One respondent (a Metro system) also made the following comment:

"[Our] answer refers to updated paperwork and processes. However, most of the Safety Function's time is spent on maintaining the SMS. As a lot of personnel's work can be counted as maintaining the SMS."

The survey also asked respondents about what they felt the main challenges were in maintaining a SMS under ROGS. The results are presented in Figure 21. Note that respondents were asked to tick all the options that applied to them (i.e. respondents may have selected more than one option).

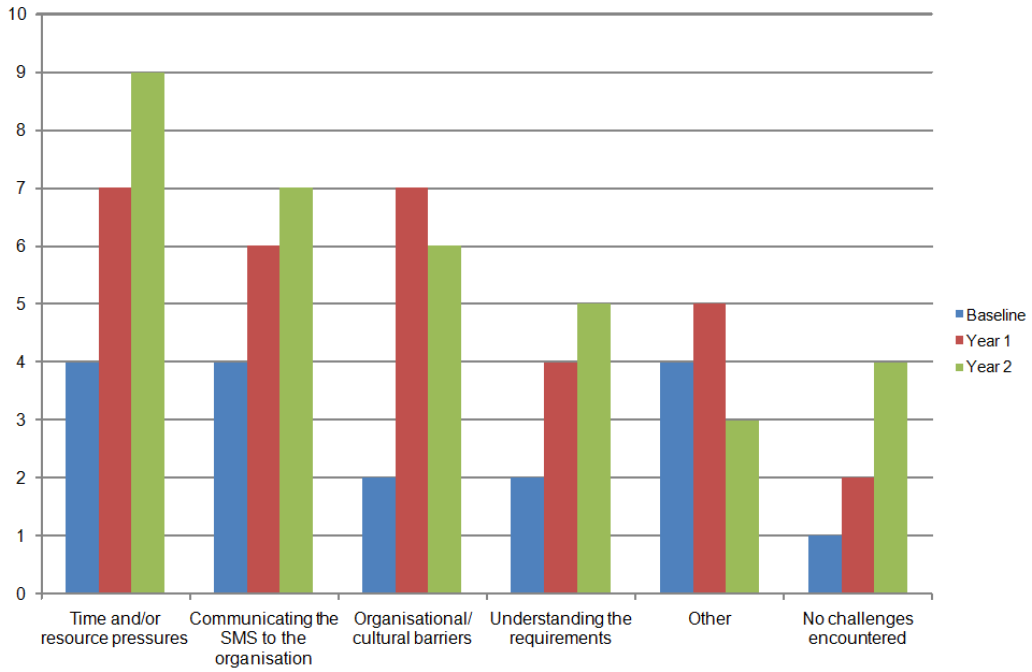

Figure 21 Main challenges in maintaining a SMS under ROGS

Figure 21 indicates that for year two the most common cited challenge was 'time and / or resource pressures' (47% - 9 out of 19). The second most common challenge was 'communicating the SMS to the organisation' (37% - 7 out of 19), which was followed by 'organisational / cultural barriers' (32% - 6 out of 19). This was a similar trend to that seen in year one. Time / resource pressures and communication issues were also significant at the baseline, suggesting these challenges are reasonably constant.

In year two, there were some additional comments made regarding the challenges. These verbatim comments are as follows (each bullet point represents the views of one individual):

- "*ROGS is not the main driver for the Safety Management System*."
- "*ROGS SMS design is relatively simple, but 2 challenges remain: 1) Understanding and capability of Spec / Instruction development within TOC; 2) the company's need for a wider Health & SMS of which the ROGS elements are just a subset*."

Finally, respondents were asked to give their view on whether SMS under ROGS has affected safety. The results are presented on Figure 22. It should be noted that findings are presented as a percentage to aid direct comparison between surveys.

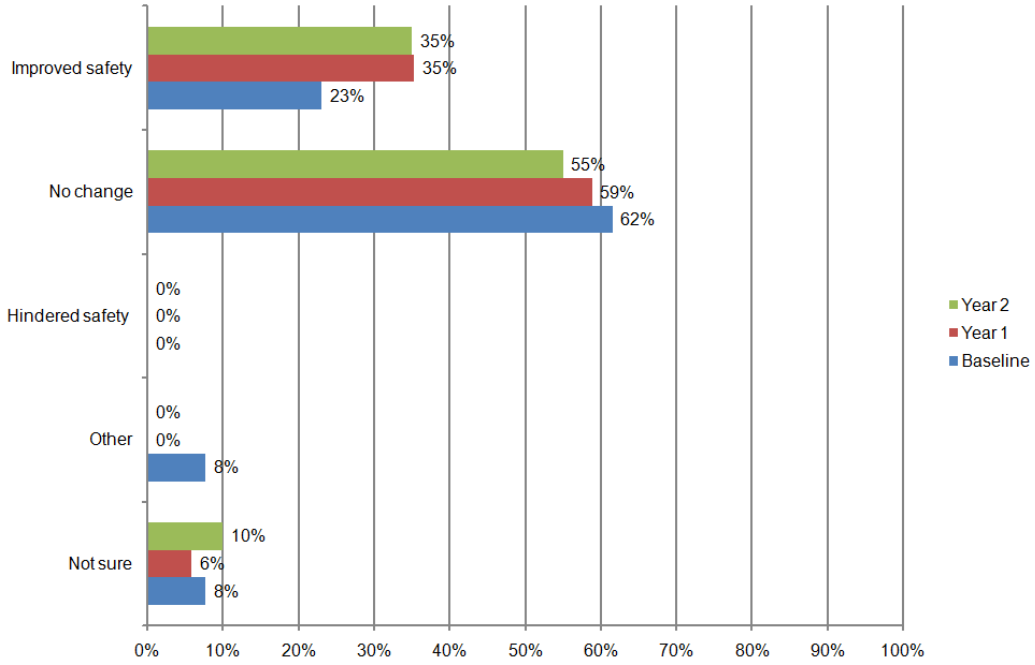

Figure 22 Responses to the question: "To what extent do you think SMS under ROGS has affected safety?"

Figure 22 highlights that for year two the majority of respondents (55% - 11 out of 20) believe SMS under ROGS has not affected safety. Encouragingly, 35% of respondents (7 out of 20) feel that safety has improved. Two respondents (10% - 2 out of 20) were 'not sure' if safety had been affected. No respondents in year two said that SMS under ROGS has hindered safety. These trends are reflected across all three years.

3.5.4 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. Figure 23 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.

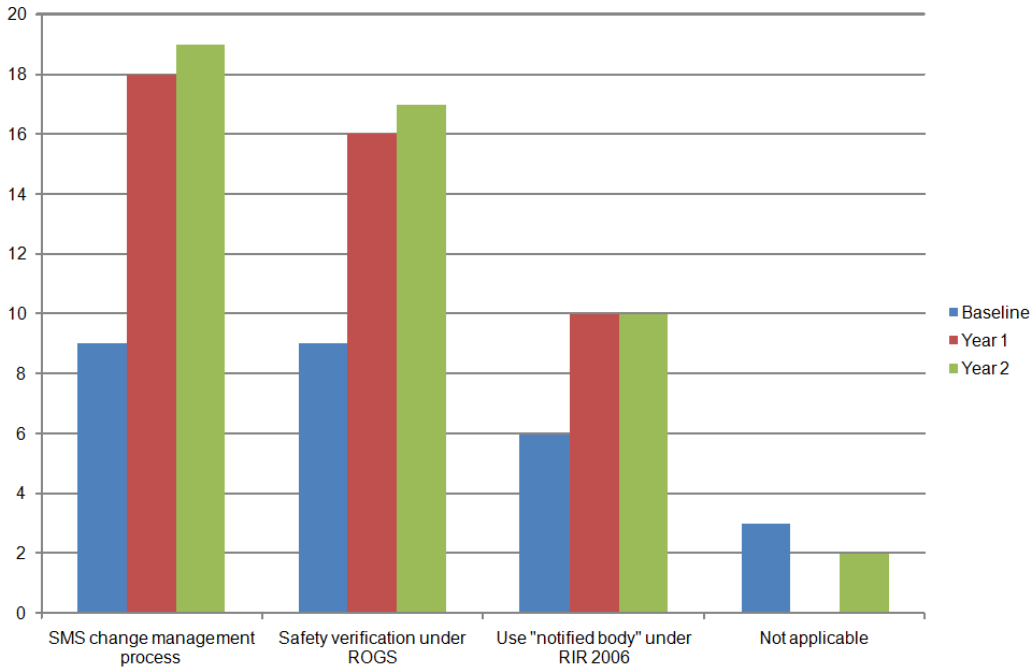

Figure 23 Duty holder processes in place for the safe introduction of new / altered infrastructure or rolling stock

Figure 23 highlights that for year two the majority of the respondents (83% - 19 out of 23) indicated that they use a SMS change management process to assist in the safe introduction of new / altered infrastructure or rolling stock. The next most common method adopted was safety verification under ROGS (74% - 17 out of 23), followed by the use of a notified body under RIR 2006 (43% - 10 out of 23). Although the total number of respondents do vary across the three samples, largely the same trend is reflected across the three surveys.

In total, 19 respondents either used a SMS change management process or safety verification under ROGS. This 19 were asked further questions regarding safety verification.

Duty holders were asked to provide an estimate of the costs of undertaking safety verification under ROGS per year. The findings are presented in Figure 24.

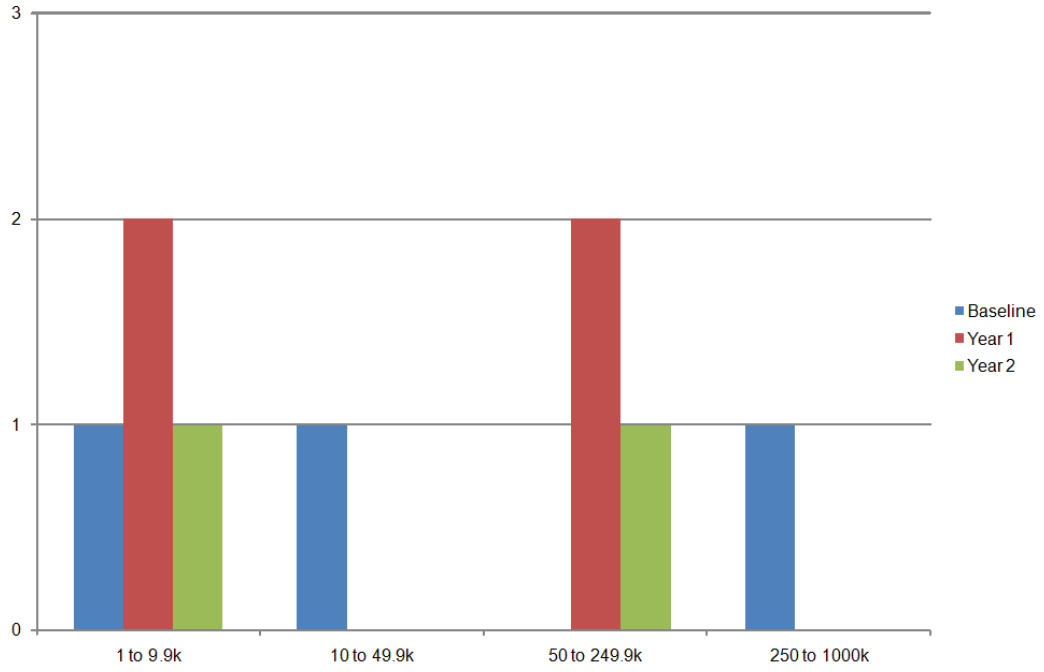

Figure 24 Costs incurred as a result of safety verification under ROGS per year (000s GBP)

Figure 24 highlights that only two respondents in year two were able to provide a cost estimation for this question. One indicated an annual cost of between £1k and £9.9k and the other specified a cost of between £50k and £249.9k. Due to the small samples answering this question across the three surveys, it is difficult to confirm any trends.

One respondent (a Metro system) also gave the following comment:

"Due to the small size of the company, we always have to use external consultants to ensure independence. This is expensive. The actual number of days and costs depends on the number of projects that require ICP and also the complexity of the project."

Respondents were also asked to estimate the number of days spent undertaking safety verification under ROGS per year. The findings are highlighted on Figure 25.

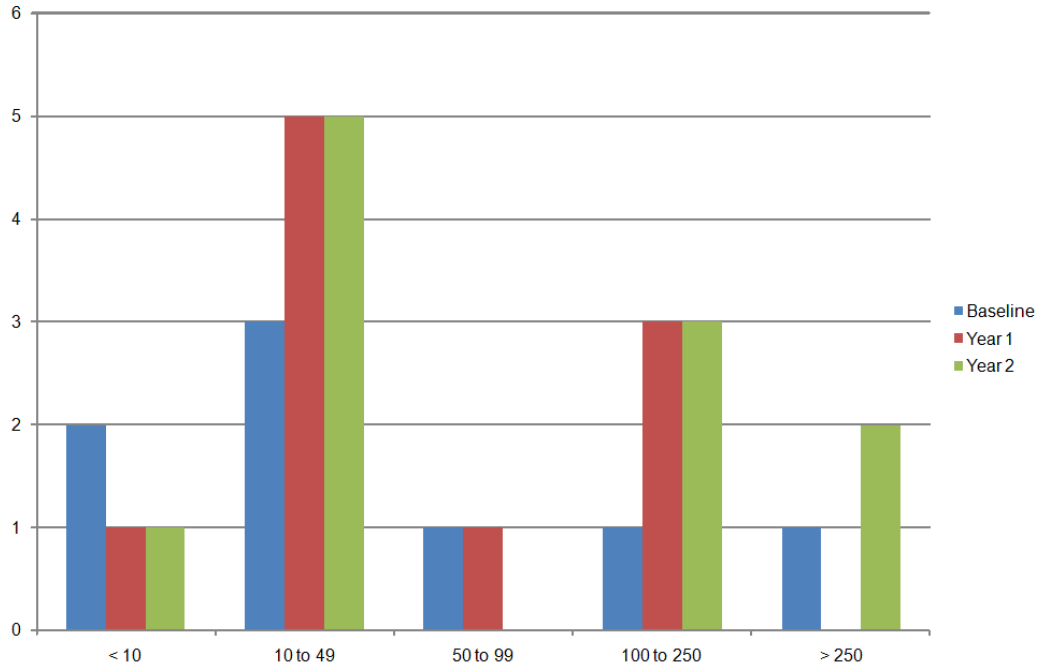

Figure 25 Estimated number of days spent undertaking safety verification under ROGS per year

Figure 25 highlights that five year two respondents were spending between 10 to 49 days per year on safety verification (closer inspection of the figures revealed the majority were spending between 10 and 15 days). Across all three surveys most respondents were spending between 10 to 49 days on safety verification, except in previous years closer inspection of the figures indicated people were spending more than 10 to 15 days. This suggests organisations may have streamlined the process now. In the year two survey three further respondents said they were spending between 100 and 250 days and a couple were spending more than 250 days per year.

