Development and validation of the HMRI safety culture inspection toolkit

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RESEARCH REPORT 365
Her Majesty’s Railway Inspectorate (HMRI) currently has a programme in place to validate the implementation of recommendations that have arisen from public inquiries such as the Cullen Inquiry. A number of themes have been identified within the extensive set of recommendations, one of which relates specifically to safety culture and requires all UK rail organisations to implement an effective safety culture.

The aim of the current work is to develop a pragmatic approach and methodology for the inspection of safety culture in UK rail companies, which focuses on a limited number of indicators that are known to influence safety culture. These indicators are:

- Leadership
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Attitude Towards Blame

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ACRONYM LIST

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MANAGEMENT SUMMARY

Background
Her Majesty’s Railway Inspectorate (HMRI) currently has a programme in place to validate the implementation of recommendations that have arisen from public inquiries such as the Cullen Inquiry (Reference 1). A number of themes have been identified within the extensive set of recommendations, one of which relates specifically to safety culture and requires all UK rail organisations to implement an effective safety culture.

The aim of this work programme is to develop a pragmatic approach and methodology for the inspection of safety culture in UK rail companies, which focuses on a limited number of indicators that are known to influence safety culture. These indicators are:

- Leadership
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Attitude Towards Blame

The Health and Safety Executive (HSE) commissioned Human Engineering Limited to develop a toolkit based upon the five indicators listed above, and to validate the effectiveness of the toolkit through a series of inspection visits at a range of UK rail companies. The intention was that the toolkit would be made available to Her Majesty’s Railway Inspectors to assist in the validation of the recommendation arising from the Cullen Inquiry (Reference 1).

In order to achieve this, Human Engineering undertook a work programme which incorporated the development of an inspection toolkit, the completion of a pilot inspection, and a series of inspections across rail organisations to validate the toolkit.

Defining the Requirements of the Toolkit
A literature review was undertaken to identify the main features of the five safety culture indicators and approaches to measure safety culture. The research undertaken in support of the literature review is reported in detail within Reference 2.

Interviews were also conducted with a range of subject matter experts, such as rail industry stakeholders and HMRI inspectors, to gain an understanding of industry best practice with regard to safety culture assessments and the usability requirements for the toolkit.

Based upon the background research and the outcomes of the consultations, it was decided that the components of the toolkit would consist of:

- A question set
- A pocket card
- An overview diagram
- A guide for HMRI Inspectors

Development of the Toolkit
The toolkit components were developed to reflect the findings of the background research. In order to develop an objective and consistent safety culture toolkit a pilot visit and a series of further visits were undertaken to validate the toolkit. The main lessons learned during these visits were used to refine and develop the final version of all the components of the toolkit.

The question set has been developed to be used during interviews and discussions with employees from all organisational levels regarding the five indicators of safety culture. The interviews have been structured around six scenarios which anchor the questions to realistic events or systems. The
responses from the interviews are to be used to compare actual performance against assessment
criteria which are evaluated using evidence points that are indicative of either satisfactory or
unsatisfactory practice.

During the pilot and validation visits a few issues were identified with regard to the technical content
and A4 format of the question set. It was identified that the assessment criteria, evidence points, and
questions needed expanding and refining, and the format of the tool needed to be more practical for
the inspector to be able to use it effectively. Therefore, appropriate modifications were made.

After a series of refinements and re-testing, the final question set consists of an A5 sized spiral bound
booklet. This is much easier to use than the original A4 sized version and provides a simple and
straightforward approach to interviewing.

A pocket card and overview diagram were also developed to support the question set. These provide
the inspector with additional options he/she can use when conducting the inspection, according to
their personal preference. As a result of the visits there were minimal changes made to the structure
of the pocket card and the overview diagram.

The inspectors’ guide is a handbook for HMRI inspectors and is intended to provide interpretative
guidance on how to use the safety culture inspection toolkit, considering all stages of the inspection
process including planning, assessing and reporting.

The final versions of the different components of the toolkit have been presented within the following
annexes:

- Annex A- Question Set
- Annex B- Pocket Card
- Annex C- Overview Diagram
- Annex D- Inspectors’ Guide

Summary of Findings for the Validation Visits
In order to validate the toolkit a pilot visit and six further visits at a range of railway organisations were
undertaken. The toolkit allowed for an analysis of the companies visited to be undertaken. The main
strengths and key issues in relation to the 5 indicators have been outlined in this report and are
discussed in detail in Reference 5. The findings of the visits are confidential, therefore any identifying
information (i.e. company names) has not been revealed in this document.

Conclusions and Recommendations
The safety culture inspection toolkit provides a flexible approach to measuring objectively the
effectiveness of a rail organisation’s management system in promoting a positive safety culture. The
different components of the toolkit provide the inspectors with a variety of options with which to
conduct their inspections. The toolkit components also provide inspectors with the flexibility to use
whichever option suits their personal inspection styles.

The flexibility in the design of the toolkit allows the inspector to measure all five safety culture
indicators. However, the toolkit also provides the flexibility to concentrate on one particular indicator
of safety culture, if required. For example, if the inspector wanted to investigate specifically the extent
to which employees are involved in decision making, safety planning, and providing ideas for
improvement, then the toolkit allows for this. The presentation of the assessment criteria and
evidence points in the question set and pocket card provide insight into the type of evidence that
should be present within the organisation.

Recommendations
The inspectors’ guide provides a comprehensive account of how to plan, assess and report the safety
culture inspection using the toolkit. It is recommended that the guide be used as a training manual to
accompany a formal training course. A training course will allow all HMRI inspectors to gain an in-
depth understanding of the background to the tool, how to use it and provide the opportunity for
instant clarification.
It is recommended that the effectiveness of the toolkit and its approach be evaluated once it has been fully integrated by HMRI inspectors. This will allow any issues and concerns about its usability that may be apparent at a latter stage, to be addressed and resolved.

It should be appreciated that the five indicators used to develop the toolkit are not conclusive, and should be reviewed for incorporation within the toolkit in the future.
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1. INTRODUCTION

1.1 Background

1.1.1 Her Majesty’s Railway Inspectorate (HMRI) has an ongoing programme of work to validate the implementation of recommendations arising from public inquiries concerning rail incidents. One such recommendation, which originated from Lord Cullen’s inquiry into the incident at Ladbroke Grove (Reference 1) concerned the development of an improved safety culture within rail organisations. While other safety-critical industries have developed safety culture tools and models, no suitable solution existed that the HMRI could use to undertake validation inspections of safety culture within rail organisations.

1.1.2 The conclusions drawn from the Cullen Inquiry emphasised the significance of a number of aspects of safety management and safety culture. Amongst those identified were safety leadership, communications, continuous learning, “blame culture”, staff motivation, training and competency, and interdependency. Existing research also highlighted a number of key indicators of positive safety culture that matched well with the conclusions drawn by Lord Cullen. The HMRI identified five indicators as the basis for validation inspections on safety culture. These indicators included:

- Leadership.
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Attitude Towards Blame

1.1.3 The Health and Safety Executive (HSE) commissioned Human Engineering Limited to develop and validate a toolkit for use by Her Majesty’s Railway Inspectors, to assist in the validation of the safety culture recommendations. The aim was for the development of a pragmatic approach that focuses on the five indicators listed in paragraph 1.1.2, to capture evidence of company safety culture practice.

1.2 Requirements

1.2.1 The work programme sought to satisfy a number of requirements. These included:

- **Focus**: whilst there are other facets of safety culture the approach should focus on five key indicators; leadership, two-way communication, employee involvement, learning culture and attitude towards blame.

- **Clarity and Ease of Use**: the approach should be easy to use and interpret, as well as being free of technical jargon.

- **Comprehensible**: it should be understandable and interpretable by an individual with experience of the rail industry, though with little direct experience of safety culture.

- **Application**: the approach should be applicable to assess the safety culture in all rail organisations that are involved in safety critical work.