Respondents were also asked what the main challenges were in meeting the requirements of safety verification. In year two the most significant challenge (58% - 11 out of 19) was perceived to be 'understanding the requirements' of safety verification. Knowing when to apply safety verification was also viewed as a key challenge by 53% (10 out of 19) of respondents. These were also the top two challenges in the year one survey. Knowing when to apply safety verification was also cited by the majority of respondents at the baseline. In addition to this, 31% (six out of 19) of respondents felt that identifying / appointing an independent competent person (ICP) was still a challenge.

Respondents were also asked to rate the level of improvement in safety as a result of safety verification under ROGS. Responses are presented in Figure 26.

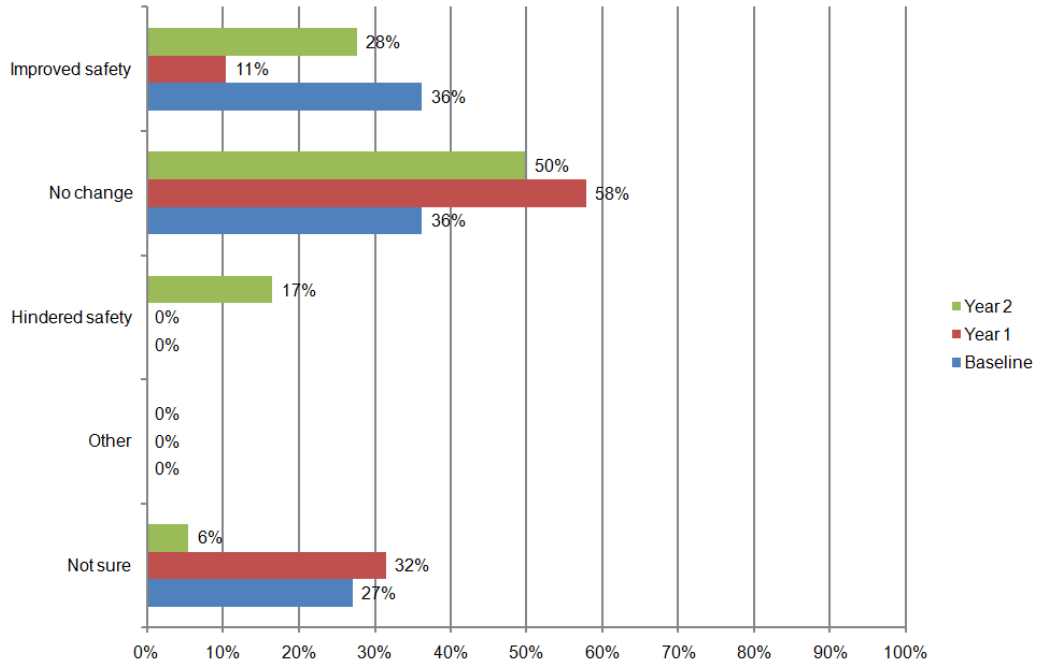

Figure 26 Responses to the question: "To what extent do you think safety verification under ROGS has affected safety?"

Figure 26 highlights that half of the respondents (50% - 9 out of 18) believe 'no change' in safety has occurred. A lower proportion (28% - 5 out of 18) believe that safety has 'improved'. Conversely, 17% (3 out of 18) suggest that safety has been 'hindered' as a result of safety verification under ROGS.

3.5.5 Safety Certification

All duty holders were asked if they held a safety certificate under ROGS; 62% of year two respondents (15 out of 23) said they did have a certificate. This indicated an increase compared with 44% of baseline respondents (7 out of 16) and 59% of year one respondents (13 out of 22).

Respondents were also asked to indicate to what extent they had achieved each stage of the safety certification assessment process. The results are presented in Figure 27.

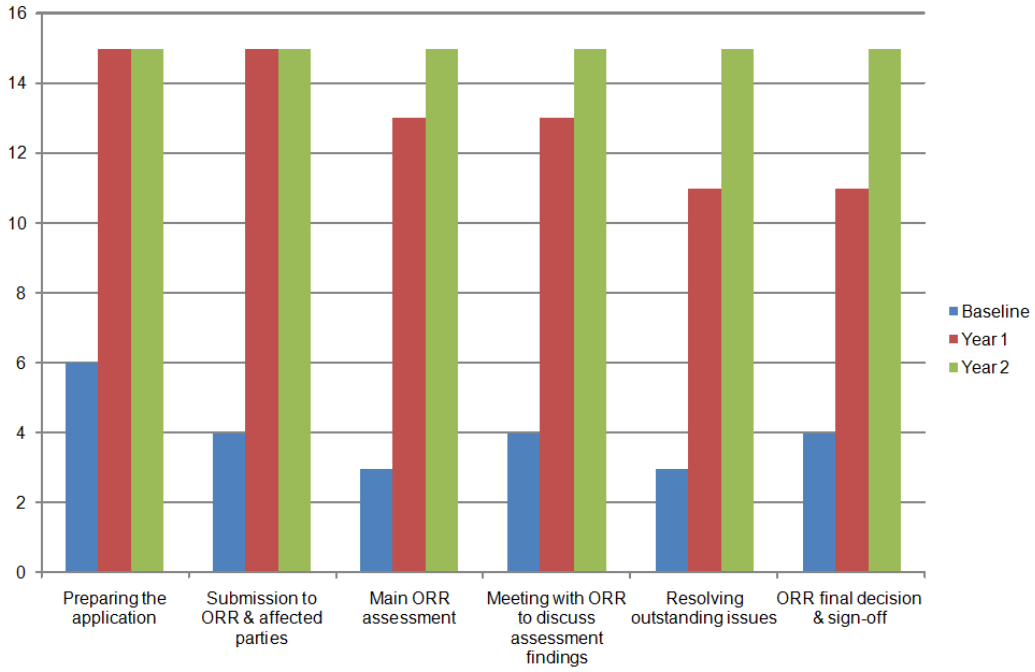

Figure 27 Stages in safety certification process completed by duty holders

Figure 27 clearly shows that all 15 duty holders had completed each stage in the safety certification process. This is an improvement on year one, where some duty holders had not completed the final stages.

Respondents were then asked to estimate the **costs** they had incurred in their **initial** application for a safety certificate under ROGS. The findings are presented in Figure 28.

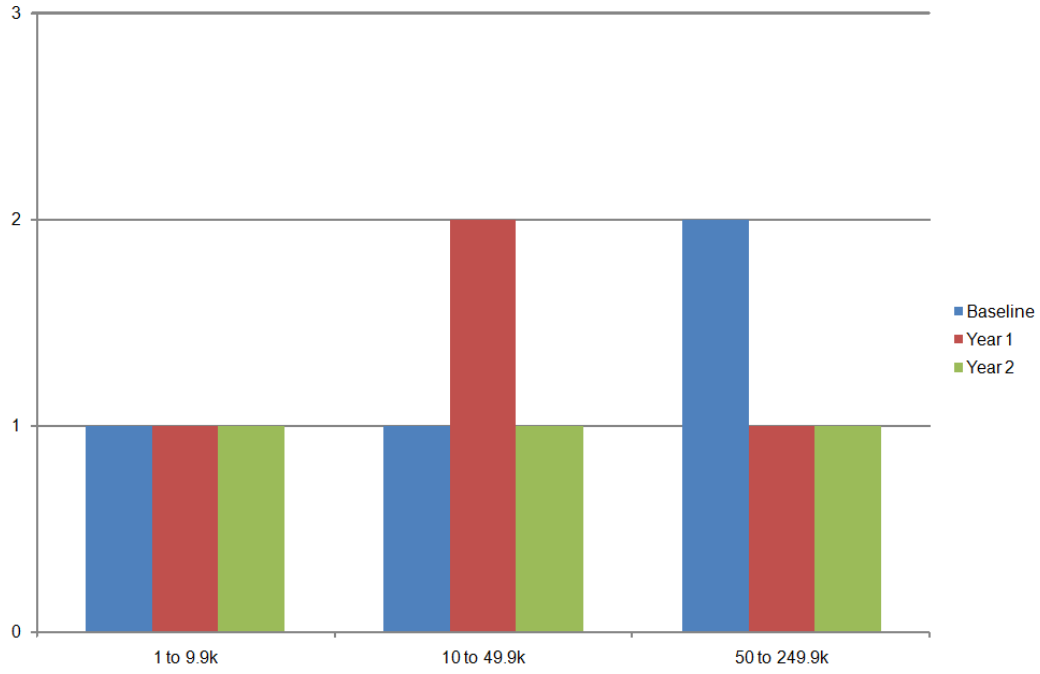

Figure 28 Costs incurred as a result of initial application for a safety certificate under ROGS (000s GBP)

Figure 28 highlights that only three respondents provided estimates; one in each cost category. Respondents were also asked to estimate costs associated with **amending** applications for safety certification. Only two respondents in year two were able to comment on amended costs, and both respondents indicated it cost them less than £1k. This is less than the figures quoted in year one and the baseline.

Respondents were asked to indicate whether the cost of applying for a safety certificate under ROGS was 'less', 'about the same' or 'more' than their safety case applications. The results are presented in Figure 29.

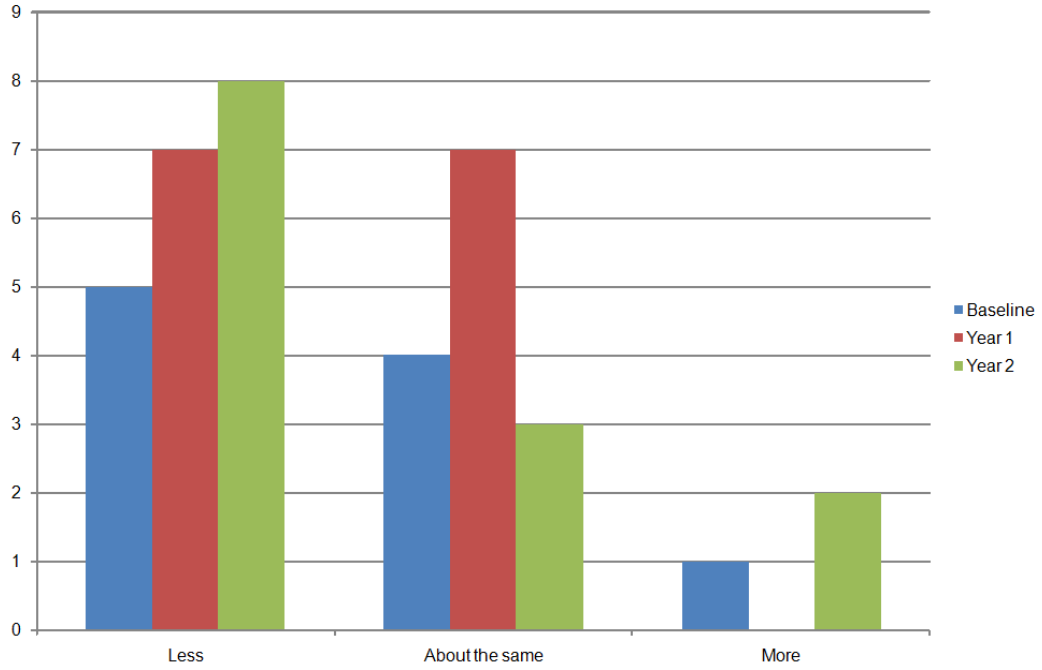

Figure 29 Respondents' views on the cost spent applying for safety certification compared to the cost spent on safety case application

Figure 29 highlights that the majority of respondents (62% - 8 out of 13) feel that costs for applying for safety certification under ROGS is 'less' than for the previous safety case regime. A much lower proportion feel that costs are the 'same' between both regimes and only two think costs are 'more' under ROGS. Comparing all three measurement points, it would appear that the number of respondents who feel safety certification under ROGS is less expensive is increasing.

Respondents were also asked to estimate the **number of days** spent on their **initial** application for safety certification. The responses are presented on Figure 30.

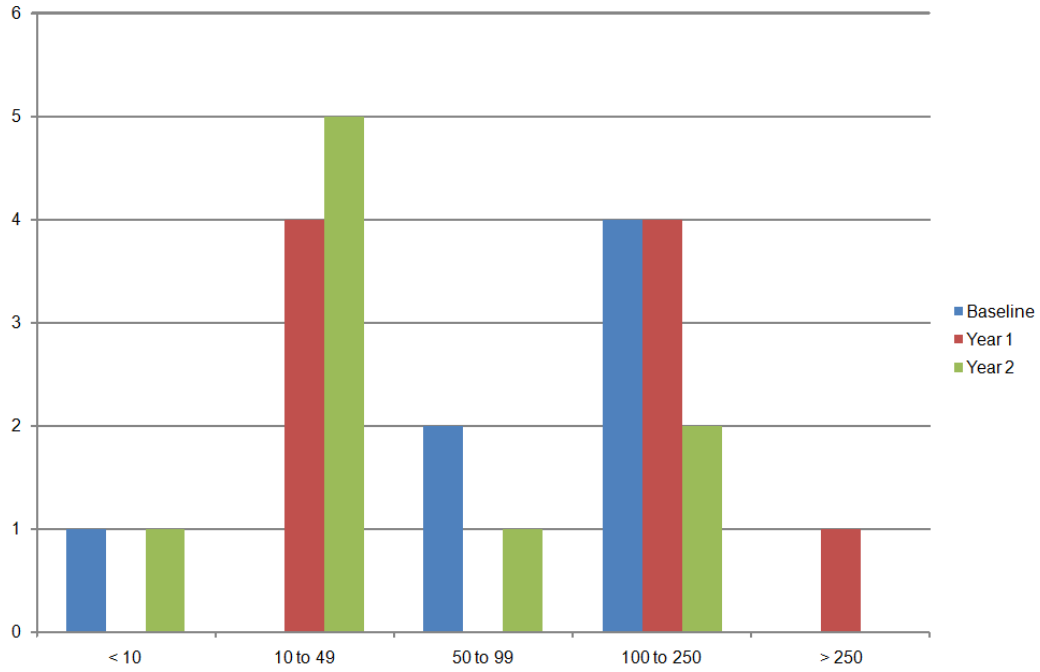

Figure 30 Days spent on the initial application for a safety certificate under ROGS.

Figure 30 highlights that the majority of year two respondents spent between 10 to 49 days (56% - 5 out of 9) on their initial application. In year one nearly half of respondents 44% (4 out of 9) stated they spent 10 to 49 days and another 44% stated they spent between 100 to 250 days.

Respondents who made **amendments** to their safety certificate application were also asked to estimate the days involved. In year two 60% of respondents (6 out of 10) said less than 10 days were needed to make application amendments. The remaining 40% (4 out of 10) spent between 10 to 49 days. No one took more than 50 days.

Respondents were then asked whether the time spent (i.e. days) on applying for a safety certificate under ROGS is ‘more’ ‘about the same’ or ‘less’ than safety case applications. The results are presented in Figure 31.

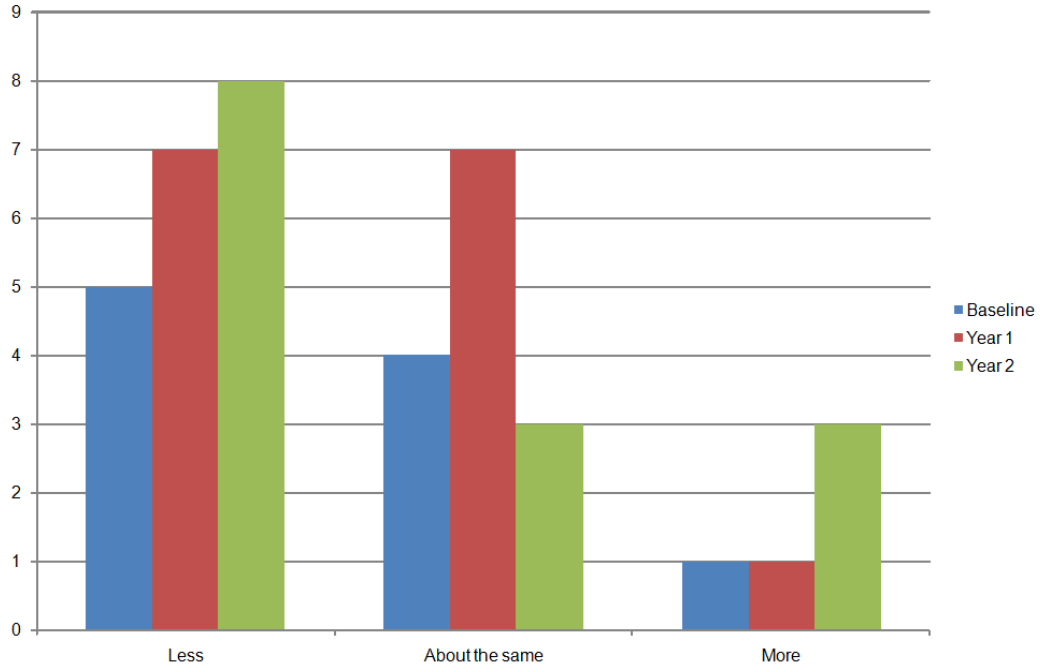

Figure 31 Respondents’ views on the time spent applying for safety certification compared to the time spent on safety case application

Figure 31 highlights that the largest number of respondents in year two felt that applying for ROGS safety certification takes ‘less’ time than the previous safety case regime. Three respondents felt it took about the same time and three respondents felt it took more time.

Duty holders were asked to indicate what challenges they encountered during the process of achieving safety certification. Respondents were asked to indicate all of the challenges that they had encountered. The findings are presented in Figure 32.

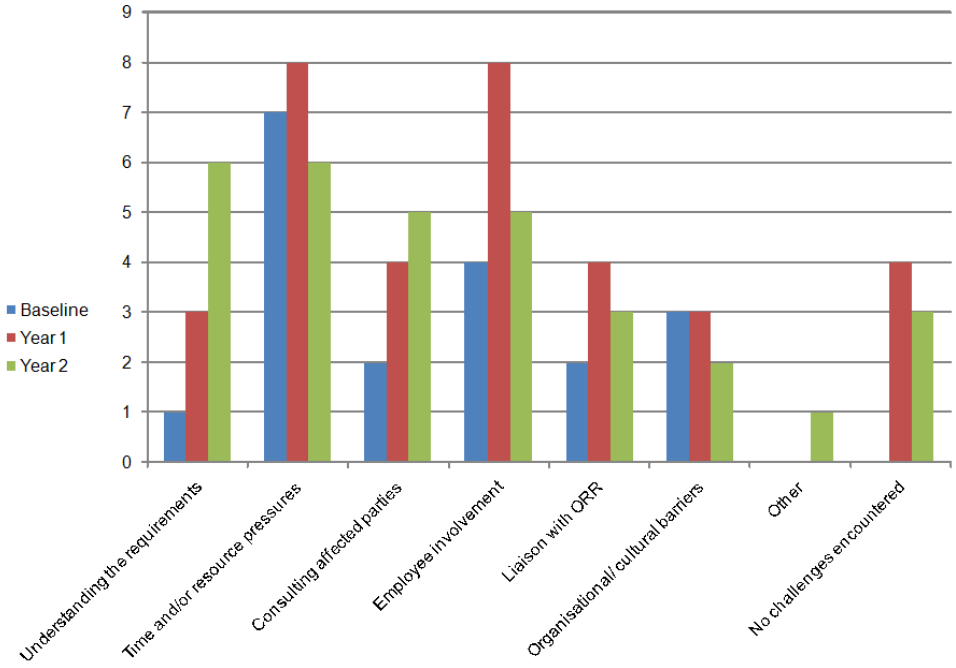

Figure 32 Main challenges in acquiring a safety certificate under ROGS

Figure 32 highlights that the most commonly experienced challenges are 'understanding the requirements' and 'time and / or resource pressures' (both attracting 26% - 6 out of 23). The second most common challenges were found to be 'consulting affected parties' and 'employee involvement' both with 22% (5 out of 23).

In terms of comparing year two results to the previous years, it is apparent that 'time and / or resource pressures' was also one of the most common challenges for respondents in year one, and the most common challenge at the baseline.

Respondents were also asked about whether they felt improvements could be made to the application process. Four respondents felt improvements could be made and suggested the following (each bullet point represents the views of one individual):

- "*Distribution list for other duty holders*."
- "*Process is straightforward; the only area where some confusion still exists is around when exactly change should be notified etc. This will come through experience*."
- "*More explicit, it's very vague*."
- "*When staged amendments were needed to application it became unclear as to which version was being classed as the current one*."

Finally, duty holders were asked to what extent they felt safety certification under ROGS has affected safety. The results are shown in Figure 33.

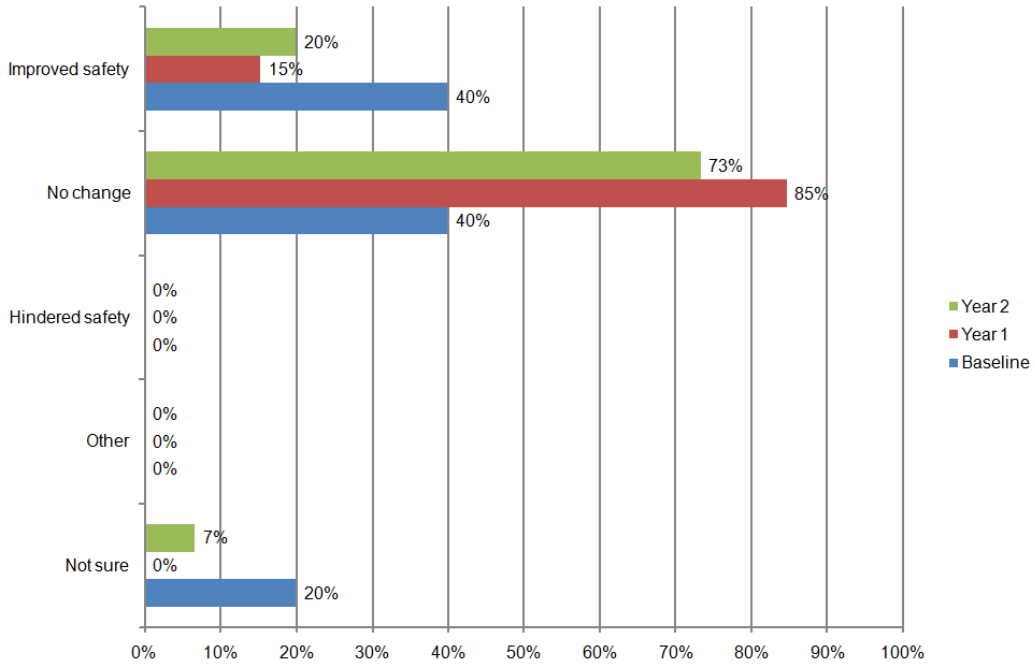

Figure 33 Responses to the question: To what extent do you think safety certification under ROGS has affected safety?

The majority of year two respondents (73% - 11 out of 15) appear to think that there has been 'no change' to safety as a result of safety certification under ROGS. Furthermore, 20% (3 out 15) of respondents felt that safety had 'improved' because of safety certification. This shows a similar trend to year one findings.

3.5.6 Safety Authorisation

Respondents were asked if they had safety authorisation under ROGS and 57% (13 out of 23) of year two respondents reported they had safety authorisation. This was compared to 45% (10 out of 22) in year one and 31% (5 out of 16) at the baseline. Respondents were then asked to indicate all the stages in the safety authorisation assessment process their organisation had completed. The results are presented in Figure 34.

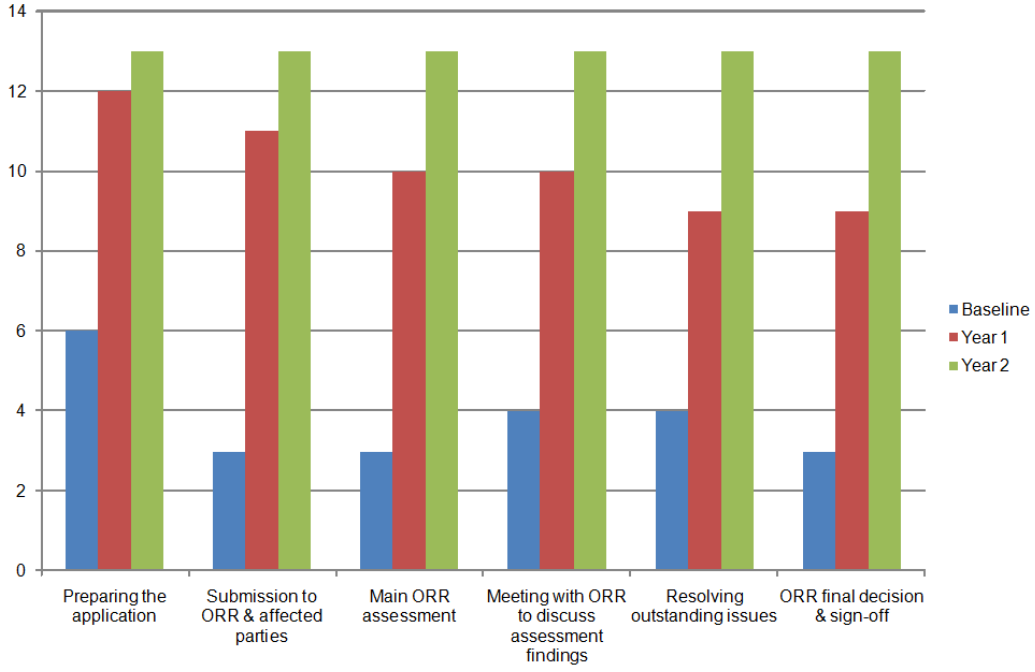

Figure 34 Stages in safety authorisation process completed by duty holders

As can be seen in Figure 34, for all 13 duty holders who had safety authorisation under ROGS, each duty holder had completed all six stages of the safety authorisation process. This contrasts against year one where a large number of respondents had completed the earlier stages, but this steadily decreased with subsequent stages. This was an improvement on year one and at the baseline.

Duty holders were also asked to provide an estimate of the costs involved from their **initial** application for safety authorisation under ROGS (in GBP and in working days). As in previous years, few respondents provided an estimate. In year two, figures given by separate respondents were £4k, £25k, and £50k. In terms of making **amendments** to applications for safety authorisation, one year two respondent quoted £500. This compared to a year one respondent who quoted £12.5k, and at baseline a respondent who quoted £48k.

Respondents were asked about how they felt the costs of applying for safety authorisation under ROGS compared with safety case applications. Respondents were asked to indicate whether costs were 'less', 'about the same', or 'more' under ROGS than the previous regime. A large proportion of year two respondents (46% - 6 out of 13) believed the cost required is about the 'same' under both regimes. This compares to a similar figure for year one of 50%

(6 out of 12) and 50% (3 out of 6) for the baseline. Only 15% (2 out of 13) in year two believe it had cost 'more' under ROGS than the previous regime.

Respondents were also asked how many days they had spent in making their **initial** application for safety authorisation. The results are presented in Figure 35.

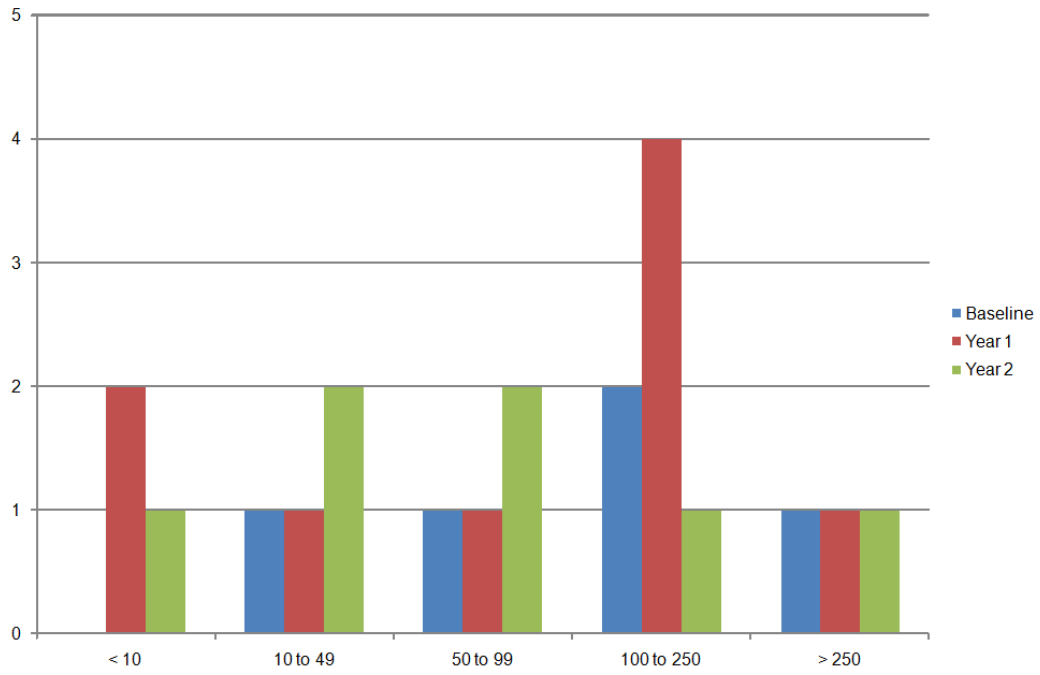

Figure 35 Days spent as a result of initial applications for safety authorisation under ROGS per year

Figure 35 highlights that only seven respondents provided details on the number of days spent on their initial application for safety authorisation. The number of days ranged from less than 10 to more than 250. This was quite different to year one where clearly most respondents said that their initial application took between 100 and 250 days.