- **Reliable**: different assessors, given the same information, should be expected to make more or less the same assessment of an organisation.

- **Evidence Based**: criteria that are to be assessed should be traceable to credible sources including empirical evidence, legislation, standards and other guidance.

- **Good Practice**: the approach should be based on what is considered to be good practice, or what is reasonable and practicable for rail organisations to comply
Aim and Objectives

1.3.1 The principle aim of this work programme was to develop a safety culture inspection toolkit that inspectors can use to undertake inspections of safety culture within UK rail companies.

Objectives

1.3.2 The main objectives of this work programme were to ensure that the:

- Toolkit focuses on the objective and psychological aspects of safety culture and incorporates a methodology that, as far as practicable, captures what happens in the company, (a ‘reality check’) rather than focusing on the perceptions of staff.
- Toolkit measures what it is intended to.
- Inspection approach can be applied appropriately to all rail organisations.
- Questions in the toolkit can be applied successfully at all organisational levels.
- Format and layout of the toolkit are appropriate for use by mobile inspectors.
- Findings of a visit can be used to produce a comprehensive account of an organisation in relation to the five indicators of safety culture.

1.3.3 In order to achieve the aim and objectives, the project incorporated:

- The development of an inspection toolkit.
- The completion of a pilot inspection.
- A series of inspections at a range of UK rail companies to validate the toolkit.

Structure of the Report

1.4.1 This report has been structured to highlight the key stages that took place during the development and validation of the HMRI safety culture inspection toolkit. These stages are reported below:

Section 2: Defining the Requirements

1.4.2 This reports on the key sources used to develop the initial version of the toolkit and highlights the scope for the components of the toolkit.

Section 3: Development of the Toolkit

1.4.3 The section outlines the underlying features that are consistent throughout all the different components of the toolkit.

Sections 4, 5, 6, and 7: The Components of the Toolkit

1.4.4 Each section summarises the stages that were undertaken to develop and validate each of the toolkit components, namely the question set, the pocket card, the overview diagram, and the inspectors’ guide. This details specifically how the initial version of each component was developed, the key lessons learned during the pilot and validation visits and the subsequent rationale behind the refinements made to the components.

Section 8: Summary of the Development of the Toolkit

1.4.5 This section provides a brief summary of how the toolkit components were developed, the principal changes made during the testing phases and outlines the final version of the toolkit.
Section 9: Summary of the Findings for the Validation Visits

1.4.6 This section summaries the main strengths and issues in relation to the five indicators of safety culture that were identified during the pilot inspection and six further validation visits.

Section 10: Conclusions and Recommendations

1.4.7 This documents the main outcomes of the stages to develop and validate the toolkit, and also highlights any recommendations that should be considered.
2. DEFINING THE REQUIREMENTS

2.1 Overview

2.1.1 This main aim of this section of the report is to outline:

• The background research undertaken to develop the toolkit.
• The main components of the toolkit.

2.2 Background Research

2.2.1 As part of the development of the HMRI safety culture inspection toolkit, a number of sources were used to conduct the initial background research. These sources have been summarised below.

**Literature Review**

2.2.2 A literature review was undertaken to identify the main features of safety culture within the academic and applied literature, focusing on cross-industry research carried out from 1986 onwards. This included a review of:

• Theoretical definitions of safety culture.
• The characteristics or indicators of a positive and negative safety culture in relation to the five safety culture indicators specified by the HSE, namely: leadership; two-way communication; employee involvement; learning culture, and the attitude towards blame.
• The safety culture/climate assessment tools that have been used in a variety of other safety-critical industries.

2.2.3 This review has provided sound guidance for the development of the HMRI safety culture inspection toolkit. The literature review is reported in detail in Reference 2. For each indicator, guidance has been taken from the research and used to develop the toolkit so that it can be used to identify the appropriate evidence that will indicate good or poor safety culture practice.

**Consultation With Rail Stakeholders**

2.2.4 In order to develop an objective and tailored safety culture inspection toolkit, interviews were conducted with a range of subject matter experts. These included meetings with rail industry stakeholders and HMRI Inspectors.

2.2.5 The main aims of these meetings were to:

• Share experience of addressing safety culture and safety behaviour within the rail industry.
• Identify industry best practice and challenges.
• Identify the strengths and limitations of existing tools and methodologies.
• Identify user requirements for those conducting the inspections and those responding to the findings of inspections.

2.2.6 The output from these interviews were collated and have been integrated within the design and structure of the HMRI safety culture inspection toolkit.
2.3 Identification of The Toolkit Components

2.3.1 The scope of the work programme indicated that the toolkit components should, as a minimum, include a question set and an inspectors’ guide.

2.3.2 Based on the background research, and specifically the feedback obtained from HMRI Inspectors, it was decided that the toolkit should consist of:

- A question set.
- A pocket card.
- An overview diagram.
- A guide for HMRI Inspectors.

2.3.3 The overview diagram and pocket card would provide inspectors with alternative formats to the question set. Although the question set, pocket card and overview diagram would contain the same information; the different formats would allow the inspectors the freedom to conduct their inspections using the options that suit their personal preferences.

2.3.4 The next section describes the key characteristics of the toolkit; sections 4, 5, 6 and 7 provide specific detail concerning the development of each component.
3. DEVELOPMENT OF THE TOOLKIT

3.1 Requirements of the Toolkit

3.1.1 The HMRI required a tool that is suitable for use within the different functional components of the UK rail industry.

Applicability to a Variety of Rail Organisations

3.1.2 The toolkit has therefore been designed to measure the effectiveness of safety culture within a broad range of UK railway organisations including, Train Operating Companies, Freight Operating Companies, Infrastructure Maintenance Companies, and Train Maintenance Companies.

Health and Safety Management Framework

3.1.3 The HSE Model for Successful Health and Safety Management (Reference 3), also known as POPMAR (which refers to the key stages of the system: Policy, Organisation, Planning, Monitoring, Audit, and Review) and the Health and Safety at Work Regulations (Reference 4) are complementary. The POPMAR model provides best practice guidance on health and safety management; whereas the Health and Safety at Work Regulations refer to the regulations that a company should adhere to in relation to health and safety management. As mentioned above these two approaches are complimentary, and have thus been used as the basis for a suitable health and safety management framework that adheres to best practice guidance and regulations against which the toolkit could be developed.

3.1.4 The health and safety management framework outlines the steps that should be taken to ensure that there are effective arrangements in place to manage health and safety. The key stages of the framework and a brief definition of each of the stages are presented in Figure 1.

Figure 1- Health and Safety Management Framework

3.1.5 The framework has been incorporated into the tool to ensure that best practice and regulatory principles of effective safety management are being addressed in the assessment approach. This is discussed in greater detail in sections 4, 5, 6 and 7 which describe the development of the toolkit components.

Vertical Slice Approach

3.1.6 The toolkit has been designed to verify what management think is happening, is actually happening at all organisational levels. The approach should be suitable for one-to-one interviews or adhoc discussions to take place with employees to collect data regarding safety related behaviours, processes and attitudes. The assessment should include and
compare the responses of employees through a ‘vertical slice’ of the organisation, i.e. from a variety of organisational layers. The vertical slice should segment the organisation at all levels from the top to the bottom.

3.2 Toolkit Features

3.2.1 The different components of the toolkit include a number of consistent features. These features form the underlying characteristics of the toolkit and have been used to provide an objective method to assess safety culture within a range of railway organisations.

3.2.2 The consistent features of the toolkit consist of:

- Colour coding to represent the five indicators.
- Assessment criteria.
- Scenarios.

3.2.3 These features have been discussed in detail below.

**Colour Coding to Represent the Five Indicators**

3.2.4 A colour scheme has been utilised to bring clarity to the toolkit. The five safety culture indicators are colour coded. This theme runs throughout the question set, pocket card, overview diagram, and the inspectors’ guide. Figure 2 illustrates the colours used throughout the toolkit to depict the five indicators.