Respondents were also asked the same question, but this time about **amendments** their application. In year two, six respondents provided feedback and the majority (three out of 6) spent less than 10 days on amending their safety authorisation application.

As with cost, it was important to understand how time spent applying for safety authorisation compared with the time spent on safety case application. The findings for year two revealed that 46% (6 out of 13) felt that applying for safety authorisations took 'less' time than the previous regime. This is an increase from the 33% (4 out of 12) who had a similar opinion in year one, although still lower than 50% at the baseline (3 out of 6). A further 38% (5 out of 13) felt the time taken was about the 'same' between the two regimes.

Respondents were asked to indicate what they felt the main challenges of applying for safety authorisation were. The findings are presented in Figure 36.

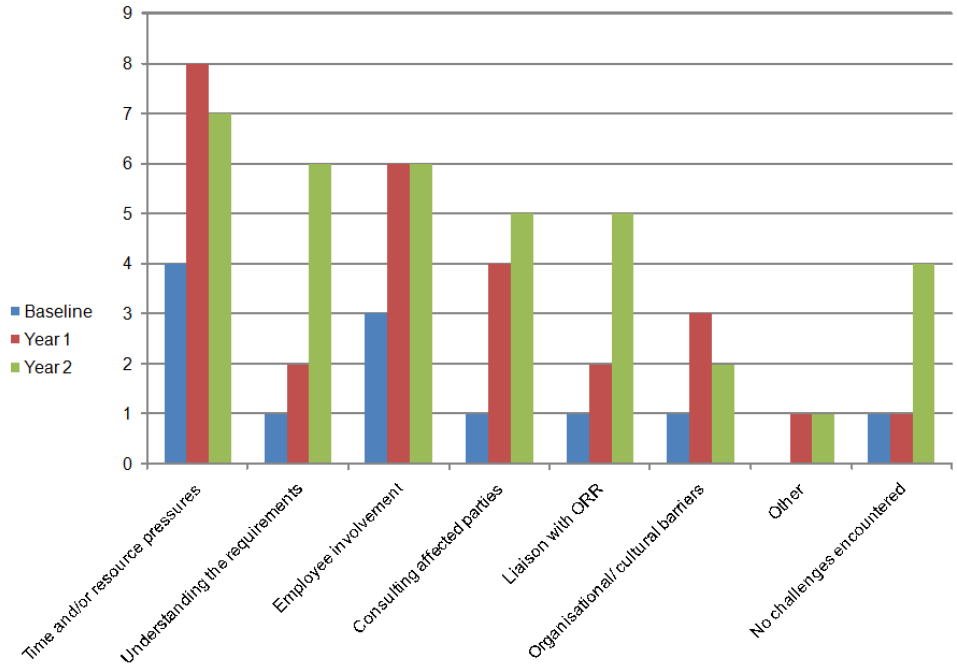

Figure 36 Main challenges in acquiring safety authorisation under ROGS

Figure 36 highlights that the most common challenge for year two respondents appears to be 'time and / or resource pressures' (54% - 7 out of 13). This challenge was also cited the most by year one respondents.

The next two most common challenges found by year two respondents were 'employee involvement' and 'understanding the requirements' (both 46% - 6 out of 13). Employee involvement was also found to be a significant challenge in year one and at the baseline. However, understanding the requirements of safety authorisation did not appear to be such a challenge at year one or at the baseline.

The 13 duty holders were asked if the application process could be improved. Findings indicate that a high proportion (46% - 6 out of 13) of year two respondents felt that no improvements could be made. Two respondents from the year two survey said improvements could be made to the process, one suggested:

"Clear guidelines, more explicit information"

Finally, respondents were asked to what extent they felt safety authorisation under ROGS had affected safety. The findings are presented in Figure 37.

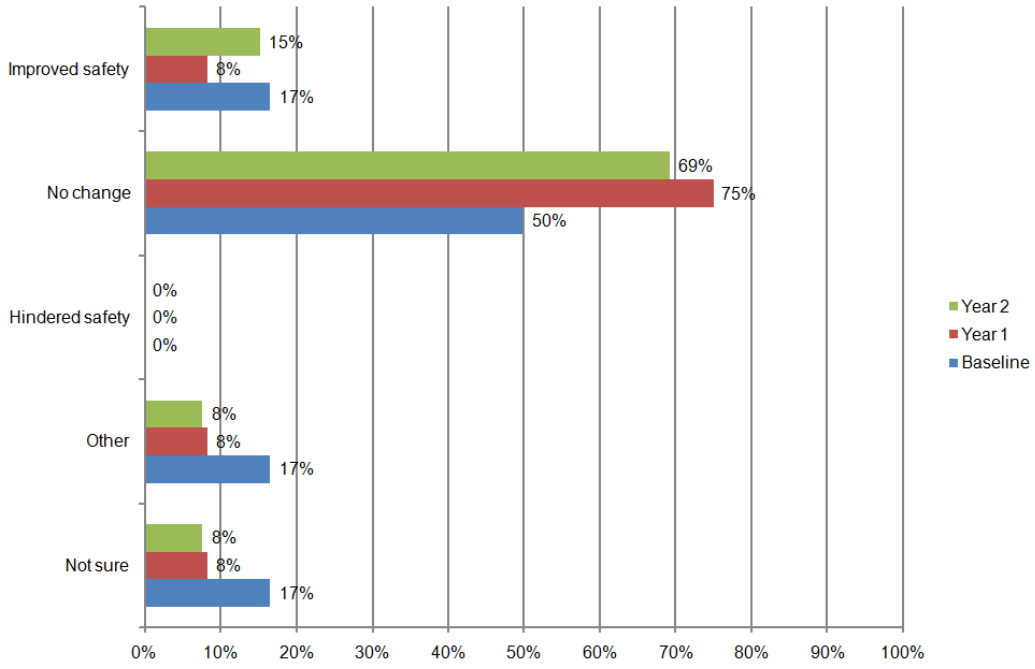

Figure 37 Responses to the question: "To what extent do you think safety authorisation under ROGS has affected safety?"

Figure 37 highlights that the clear majority of respondents 69% (9 out of 13) felt there had been 'no change' to safety as a result of safety authorisation. This reflected the finding in year one and at the baseline. One respondent who chose the 'other' option commented as follows:

"More flexibility in assessment process"

3.5.7 Risk Assessment

Respondents were asked about the key challenges in meeting the requirements of Regulation 19, and how they felt about the changes brought about to risk assessment under ROGS. The main challenges are highlighted in Figure 38. Note that respondents were asked to indicate all the challenges that they had encountered.

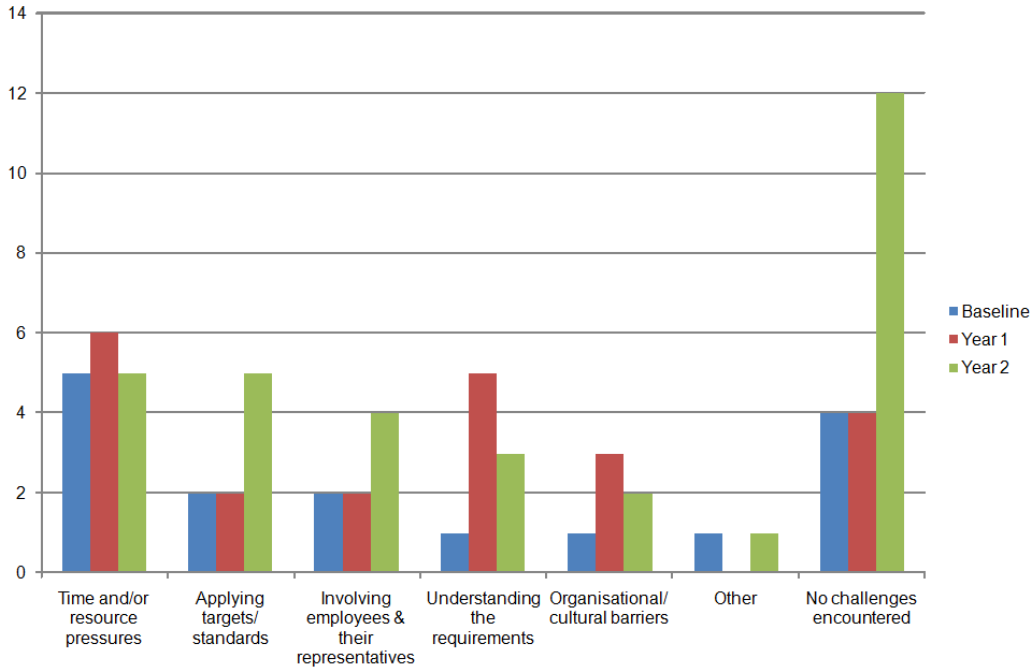

Figure 38 Main challenges faced in adapting existing risk assessment arrangements to meet the requirements of Regulation 19

Figure 38 highlights that the majority of respondents (52% - 12 out of 23) believe there have been 'no challenges encountered', which shows a dramatic rise from the 18% (4 out of 22) in year one and 25% (4 out of 16) at baseline.

Compared to previous measurement time point there appears to be an increase in those selecting 'applying targets / standards', which was originally 13% (2 out of 16) at the baseline, then 9% (2 out of 22) at year one, rising to 22% in year two. A similar increase occurred for the challenge of 'involving employees and their representatives'.

Respondents were asked how they felt about the changes brought about to risk assessment by ROGS. The findings are presented on Figure 39.

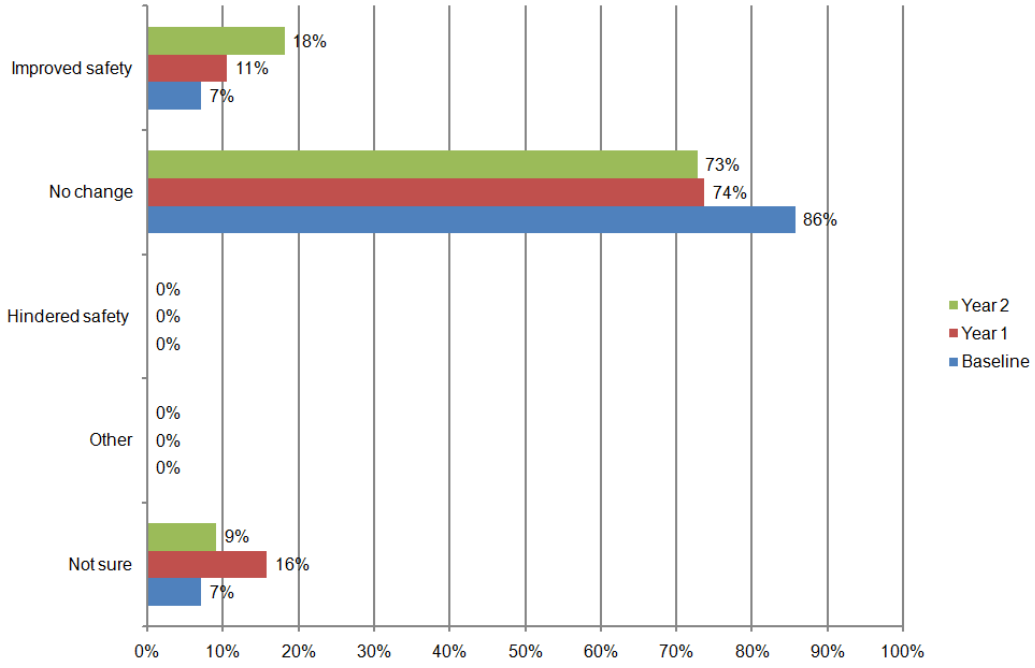

Figure 39 Responses to the question: "How do you feel about the changes brought about to risk assessment by ROGS?"

Figure 39 highlights that the majority (73% - 16 out of 22) of year two respondents feel that there has been 'no change' to safety as a result of the changes to risk assessment. This is similar to the response at year one and at the baseline. Furthermore, 18% of year two respondents feel that safety has in fact 'improved' with the changes to risk assessment under ROGS. This is higher than the 11% (2 out of 19) found in year one and 7% (1 out of 14) at baseline. Finally, not one respondent in year two suggested that safety had been 'hindered' as a result of changes to risk assessment processes.

3.5.8 Annual Safety Report

Respondents were initially asked if they were required to compile and submit an annual safety report under ROGS. In year two, there was a total of 83% (19 out of 23) who said 'yes', compared to 90% (19 out of 21) in year one and 65% (11 out of 17) at the baseline.

A limited number of respondents were also able to estimate the costs of submitting an annual safety report (per year). The costs provided by three respondents ranged from £250 to £1,000. In terms of time, an estimate of the time spent on compiling and submitting annual safety reports is presented on Figure 40.