3.2.5 Icons have also been used to represent each indicator, should it not be possible to print the toolkit in colour.

![Figure 2- Five Safety Culture Indicators Colour Coding Scheme](image)

**Assessment Criteria**

3.2.6 In order to measure the five safety culture indicators, the background research identified a number of sub components of each safety culture indicator which can be used to assess each indicator. The assessment criteria provide more information about how the five safety culture indicators should be evaluated, and what aspects to focus on during interviews.

3.2.7 Selection of the assessment criteria was based on factors such as whether they:

- Could be measured objectively in an inspection setting.
- Were applicable across the rail industry.
- Related to the Cullen (HSC, 2001) recommendations.
• Had been validated by previous research.

**Scenario Based Approach**

3.2.8 The scenarios were selected through consultation with HMRI inspectors and from evidence derived from the literature review. Factors that were used as the basis for selection included:

- The applicability of the scenario to different types of rail organisations.
- The suitability of the scenario for discussion with personnel from different areas within the organisation, and from all levels within a vertical slice of the organisation.
- The opportunities within the scenarios to provide the means for eliciting sufficient information concerning each of the assessment criterion.
- The appropriateness of the scenario to the interviewee.

3.3 **Validation of the Toolkit**

3.3.1 In order to validate the toolkit components, a pilot test and six validation visits were conducted at a range of rail organisations including train operating companies, freight operating companies, train maintenance companies, and a company responsible for infrastructure management. During each visit, the usability of the toolkit was tested and an assessment of the organisation’s safety culture was undertaken. After each visit, any refinements required to the toolkit components were made and then the toolkit was re-tested during the next visit.

3.3.2 The findings from each inspection have been documented within a separate report (Reference 5). The specific issues identified with the toolkit components are detailed in the next section which has been organised according to the four different components of the toolkit, namely, the question set, the pocket card, the overview diagram, and the inspectors’ guide. The sections for the question set, pocket card and overview diagram describe:

- How each component was developed initially.
- The refinements made following the pilot and during the series of validation visits.
- The final version of the toolkit component.
4. **THE QUESTION SET**

4.1 **Initial Development**

4.1.1 The aim of the question set is to provide a structured set of questions that can be used as the basis for interviews with staff at all levels within a rail organisation to elicit information regarding the systems, procedures and attitudes their organisation has towards safety.

4.1.2 The findings derived from the background research and consultation with rail stakeholders were used to develop the specific technical content of the question set, namely:

- Assessment Criteria.
- Evidence Points.
- Scenario Based Approach.
- Scenario Overview.
- Documentation Required.
- Questions.
- Format of the Question Set.

4.1.3 These features have also been used to develop the pocket card and the overview diagram and are discussed below.

**Assessment Criteria**

4.1.4 The initial version of the question set incorporated 11 assessment criteria which are presented within Figure 3.

![Figure 3- Safety Culture Indicators and Initial Assessment Criteria](image)
4.1.5 Each scenario can be assessed against two or three assessment criteria. The assessment criteria are colour coded to show how they link to the five safety culture indicators.

4.1.6 An example of what each assessment criteria aims to assess is provided below:

- **Performance vs. safety priority** - Safety should always be prioritised as more important than operational performance.

- **Safety management leadership** - All management should be committed to safety and should demonstrate this by conducting regular safety tours in all operational areas. Safety tours should provide the opportunity for all staff to discuss safety issues with management.

- **Promotion and awareness of safety culture** - All personnel should be aware of and understand safety goals, targets and issues. There should also be visible efforts by senior management to communicate that they are committed to developing a positive safety culture.

- **Safety concern reporting** - There should be clear and easy to follow procedures to report safety concerns. The reporting system or process should be accessible to all.

- **Discussion and awareness of safety issues** - There should be multiple channels for communication about safety.

- **Safety concern investigation** - The organisation should take specific steps to monitor known problems, identify new ones, detect trends over time and develop effective preventative measures.

- **Incident investigation** - Incident investigation procedures should include root cause analysis, ensure that lessons are learnt and that improvement actions are introduced throughout the organisation.