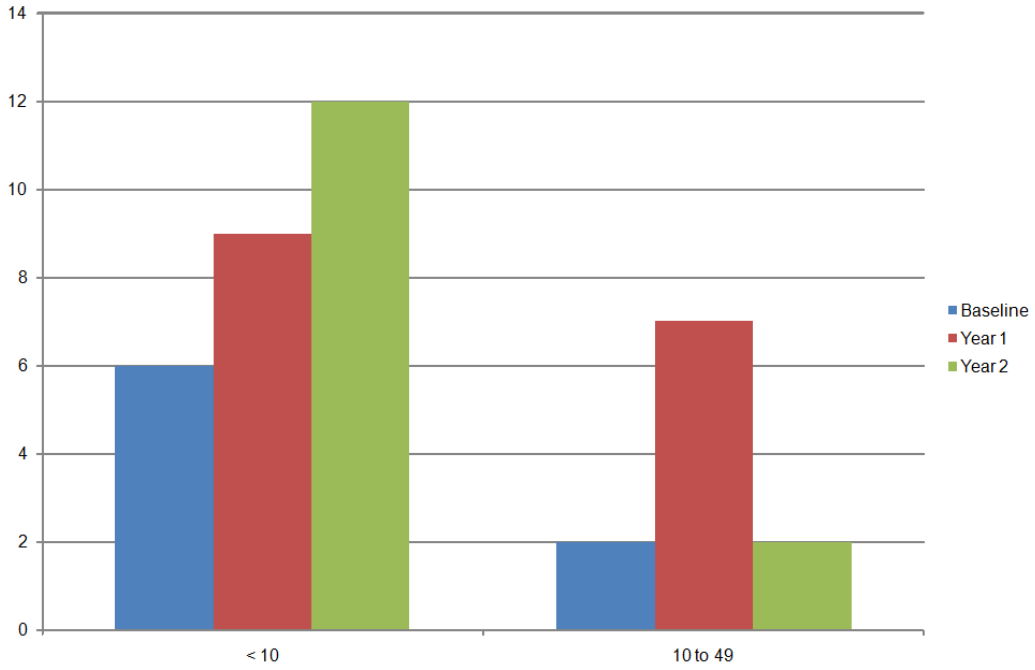

Figure 40 Days spent (per year) compiling and submitting an annual safety report

Figure 40 highlights that 12 out of the 19 respondents who were required to submit an annual safety report estimated the time spent to do this was less than 10 days. Closer inspection of the evidence indicates that typically it took organisations between one and five days. Two further respondents indicated it took them between 10 and 49 days. This appears encouraging compared with year one, where seven respondents felt it took them between 10 and 49 days. This may indicate that the process is becoming more streamlined and easier to manage.

Respondents were also asked to indicate all of the challenges they had experienced in preparing and submitting their annual safety report. The results are presented in Figure 41.

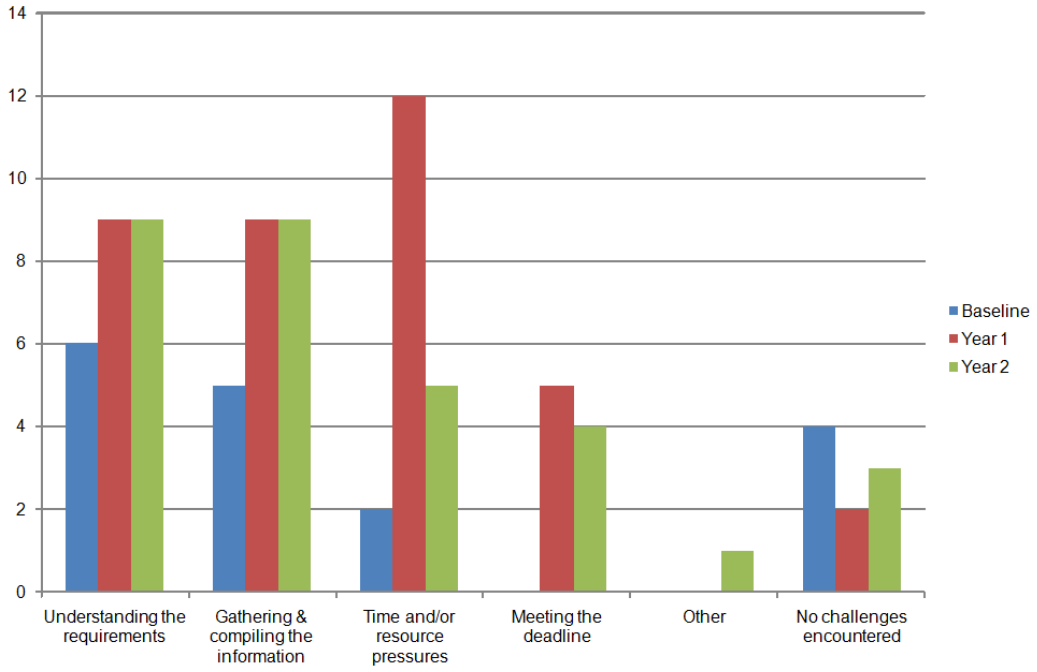

Figure 41 Main challenges encountered in preparing and submitting an annual safety report

Figure 41 highlights that in year two the two most commonly cited challenges were 'understanding the requirements' and 'gathering and compiling the information' (both 47% - 9 out of 19). Interestingly, only five out of a possible 19 respondents cited 'time and / or resource pressures', compared with year one when this was cited by the largest number of year one respondents. This may link with the findings from Figure 40, which indicate that the annual safety report process is taking less time, and hence it would appear there is less pressure on time and resource.

Finally, respondents were asked to give their views in relation to the extent to which they felt annual safety reports under ROGS had affected safety in their organisation. The findings are presented in Figure 42.

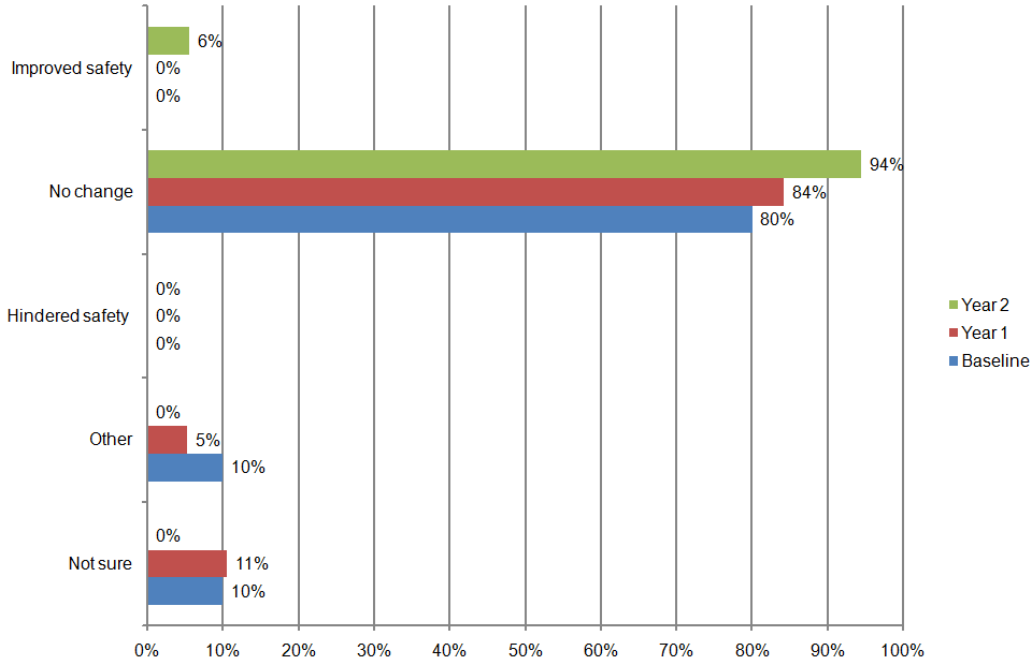

Figure 42 Responses to the question: To what extent do you think annual safety reports under ROGS have affected safety?

Figure 42 highlights that the clear majority of respondents (94% - 17 out of the 18 who responded to this question) felt that there was 'no change' in safety as a result of annual safety reports being introduced. This reflected the findings from year one and at the baseline.

3.5.9 Duty of Co-Operation

To understand the challenges most commonly encountered in meeting the duty of co-operation, respondents were asked to indicate all the challenges they had faced. The results are presented in Figure 43.

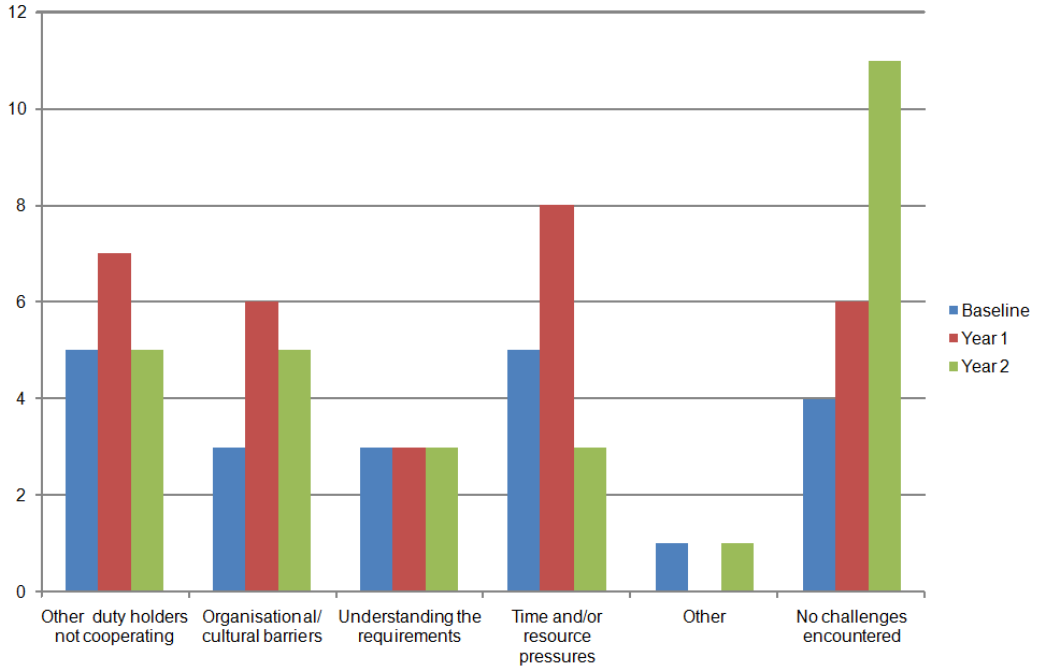

Figure 43 Main challenges encountered in meeting the duty of co-operation

Figure 43 highlights the largest number of respondents (48% - 11 out of 23) report having not encountered any challenges. This has improved compared with the year one survey and at the baseline. This suggests the duty of co-operation may be becoming easier to fulfil.

Other challenges cited at year two include 'other duty holders not cooperating' and 'organisational / cultural barriers' (22% - 5 out of 23).

Finally, respondents were asked to comment on how safety had been affected as a result of the duty of co-operation. The findings are presented in Figure 44.

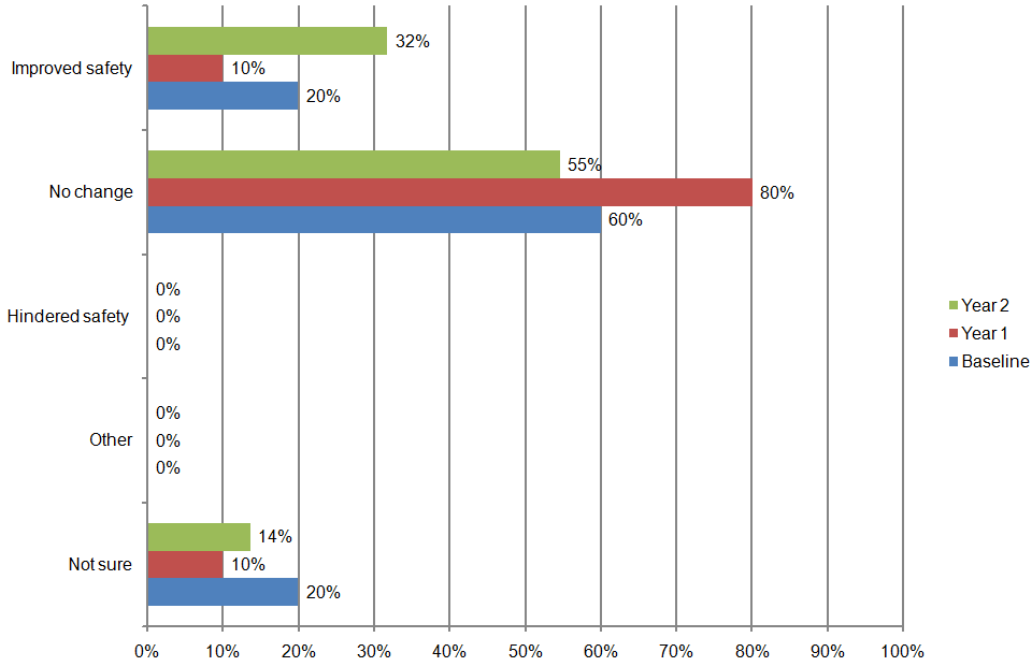

Figure 44 Responses to the question: "To what extent do you think the duty of co-operation has affected safety?"

Figure 44 highlights that for year two just over half of those who could answer this question felt that there was 'no change' in safety (55% - 12 out of 22). This compares to a much higher percentage in year one (80% - 16 out of 20). What is most encouraging is that more respondents appear to believe that safety has 'improved' as a result of the duty of co-operation (32% - 7 out of 22) in year two compared with year one and at the baseline.

3.5.10 Safety Critical Work

Duty holders were asked about their views regarding two aspects of the safety critical work duty; firstly, what they felt the main challenges were in meeting the duty, and secondly, to what extent they felt the duties had affected safety. Figure 45 highlights respondents' views about the main challenges.

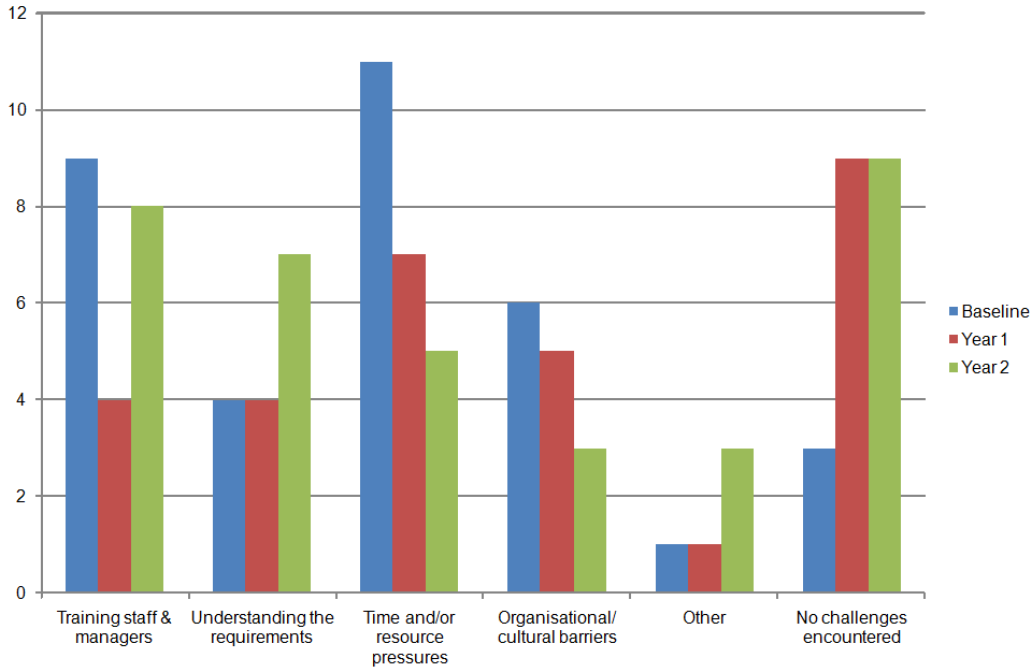

Figure 45 Main challenges encountered in meeting the safety critical work duty

Figure 45 highlights that the largest number of respondents (39% - 9 out of 23) said there were no challenges encountered in meeting the duty. However, this was closely followed with 35% (8 out of 23) citing 'training staff and managers' as a challenge and (30% - 7 out of 23) citing 'understanding the requirements'.

Comparing the results across all the three surveys, it can be seen that the challenges of 'time and / or resource pressures' and 'organisational / cultural barriers' appear to be reducing over time.

In year two, three respondents indicated they had faced 'other' challenges. Their verbatim comments on what these challenges were are as follows (each bullet point represents the views of one individual):

- "*Understanding Regulation 25 - Managing Fatigue was the main challenge*."
- "*Lack of nationally agreed competence requirements in some skill areas. Large-scale use of Agency Labour. Managing working time. Effective delivery of 'Controller' responsibilities when required info is not readily or consistently available*."
- "*The refresher training to maintain licensing*."

Respondents were also asked to comment on how they felt the duties regarding safety critical work have affected safety. The results are presented in Figure 46.

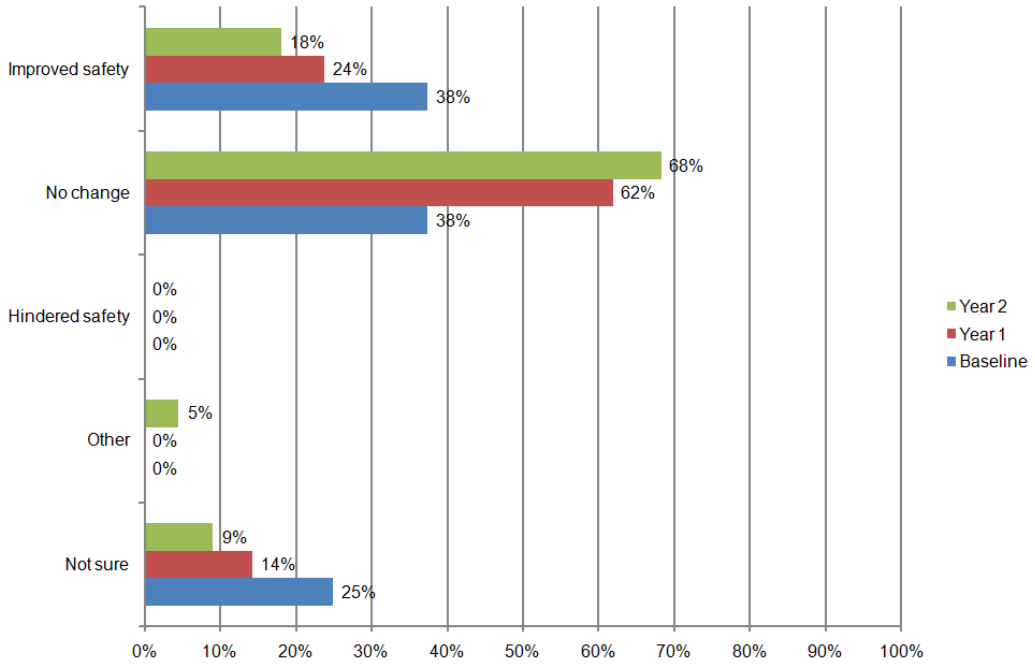

Figure 46 Responses to the question: "To what extent do you think duties regarding safety critical work have affected safety?"

Figure 46 highlights that the most common response in year two was 'no change' (68% - 15 out of 22) and this response was also significant in previous measurement time points. What is evident is that the proportion of those who believed that safety had 'improved' under the duty has declined over the measurement time points. A baseline of 38% (six out of 16) reduced to 24% (five out of 21) in year one, and fell further to 18% (four out of 22) by year two. Despite this, it is positive to see that no one felt that the duty had 'hindered' safety.

3.5.11 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 two study:

- *"The advice and help we received from our local inspectors was very good and helpful."*

- *"The relationship with our lead Inspector is helpful. Non-significant changes to our Safety Certificate are dealt with at quarterly liaison meetings and significant changes are submitted though the ORR process. This process is extremely helpful. In parallel, with the above, the agreed process for contact between our Lead Inspector and GBRf is that all ORR information and other requests come through him to Head of Safety. This facilitates a controlled flow of communication with the regulatory body."*

- *"Please note in regard to the questions about whether ROGS changed the way in which we managed safety, whilst fundamentally the answer was no, there did need to be changes to the way the safety verification process was managed as a result of the legal changes and the withdrawal of the ROTS regulations. This meant that the safety review group's terms of reference needed to be expanded and as a consequence this group was dissolved and the Director's Assurance Review Team established which now deals with the Safety Verification issues required by ROGS."*

- *"Some of the ROGS requirements are sensible and in line with what responsible operators do already, but the safety verification system for tramways is not workable and will increase costs and risks. We have explained this to ORR without avail."*

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

- *"It is too early to comment on the impact of ROGS as we have only received the Safety Certificate Part 1 & 2 and Safety Authorisation on 1st October 2008".*

- "*Defining safety critical tasks is the hardest part. Any work carried out on rolling stock or signalling or any other equipment that may affect the carrying of passengers (public) should be classed as safety critical work. It should not matter where the equipment is -whether in the depot or in service. We must be clear on all aspects of safety critical work that we carry out".*

- [Referring to time spent on applications comparing safety certification with Railway Safety Cases, and safety authorisations with Railway Safety Cases] *"The ROGS submission took more time than the Safety Case because it was our initial application. If it had been a continuation of the Safety Case if would have taken*

less time. However in the future we will only have to update our submission and will therefore be less time-consuming".

- "*The ROGS authorisation and certification is much better than the Safety Case. It is much better to have to supply higher level documentation and signpost as required*."

- "*Our ORR contact has been very approachable and helpful*."

- "*As we are a metro system we had to submit both an authorisation and certification submission. In order not to repeat information the certification submission referred to the authorisation document - the certification submission ended up being quite a short document. It may be worth considering if a joint application could be made*."

- *"The issue concerning the outcome of representations made to ORR as part of the consultation process is still patchy, with the duty holder not always being advised of the outcome and whether their points have been accepted and actioned, or rejected. If rejected, there is then a potential issue of the consequences for the duty holder who raised them in their ability to comply with their SMS, which in most cases also means their railway's rulebook. The issue of acceptance of a Safety Certificate or Safety Authorisation being notified to the affected parties, also still appears to be patchy and leaves the process hanging particularly where an affected party has made a representation. There is very little or no visibility of the final accepted document."*

3.6 SUMMARY OF KEY FINDINGS

3.6.1 Survey sample

- Out of the 27 respondents in the year two survey, 22 classed themselves as duty holders. This compares to 17 duty holders (out of 26 respondents) at baseline and 22 duty holders (out of 28 respondents) in year one.

- Of the year two respondents, 41% were from train operating companies (TOCs), which was similar to year one, but greater than the baseline.

3.6.2 Awareness and understanding of ROGS

- Respondents were asked whether they used guidance in understanding and implementing ROGS, a total of 63% (17 out of 27) for year two said they did and this was a reduction compared to year one and at the baseline.

- The most common source of help used to understand and implement ROGS by year two respondents was ORR published guidance (94% - 16 out of 17), with this trend also apparent for baseline and year one.

- Another significant source of guidance for year two respondents was direct contact with ORR (53% - nine out of 17). A similar number of respondents (59%, 10 out of 17) also relied on RSSB published guidance. These sources of guidance have remained significant over the course of time.

- Industry networking remains a popular source of guidance but its use has diminished since the baseline, and marginally since year one to 47% (eight out of 17 respondents) by year two.

3.6.3 Industry safety culture indicators

- Nearly all aspects of safety culture measured have seen some improvements in the favourable responses.

- A particularly positive improvement was with regard to there being enough staff to complete work according to health and safety procedures, which increased from 31% agreeing with this at the baseline up to 67% agreeing by year two.

- Areas where improvements have been weakest were with regard to people working safely even when supervisors are absent, consistent near miss reporting and people's understanding of the risks related to their work.

- The majority of respondents (59% - 16 out of 27) indicated that a mixture of senior/middle management, safety representatives and site work supervisors, communicated the message that safety is a key priority. This was similar to the findings in year one.

- Just over half of year two respondents (52% - 14 out of 27) said they felt staff were placed under pressure to meet operational performance objectives, although this was a decrease from year one.

- In terms of the relationship between this pressure and safety, 30% believed this pressure does **not** affect safety, 22% were 'not sure', and 33% did not answer the question. Only 15% said that they felt this pressure affected safety.

3.6.4 Feedback on ROGS and ORR

- The majority of respondents (52% - 14 out of 27) in year two felt ROGS has changed the way safety is managed. Furthermore, 52% (12 out of 23) in year two felt the impact on their business operations had been positive, which was an increase from year one.

- The majority of year two respondents (59% - 16 out of 27) feel that ROGS has influenced safety related decision-making. This finding was similar to the baseline, but more than double the proportion in year one.

- The majority of respondents (74% - 20 out of 27) agreed that standards of safety are the same under ROGS. This was an increase from year one and the baseline.

- In year two, 37% (10 out of 27) did not think any more could be done to reduce the administrative burden of ROGS. Only 22% felt that more could be done, a large reduction from 42% at the baseline.

- The number of people in year two who 'requested and received help' has decreased slightly to 52% (14 out of 27) compared with year one. Encouragingly for year two, no one 'requested help, but did not receive help' (whereas one person had selected this response in year one).

- In year two the majority of respondents (57% - 8 out of 14) described the help received from ORR as 'good'. Furthermore, not one respondent rated the help received as 'poor' or 'very poor'.

- In year two, the largest number (40% - eight out of 20) of respondents stated that they received between 3 to 5 visits from an ORR inspector. This was similar to year one.

- Most inspector visits in year two were reported to last between 3 and 5 hours (57% - 12 out of 21), which was similar to year one.

- The majority of year one and year two respondents felt that the length of inspector visits was the same under both regulatory regimes.

3.6.5 Safety Management System (SMS)

- The largest number of respondents suggested it had cost their organisation between £10k and £49.9k to maintain an SMS under ROGS per year.

- The majority of respondents (72% - 13 out of 18) felt that the costs associated with maintaining a SMS under ROGS is actually about the same as the costs incurred under the safety case regime.

- The majority of respondents indicated that they have spent between 100 to 250 days in maintaining their SMS per year.

- At year two the most common challenge in maintaining an SMS was 'time and / or resource pressures' (47% - 9 out of 19). The second most common challenge was 'communicating the SMS to the organisation' (37% - 7 out of 19). This was also found in year one and the baseline.

- The majority of year two respondents (55% - 11 out of 20) believe SMS under ROGS has not affected safety. This was reflected across all three surveys.

3.6.6 Safety verification

- The majority of the respondents (83% - 19 out of 23) indicated that they use a SMS change management process to assist in the safe introduction of new / altered infrastructure or rolling stock. The next most common method adopted was safety verification under ROGS (74% - 17 out of 23).

- Only two respondents in year two were able to provide a cost estimation for undertaking safety verification per year. One indicated an annual cost of between £1k and £9.9k and the other specified a cost of between £50k and £249.9k.

- The largest number of respondents were spending between 10 to 49 days per year on safety verification (closer inspection of the figures revealed the majority were spending between 10 and 15 days). This same trend was seen in year one and at the baseline.

- The most significant safety verification challenge (58% - 11 out of 19) was perceived to be 'understanding the requirements' of safety verification. Knowing when to apply safety verification was also viewed as a key challenge by 53% (10 out of 19) of respondents. This was also reflected in year one and at the baseline.

- Half of the respondents (50% - 9 out of 18) believed there had been 'no change' to safety as a result of safety verification under ROGS.

3.6.7 Safety certification

- The majority of year two respondents (62% - 15 out of 23) said they did have a safety certificate. All 15 also confirmed having successfully achieved each of the six stages in the certification process.

- A small number of duty holders provided details on the costs incurred to apply for and amend safety certificates. These ranged from between £1k to £9.9k right up to between £50k and £249.9k.

- The majority of respondents (62% - 8 out of 13) felt that the costs for applying for safety certification under ROGS were 'less' than for the previous safety case regime.

- Five of the year two respondents spent between 10 to 49 days (56% - 5 out of 9) on their initial application. In terms of amending an application, 60% (6 out of 10) spent less than 10 days doing this.

- The largest number of respondents in year two felt that applying for ROGS safety certification takes 'less' time than the previous safety case regime.

- The most commonly experienced safety certification challenges are 'understanding the requirements' and 'time and / or resource pressures'. The time / resource challenge was also common in year one and at the baseline.

- The majority of year two respondents (73% - 11 out of 15) appear to think that there has been 'no change' to safety as a result of safety certification under ROGS.

3.6.8 Safety authorisation

- A total of 57% (13 out of 23) of year two respondents reported they had safety authorisation under ROGS.

- For all 13 duty holders who had safety authorisation under ROGS, each duty holder had completed all six stages of the safety authorisation process.

- Three duty holders estimated that the costs involved in preparing their initial application for safety authorisation under ROGS were £4k, £25k, and £50k. In terms of making amendments to applications for safety authorisation, one year two respondent quoted £500.

- The largest proportion of year two respondents (46% - 6 out of 13) believed the cost required to apply for safety authorisation is about the 'same' as for safety case application.

- Seven respondents provided estimates on the number of days spent on their initial application for safety authorisation. There was a wide range of estimates

provided, ranging from less than 10 to more than 250. In terms of amending their safety authorisation application, three out of six respondents spent less than 10 days on this.