- **Employee involvement in safety decision making** - All personnel should be involved in any changes, new initiatives etc. that may affect their job roles.

- **Individual ownership of safety responsibilities** – An Individual’s safety responsibilities should be clearly defined within personal job descriptions.

- **Awareness and adherence to personal accountabilities** - Personnel should be aware of, understand and adhere to personal accountabilities.

- **Presence of a just culture** - Retribution and blame should not be seen as the purpose of investigations when things go wrong. Investigation procedures should clearly distinguish between different degrees of culpability (e.g. blameless, system-induced or negligence induced errors).

**Evidence Points**

4.1.7 Features that can be used to evaluate the performance of the company against each of the assessment criterion were originally termed “performance indicators” but then re-named “evidence points” as it was thought this reflected their function better. Where possible these are grounded in evidence from the literature, standards, guidelines or best practice identified in the background research. Evidence points are categorised as being indicative of either satisfactory or unsatisfactory performance and grouped accordingly. The inspector should use these as a guide to assess whether the answer given is representative of satisfactory or unsatisfactory practice.

4.1.8 Satisfactory evidence points outline what is considered to be good practice, or reasonably practicable for compliance within the rail industry. The organisation should be able to fulfil these criteria in terms of financial and personnel resources, legal requirements, and time allocation.
4.1.9 Unsatisfactory evidence points outline aspects of company practice that would suggest the organisation is not complying with good practice, or what is reasonably practicable to expect on each assessment criterion.

**Scenario Based Approach**

4.1.10 The toolkit was initially organised into six sections which corresponded to scenarios. They were designed to provide a context for eliciting the required information regarding the company's safety culture.

4.1.11 The initial scenarios selected for inclusion in the question set are presented in Figure 4.

![Figure 4- Initial Scenarios](image)

**Figure 4- Initial Scenarios**

4.1.12 Detail was provided within the question set about each scenario. A brief description of the scenario and the information that the scenario should reveal from discussions with each of the operational levels (e.g. senior and middle management and frontline safety critical staff) was also outlined. In addition, examples of specific scenarios relating to the different types of rail companies were provided to guide the inspector in tailoring the questions to specific contexts with which the interviewee may be more familiar. See Appendix A for an example of the scenario approach used in the initial version of the question set.

**Required Documentation**

4.1.13 For each scenario, it was identified that a selection of documents may be required to verify that the reported evidence was a true reflection of actual practice. Alongside each scenario overview, a list of documentation was provided for the inspector to use as a reference source.

**Questions**

4.1.14 For each of the six scenarios a series of questions was developed to investigate the extent to which the company operates within a satisfactory safety culture.

4.1.15 The questions were derived:

- To explore the safety issues associated with the scenario.
- To provide an opportunity to identify evidence in support of the assessment criteria.
- To reflect the principles described within the Health and Safety Management Framework (detailed within section 3.1.4).
The questions included in the question set consisted of both open-ended and closed question styles, for example:

- Open-ended question- “How does/did management try and make themselves approachable?”
- Closed question- “Was the concern investigated thoroughly and remedial actions developed and implemented if required?”

**Format of the Question Set**

The initial version of the question set was based on an A4 sized landscape view, and was double sided, with a spiral binding at the bottom/top edge of the page. When turning the pages two pages were always visible:

- **Page 1: Scenario** - This highlighted the aim of the scenario, the assessment criteria being measured and the specific safety culture indicators being assessed. In addition, specific scenarios relating to the different types of rail companies were provided.
- **Page 2: Questions** - The question page was more detailed, as this provided specific questions in a flow chart style that the inspector should use to identify what happens in relation to the scenario highlighted on page 1. This page also provided the inspector with evidence points in relation to the assessment criteria being measured. These evidence points were to be used as a guide to assess the company’s performance.

An example of the two-page format of this initial version of the question set has been presented in Appendix A.