- The findings for year two revealed that the largest percentage (46% - 6 out of 13) felt that applying for safety authorisations took 'less' time than the previous safety case regime. A further 38% (5 out of 13) felt the time taken was about the 'same' between the two regimes.

- The most common challenge with regard to safety authorisation cited by year two respondents was 'time and / or resource pressures' (54% - 7 out of 13). This challenge was also cited the most by year one respondents.

- A high proportion (46% - 6 out of 13) of year two respondents felt that no improvements could be made to the safety authorisation process.

- The clear majority of respondents 69% (9 out of 13) felt there had been 'no change' to safety as a result of safety authorisation.

3.6.9 Risk assessment

- The majority of respondents (52% - 12 out of 23) believe there have been no challenges encountered in adapting existing risk assessment arrangements to meet the requirements of Regulation 19.

- The majority (73% - 16 out of 22) of year two respondents feel that there has been 'no change' to safety as a result of the changes to risk assessment. This is similar to the response at year one and at the baseline.

3.6.10 Annual safety report

- In year two a total of 83% (19 out of 23) who said they were required to compile and submit an annual safety report under ROGS.

- The costs to compile an annual safety report provided by three respondents ranged from £250 to £1,000.

- The majority of respondents (12 out of 19) who were required to submit an annual safety report estimated the time spent to do this was less than 10 days (typically between one and five days). The number of respondents who took longer to submit an annual report were also seen to decrease in year two. This may suggest the process has become more streamlined.

- In year two, the two most commonly cited challenges were 'understanding the requirements' and 'gathering and compiling the information'.

- The number of respondents citing 'time and / or resource pressures' appeared to reduce in year two, which may further indicate that the annual safety report process is taking less time.

- The clear majority of respondents felt that there was 'no change' in safety as a result of annual safety reports being introduced.

3.6.11 Duty of co-operation

- The largest number of respondents (48% - 11 out of 23) report having not encountered any challenges in meeting the duty of co-operation. This indicated an improvement compared with the year one survey and at the baseline, suggesting the duty of co-operation may be becoming easier to fulfil.

- The majority of respondents (55% - 12 out of 22) felt that there had been 'no change' in safety as a result of the duty of co-operation.

- An increased proportion of respondents appear to believe that safety has 'improved' as a result of the duty of co-operation in year two compared with year one and at the baseline.

3.6.12 Safety critical work

- The largest number of respondents (39% - 9 out of 23) said there were no challenges encountered in meeting the safety critical work duty. However, a reasonable number of respondents did cite 'training staff and managers' and 'understanding the requirements' as a challenge.

- Comparing the results across all the three surveys, it can be seen that the challenges of 'time and / or resource pressures' and 'organisational / cultural barriers' appear to be reducing.

- The majority of respondents felt there had been 'no change' in the extent to which the safety critical work duties had affected safety.

4. CONCLUSIONS

4.1 YEAR TWO SURVEY FINDINGS IN RELATION TO ROGS OBJECTIVES

In order to clearly map the most appropriate Year 2 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 2 survey findings. This is also compared alongside data gathered from the baseline and year one surveys. The results are shown in Table 3 to Table 7.

It should be noted that not all of the data gathered in the year two 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 two survey to address certain objectives, this has been shaded in grey on the tables.

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

Table 3 Data for Objective 1

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.		
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***
1a. transfer the mainline rail industry from a system of railway safety cases to a system of safety certification and authorisation	• Number of mainline rail industry organisations in existence by end of 2008 • Number of safety certification and authorisation applications received, processed and approved by end of 2008	• Data on the number of safety certification and authorisation applications has started to be gathered from ORR. Analysis of this data will be finalised and presented in the final monitoring report.
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	• Creation of Common Safety Methods • Extent to which Annual Safety Reports submitted include details on Common Safety Indicators	• This data will 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.

Table 4 Data for Objective 2

Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
2a. reduce the number of railway operators that have to seek formal permission from the safety regulator to work on the railway	• Number of railway operators applying for formal permission from ORR to work on the railway by end of 2008 and 2009	• 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 is being gathered from ORR. Analysis of this data will be finalised and presented in the final monitoring report.	• See previous	• See previous
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	• Industry stakeholders' perceptions of the current quality of SMS's under ROGS in the rail industry • Industry stakeholders' perceptions of the importance of SMS's under ROGS for maintaining safety in the rail industry	• 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	• To be explored again in final Influence Network workshop	• To be explored again in final Influence Network workshop

Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		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.		
	• Cost of developing an SMS under ROGS	• 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 £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.	• A range of costs were incurred by year one respondents, although four were from £10k to £60k and one was £100k. The average was £45k. A range of days spend was also reported from 12 to 200 with the average being 97 days.	• SMS development costs not collected at year two, as development has already occurred.
	• Cost of maintaining an SMS under ROGS	• 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	• 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	• In year two the majority of respondents suggested SMS maintenance had cost their organisation between £10k and £49.9k. One respondent indicated it had cost between £1k and £9.9k and one other quoted

Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		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.	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.	a cost of between £50k and £249.9k. • The majority of responses indicated that they have spent between 100 to 250 days in maintaining their SMS per year. However, four respondents indicated that their organisation has spent 10 to 49 days. The average was 170 days per organisation per year.
	• Challenges faced in maintaining an SMS under ROGS	• 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.	• '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.	• The most significant challenges at year two were 'time and / or resource pressures' followed by 'communicating the SMS to the organisation', followed by 'organisational / cultural barriers'.
	• Impact of ROGS SMS on safety	• The majority (62%) of respondents indicated that their SMS under ROGS had not caused any changes to safety.	• 53% of year one respondents thought ROGS SMS had made no change to safety. However, 32%	• The majority (55%) of year two respondents felt that SMS under ROGS has not affected safety.

Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		Encouragingly 23%, said their SMS under ROGS had improved safety and no respondents indicated that their SMS under ROGS had hindered safety.	thought this had improved safety.	
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	• Amount of time booked by HMRI inspectors to assessing safety cases	• In order to gather the amount of time booked by HMRI inspectors to assessing safety cases and conducting site visits this data is being gathered from ORR. Analysis of this data will be finalised and presented in the final monitoring report.	• See previous	• See previous
	• Amount of time booked by HMRI inspectors to conducting site visits	• In order to gather the amount of time booked by HMRI inspectors to assessing safety cases and conducting site visits this data is being gathered from ORR. Analysis of this data will be finalised and presented in the final monitoring report.	• See previous	• See previous
	• Number of queries received by ORR with regard to RA etc.	• The number of queries received by ORR with regard to risk assessment will need to be gathered from ORR. • The types of challenges that duty	• The year one respondents indicated 'understanding the requirements' was a challenge in dealing with the ROGS risk assessment	• The majority of respondents (52%) felt there have been no challenges encountered in adapting existing risk assessment arrangements

Objective 2: Simplify domestic UK rail safety Regulatory structure by replacing three sets of regulations with one.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		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.	requirements (23%). A further (27%) felt that time and / or resource pressures were a challenge.	to meet the requirements of Regulation 19. This showed a big increase in numbers from previous surveys.

Table 5 Data for Objective 3

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
3a. transport operators and infrastructure managers need to work together to ensure system safety	• Appointment of representatives in organisations tasked with interfacing with other duty holders	• To be explored at final Influence Network workshop	• To be explored at final Influence Network workshop	• To be explored at final Influence Network workshop
	• Methods developed to evaluate effectiveness of co-operation	• 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.	• 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.	• Format for process for achieving co-operation not collected at year two, as format already implemented in previous years.
	• Identification of areas where majority of operator interfacing occurs	• In terms of making changes, the largest percentage of baseline survey responses (47%) said they identified areas where the majority of operator interfacing occurs.	• 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.	• Details not collected in year two as stage has passed.
	• Development of written	• To be explored at final	• To be explored at final	• To be explored at final

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
	procedures for interfacing with other duty holders	Influence Network workshop	Influence Network workshop	Influence Network workshop
	• Impact of duty of co-operation on safety	• The majority of respondents (60%) felt that the new duty of co-operation had not yet caused a change in safety.	• The majority of respondents (80%) felt that the new duty of co-operation had not caused a change in safety.	• The majority of respondents (55%) felt that there had been 'no change' in safety as a result of the duty of co-operation.
	• Challenges encountered in meeting duty of co-operation	• The joint largest number of survey responses felt other duty holders not co-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%).	• Time and / or resource pressures were cited as a significant challenge by 38% of year one respondents. Furthermore, organisational / cultural barriers were cited as a challenge by 29% of respondents.	• The largest number of respondents (48%) report having not encountered any challenges in meeting the duty of co-operation.
	• Industry stakeholders' perceptions of the current quality of interface management in the rail industry	• 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	• To be explored again in final Influence Network workshop	• To be explored again in final Influence Network workshop

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		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.		
	• Stakeholders' perceptions of the importance of interface management for maintaining safety in the rail industry	• To be explored at final Influence Network workshop	• To be explored at final Influence Network workshop	• To be explored at final Influence Network workshop
3b. transport operators should identify appropriate forms of co-operation that complement the measures they are taking to comply with their own safety duties	• See Objective 3a outcome measures	• See Objective 3a baseline data.	• See Objective 3a year one data.	• See Objective 3a year two data.

Table 6 Data for Objective 4

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
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	• Number of non-mainline railway organisations having difficulty without HMRI approval role	• Outcome data on the number of non-mainline railway organisations having difficulty without the HMRI approval role is being explored with ORR (HMRI)	• See previous	• See previous
	• Number of non-mainline railway organisations with process in place for introducing new or altered works, plant or equipment	• In terms of the processes 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).	• 64% were using the 'SMS change management process', 57% were 'safety verification under ROGS' and 36% of responses were 'Use of "notified body" under RIR'	• The majority of year two respondents (83%) indicated that they use a 'SMS change management process' to assist in the safe introduction of new / altered infrastructure or rolling stock. The next most common method adopted was 'safety verification under ROGS' (74%)

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
	• Introduction of systems for deciding when safety verification must be applied	• 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.	• 43% required minor changes to their existing processes, 29% required major changes, a completely new process was required by 14% of year one respondents.	• Details not collected in year two as stage has passed.
	• Changes to written safety verification schemes	• The most significant changes made were changing the written safety verification scheme (38%) and introducing a system for deciding when safety verification must be applied (38%).	• The most common changes made were changing the written safety verification scheme (36%) and introducing a system for deciding when safety verification must be applied (54%).	• Details not collected in year two as stage has passed.
	• Changed processes for evaluating the effectiveness of the safety verification process	• To be explored at final Influence Network workshop	• To be explored at final Influence Network workshop	• To be explored at final Influence Network workshop

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
	• Challenges encountered in obtaining safety verification	• 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%).	• 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%).	• The most significant safety verification challenge was perceived to be 'understanding the requirements' of safety verification (58%). Knowing when to apply safety verification was also viewed as a key challenge by 53% of respondents.
4b. replace this requirement with a more targeted requirement on duty holders to obtain safety verification from an independent competent person	• Identification of suitable independent competent person/s (ICP)	• A significant challenge in safety verification was found to be identifying and appointing an independent competent person (ICP) (45%).	• Identifying and appointing an independent competent person (ICP) was reported as a challenge by 29% of respondents.	• Identifying and appointing an independent competent person (ICP) was reported as a challenge by 31% of respondents.
	• Changes in the way information is managed to ensure easy access for ICP's	• 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	• 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.	• Details not collected in year two as stage has passed.

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		requirements; 31% of respondents required major changes and 15% of respondents required a completely new process.		
	• Introduction of processes for handling ICP recommendations	• In terms of findings suitable workers in the 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).	• To be explored again at the final Influence Network workshop	• To be explored again at the final Influence Network workshop

Table 7 Data for Objective 5

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
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	• Number of organisations identifying safety critical work undertaken in organisation	• 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%).	• 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.	• Details not collected in year two as stage has passed.
5b. safety critical tasks must be carried out by a person assessed as being competent and fit for work	• Number of organisations introducing competency management systems	• 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	• To be explored again at the final Influence Network workshop	• To be explored again at the final Influence Network workshop

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		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.		
	• Number of organistaions explicitly identifying workers undertaking safety critical work and those managing them	• 69% of respondents indicated that they identify workers undertaking safety critical work and those managing them.	• 71% of respondents undertook this activity.	• Details not collected in year two as stage has passed.
	• Number of workers accredited as competent	• In terms of finding suitable workers in the 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).	• To be explored again at the final Influence Network workshop	• To be explored again at the final Influence Network workshop
	• Industry's perception of the competence, health and overall fitness of rail	• In terms of fatigue in the rail industry, the group underlined that the rail	• To be explored again at the final Influence Network workshop	• To be explored again at the final Influence Network workshop

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
	industry workers	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. • In terms of physical health the group highlighted how train drivers go through a rigorous selection		

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
		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 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.		
5c. remove the requirement for	• Number of safety critical	• Outcome data on the	• See previous	• See previous

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.				
Subsidiary objectives	***Outcome measures***	***Outcome measures: baseline data***	***Outcome measures: year one***	***Outcome measures: year two***
safety critical workers to carry a formal means of identification	workers carrying formal means of identification	number of safety critical workers carrying formal means of identification is being explored with ORR.		
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	• Consideration of the pattern of working hours and roster design reflected in revised working schedules	• To be explored at the final Influence Network workshop	• To be explored at the final Influence Network workshop	• To be explored at the final Influence Network workshop
	• Industry's perception of the health and fatigue of rail industry workers	• See objective 5b for industry's perception of the health and fatigue or rail industry workers.	• To be explored at the final Influence Network workshop	• To be explored at the final Influence Network workshop
	• Industry's perception of safe job design	• To be explored at the final Influence Network workshop	• To be explored at the final Influence Network workshop	• To be explored at the final Influence Network workshop

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

4.2.1 Objective 2

2b - Cost of maintaining an SMS under ROGS

Across all three surveys only limited data was available. In order to make direct comparisons an average cost per year, per organisation, was calculated. The average days spent per year in the baseline was 156, in the year one survey it reduced to 95 and in year two it went back up to 170.

2b - Challenges faced in maintaining an SMS under ROGS

For year two the most common cited challenge was 'time and / or resource pressures' followed by 'communicating the SMS to the organisation' and then 'organisational / cultural barriers'. This was a similar trend to that seen in year one. Time / resource pressures and communication issues were also significant at the baseline, suggesting these two challenges are reasonably constant across all three surveys.

2b - Impact of ROGS SMS on safety

The majority of respondents across all three surveys indicated that SMS under ROGS had not caused any changes to safety. This is a positive finding considering one aspect of the overarching aims of ROGS is to maintain safety at a constant level during this period of change.

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

In year two the majority of respondents (52%) felt there had been no challenges encountered in adapting existing risk assessment processes to address Regulation 19. This is a significant improvement on the previous two years, where respondents did highlight encountering a range of other challenges.

4.2.2 Objective 3

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

The majority of respondents across all three surveys felt that the duty of co-operation had not caused a change in safety. However, in year two there is an increased proportion of respondents who believe that safety has 'improved' as a result of the duty of co-operation compared with year one and at the baseline.

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

The largest number of respondents in year two reported having not encountered any challenges in meeting the duty of co-operation. This indicated an improvement compared with the year one survey and at the baseline, suggesting the duty of co-operation may be becoming easier to fulfil.

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

For year two the majority of the respondents (83%) indicated that they use a SMS change management process to assist in the safe introduction of new / altered infrastructure or rolling stock. The next most common method adopted was safety verification under ROGS (74%), followed by the use of a notified body under RIR 2006 (43%). Although the total number of respondents do vary across the three samples, largely the same trend is reflected across the three surveys.

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%), year one survey (48%) and again in the year two survey (53%). This would therefore appear to be a challenge that has not reduced with time and may need further exploration. Understanding the requirements and time / resource pressures were also cited as key challenges.

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

In the baseline survey identifying a suitable independent competent person (ICP) was a challenge for 45% of respondents, however, by year one this had reduced to 29% and in year two this remains reasonably constant with 31% of respondents finding it an issue. This suggests that this was an issue for most organisations when ROGS was first implemented, but has since become more manageable.

5. REFERENCES

[1] http://www.rail-reg.gov.uk/upload/pdf/rogs-monitor-bomel-reprt-feb08.pdf

[2] http://www.rail-reg.gov.uk/upload/pdf/rogs-monitor-bomel-reprt-nov08.pdf

[3] Health and Safety Executive (HSE). '*Health and Safety Climate Survey Tool (HSCST)'*, Byrom & Corbridge, 1997

APPENDIX A
YEAR TWO SURVEY ISSUED TO INDUSTRY

YEAR 2 SURVEY
THE RAILWAYS AND OTHER GUIDED TRANSPORT SYSTEMS (SAFETY) REGULATIONS 2006 (ROGS)

ABOUT THIS SURVEY

- Noble Denton BOMEL (ND 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 third 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 have also streamlined this Year 2 survey to help avoid you answering questions for a third time on issues that should not have changed.***
- 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

ND BOMEL: Mandy Dow, 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 ND BOMEL only	
1.1 Your name:	
If you participated in the first or second survey and your details have not changed you do not need to complete questions 1.2 to 1.6 again	
1.2 Job title:	
1.3 Organisation name:	
1.4 Telephone No:	
1.5 Email:	
1.6 Website:	

2 Awareness and understanding of ROGS

2.1 At this point in time, do you still use help to assist you in understanding and implementing ROGS? (If *No* go straight to question 3.1)	Yes	☐
	No	☐
2.2 If *Yes*, please specify what help you use. (Select all boxes that apply)	ORR published guidance	☐
	RSSB published guidance	☐
	Internal organisational guidance	☐
	External consultant	☐
	Internal consultant	☐
	Direct contact with ORR	☐
	Direct contact with RSSB	☐
	Trade union	☐
	Industry networking	☐
	Other	☐
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	☐	☐	☐	☐	☐	☐
3.2 The company really cares about the health and safety of the people who work here	☐	☐	☐	☐	☐	☐
3.3 My immediate boss often talks to me about health and safety	☐	☐	☐	☐	☐	☐
3.4 Supervisors are good at detecting unsafe behaviour	☐	☐	☐	☐	☐	☐
3.5 There is nothing I can do to further improve health and safety here	☐	☐	☐	☐	☐	☐
3.6 I trust my workmates with my health and safety	☐	☐	☐	☐	☐	☐
3.7 I am clear about what my responsibilities are for health and safety	☐	☐	☐	☐	☐	☐
3.8 People here do not remember much of the health and safety training which applies to their job	☐	☐	☐	☐	☐	☐
3.9 People here always work safely even when they are not being supervised	☐	☐	☐	☐	☐	☐
3.10 People here think health and safety is not their problem – it's up to management and others	☐	☐	☐	☐	☐	☐
3.11 Some people here have a poor understanding of the risks associated with their work	☐	☐	☐	☐	☐	☐
3.12 There are always enough people available to get the job done according to the health and safety procedures/instructions/rules	☐	☐	☐	☐	☐	☐
3.13 Near misses are always reported	☐	☐	☐	☐	☐	☐
3.14 Do management involve staff at all levels in safety related decision making?					Yes	☐
					No	☐
					Not sure	☐
Please explain why:						

3.15 Is there a message conveyed to all staff that safety is a key priority?	Yes	☐
	No	☐
	Not sure	☐
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 using the *DROP DOWN MENU*)	Senior management	Blank
	Middle management	
	Safety representatives	
	Site work supervisors	
	A mixture of the above	
	No one specifically has that responsibility	
	Other	
If *Other*, 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	☐
	No	☐
	Not sure	☐
Please explain why:		
3.19 If *Yes* to Question 3.18, do you think this pressure affects safety?	Yes	☐
	No	☐
	Not sure	☐
Please explain why:		

4 General feedback on ROGS and ORR

4.1 Has ROGS changed the way in which safety has been managed in your organisation?	Yes	☐
	No	☐
	Not sure	☐
Please explain why:		
4.2 If changes have been required, how have they impacted on your business operations? (Select one box)	Positive impact	☐
	Neutral impact	☐
	Negative impact	☐
Please explain why:		
4.3 Has ROGS made any difference to safety related decision making?	Yes	☐
	No	☐
	Not sure	☐
Please explain why:		

4.4 Please provide your views on the following statement by ticking the box which most accurately reflects your opinion:	Strongly agree	Agree	Neither	Disagree	Strongly disagree	No opinion
"From experience, I believe that standards of safety are the same under ROGS"	☐	☐	☐	☐	☐	☐

4.5 Could more be done to reduce the administrative burden of the regulations?	Yes	☐
	No	☐
	No opinion	☐
Please explain why:		
4.6 Did you request and / or receive help from ORR regarding ROGS? (Select one box)	Requested and received help	☐
	Requested help, but did not receive help	☐
	Did not request any help	☐
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	☐
	Good	☐
	Average	☐
	Poor	☐
	Very poor	☐
	No opinion	☐

4.9 Approximately how many times have you received a visit from an ORR inspector (HMRI) in 2008? (Select one box)	No visits in 2007	☐
	Between 1 and 2	☐
	Between 3 and 5	☐
	Between 6 and 10	☐
	More than 10	☐
	If preferred, please estimate the number of times:	
4.10 If you have received an inspector visit in 2008, typically how much time did the ORR inspector spend with your organisation (on one visit)? (Select one box)	Less than 1 hour	☐
	1 to 2 hours	☐
	3 to 5 hours	☐
	6 to 8 hours	☐
	More than 8 hours	☐
	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	☐
	About the same	☐
	Less time spent since ROGS	☐
4.12 What else could ORR do to help you with ROGS?		

5 Additional comments

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

This section will be used to put cost data into context		
6.1 What best describes the role of your organisation?: (Select **one** box from the *DROP DOWN MENU* only or specify below)	Infrastructure manager	Blank
	Train operating company (TOC)	
	Freight operating company (FOC)	
	On Track Machine operation (OTM)	
	Possession only operation	
	Maintainer of vehicles or infrastructure	
	Rolling stock manufacturer or company (incl. Leasing companies)	
	Metro system (e.g. London Underground, Tyne & Wear Metro)	
	Light railway	
	Tramway	
	Railway (or other transport system) operating under 40kph	
	Trade union	
	Passenger groups	
	Other	
If *Other*, please specify:		

7 Implementation of ROGS

SAFETY MANAGEMENT SYSTEM (SMS)			
7.1 Do you have a safety management system which is ROGS compliant?		Yes	☐
		No	☐
		Not sure	☐
		If *No or Not sure* please go straight to Question 7.6	
7.2 Please estimate the costs your organisation incurs as a result of maintaining an SMS under ROGS, **per year**. 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	
7.3 Compared to your costs to maintain a safety case, please indicate whether SMS maintenance costs under ROGS are:		Similar	☐
		More expensive	☐
		Less expensive	☐

7.4 What are the main challenges in maintaining an SMS under ROGS? (Select all boxes that apply)	Understanding the requirements	☐
	Time and / or resource pressures	☐
	Organisational / cultural barriers	☐
	Communicating the SMS to the organisation	☐
	No challenges encountered	☐
	Other	☐
If *Other*, please specify:		
7.5 To what extent do you think SMS under ROGS has affected safety? (Select one box)	Improved safety	☐
	Hindered safety	☐
	No change	☐
	Not sure	☐
	Other	☐
If *Other*, please specify:		

SAFETY VERIFICATION (SV)		
7.6 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)	☐
	SMS change management process	☐
	Safety verification under ROGS	☐
	Not applicable	☐
If only '*Use "notified body" under RIR*' and / or '*Not applicable'* apply to your organisation please go straight to Question 7.10		
7.7 Please estimate the costs your organisation incurs as a result of undertaking SV under ROGS, **per year**. 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	
7.8 What are the main challenges in meeting the requirements of SV? (Select all boxes that apply)	Understanding the requirements	☐
	Time and / or resource pressures	☐
	Organisational / cultural barriers	☐
	Knowing when to apply safety verification	☐
	Identifying / appointing an ICP	☐
	No challenges encountered	☐
	Other	☐
If *Other*, please specify:		

7.9 To what extent do you think SV under ROGS has affected safety? (Select one box)	Improved safety	☐
	Hindered safety	☐
	No change	☐
	Not sure	☐
	Other	☐
If *Other*, please specify:		

SAFETY CERTIFICATION		
7.10 Do you have a safety certificate under ROGS? (Select one box)	Yes	☐
	No	☐
	Not sure	☐
If *No or Not sure* please go straight to Question 7.18		
7.11 Please tick **ALL** of the stages in the safety certification assessment process you have completed. (Select **ALL** boxes that apply)	Preparing the application	☐
	Submission to ORR and affected parties	☐
	Main ORR assessment	☐
	Meeting with ORR to discuss assessment findings	☐
	Resolving outstanding issues	☐
	ORR final decision and sign-off	☐

7.12 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, **per year**. 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		

7.13 What are the main challenges? (Select all boxes that apply)	Understanding the requirements	☐
	Time and / or resource pressures	☐
	Organisational / cultural barriers	☐
	Consulting affected parties	☐
	Liaison with ORR	☐
	Employee involvement	☐
	No challenges encountered	☐
	Other	☐
If *Other*, please specify:		
7.14 Compared to Railway Safety Case applications, the **time** spent on applying for a safety certificate was: (Select one box)	More	☐
	Less	☐
	About the same	☐

7.15 Compared to Railway Safety Case applications, the **cost** of applying for a safety certificate was: (Select one box)	More	☐
	Less	☐
	About the same	☐
7.16 Do you think that improvements could be made to the application process?	Yes	☐
	No	☐
	No opinion	☐
If *Yes*, please specify:		
7.17 To what extent do you think safety certification under ROGS has affected safety? (Select one box)	Improved safety	☐
	Hindered safety	☐
	No change	☐
	Not sure	☐
	Other	☐
If *Other*, please specify:		

SAFETY AUTHORISATION		
7.18 Do you have safety authorisation under ROGS? (Select one box)	Yes	☐
	No	☐
	Not sure	☐
If *No or Not sure* please go straight to Question 7.26		

7.19 Please tick **ALL** of the stages in the safety authorisation assessment process you have completed. (Select **ALL** boxes that apply)	Preparing the application	☐	
	Submission to ORR and affected parties	☐	
	Main ORR assessment	☐	
	Meeting with ORR to discuss assessment findings	☐	
	Resolving outstanding issues	☐	
	ORR final decision and sign-off	☐	
7.20 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, **per year**. 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		

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

RISK ASSESSMENT		
7.26 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	☐
	Time and / or resource pressures	☐
	Organisational / cultural barriers	☐
	Involving employees and their representatives	☐
	Applying targets / standards	☐
	No challenges encountered	☐
	Other	☐
If *Other*, please specify:		

7.27 How do you feel about the changes brought about to risk assessment by ROGS? (Select one box)	Improved safety	☐
	Hindered safety	☐
	No change	☐
	Not sure	☐
	Other	☐
If *Other*, please specify:		

ANNUAL SAFETY REPORT		
7.28 Are you required to compile and submit an annual safety report under ROGS? (Select one box)	Yes	☐
	No	☐
	Not sure	☐
If *No* or *Not sure* please go straight to Question 7.32		
7.29 Please estimate the costs your organisation incurs as a result of submitting an annual safety report, **per year**. 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	
7.30 What are the main challenges in preparing and submitting a report? (Select all boxes that apply)	Understanding the requirements	☐
	Time and / or resource pressures	☐
	Gathering and compiling the information	☐
	Meeting the deadline	☐
	No challenges encountered	☐
	Other	☐
If *Other*, please specify:		
7.31 To what extent do you think annual safety reports under ROGS have affected safety? (Select one box)	Improved safety	☐
	Hindered safety	☐
	No change	☐
	Not sure	☐
	Other	☐
If *Other*, please specify:		

DUTY OF CO-OPERATION			
7.32	What are the main challenges in meeting the duty? (Select all boxes that apply)	Understanding the requirements	☐
		Time and / or resource pressures	☐
		Organisational / cultural barriers	☐
		Other duty holders not co-operating	☐
		No challenges encountered	☐
		Other	☐
	If *Other*, please specify:		
7.33	To what extent do you think the duty of co-operation has affected safety? (Select one box)	Improved safety	☐
		Hindered safety	☐
		No change	☐
		Not sure	☐
		Other	☐
	If *Other*, please specify:		

SAFETY CRITICAL WORK			
7.34	What are the main challenges in meeting the duty? (Select all boxes that apply)	Understanding the requirements	☐
		Time and / or resource pressures	☐
		Organisational / cultural barriers	☐
		Training staff and managers	☐
		No challenges encountered	☐
		Other	☐
	If *Other*, please specify:		
7.35	To what extent do you think duties regarding safety critical work have affected safety? (Select one box)	Improved safety	☐
		Hindered safety	☐
		No change	☐
		Not sure	☐
		Other	☐
	If *Other*, 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, marking the email subject as "ROGS survey" by 5pm on Friday 27th February 2009.

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