**Evolution of the Question Set**

**Edits Made to the Wording**

During the pilot and validation phases of the toolkit it was identified that some of the questions, assessment criteria, and evidence points could be interpreted as being ambiguous. As the inspector may conduct the inspection under limited time constraints, the wording of these features needs to be self-explanatory. It was decided that each question, assessment criterion, and evidence point should be simple to understand, and therefore appropriate refinements were made to the wording.

**Expansion of the Scenario Approach and Assessment Criteria**

The pilot inspection highlighted that it would be beneficial to expand the original assessment criteria. The scenarios made it possible for the measurement of further assessment criteria. Additional assessment criteria were therefore developed. A list of the final assessment criteria and the scenarios to which they are relevant are displayed in Figure 5.
4.2.3 Figure 5 also demonstrates the relationship between the safety culture indicators and the assessment criteria, using the colour-coding theme that has been adopted throughout the toolkit.

4.2.4 A brief example of what each refined assessment criteria aims to assess is provided below:

- **Management Visibility** - All management should be committed to safety and should demonstrate this by conducting regular safety tours in all operational areas. Safety tours should provide the opportunity for all staff to discuss safety issues with management.

- **Employee Involvement in Safety Discussions** – Safety management methods should serve to provide an opportunity to all staff for open discussion of safety, to identify risks and mitigate against these risks.

- **Safety Culture/Climate Monitoring** - Management should monitor and review employee thoughts, opinions and feelings concerning the effectiveness of safety management, for example by conducting safety climate/culture surveys.

- **Internal Safety Concern Reporting System** - There should be clear and easy to follow procedures to report safety concerns. The reporting system or process should be accessible to all.

- **Approachable Management** - There should be opportunities for face-to-face discussion with management, and management should take responsibility for dealing with safety concerns once they have been identified.
• **Culture of Trust** - Operational staff regularly report concerns when it is appropriate to do so, and reports should be made that concern a range of issues.

• **Safety Concern Investigation and Mitigation Procedure** - The organisation should take specific steps to monitor known problems, identify new ones, detect trends over time and develop effective preventative measures.

• **Safety Concerns Log** – All concerns reported should be logged for reference, and efforts should be made by management to analyse repeat or similar concerns.

• **Employee Participation in the Change Process** - All personnel should be involved in any changes or new initiatives etc. that may affect their job roles.

• **Employee Training about the Change** – If required, the relevant individuals should be trained to the required level of competence before the change takes place.

• **Employee Motivation** – Employees should report that they feel involved and included in the change process.

• **Active Response to Feedback** – There should be strategies in place to communicate the outcomes of the consultation about the proposed change.

• **Safety Information Communication System** - Safety information (relating to both personal safety and major accident avoidance) should be communicated at the start of the shift or whenever there is a handover of duties.

• **Comprehension of Safety Information** – Staff should have all the information necessary to conduct their shift safely.

• **Employee Awareness of Accountabilities** - Personnel should be aware of, understand and adhere to personal accountabilities.

• **Safety Prioritised Behaviour**- There should be no pressure to maintain performance standards, potentially at the cost of safety.

• **Performance vs. Safety Management Priority** – There should be evidence that management stipulate clearly and repeatedly to operational staff that safety is the first priority.

• **Safety Accountability** – Management should take responsibility for the consequences when they prioritise performance over safety.

• **Incident Investigation System** - Incident investigation procedures should include root cause analysis and, ensure that lessons are learnt. Improvement actions should be introduced throughout the organisation.

• **Fault Allocation Process** – Care should be taken not to apportion blame before the root cause analysis is complete. The purpose of the situation should be to learn from the incident, rather than apportion blame.

• **Disciplinary Process** – Clear procedures for deciding upon the relevant disciplinary actions should be in place.

• **Feedback Systems** – There should be strategies in place for communicating the outcome of investigations, e.g. via briefings, newsletters etc.

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**Expansion of the Evidence Points**

4.2.5 A requirement for additional evidence points was also identified. Further evidence points were therefore identified from the background research and incorporated within the question set.

4.2.6 An example of some of the expanded evidence points used for the Safety Concern scenario are detailed in Figure 6.
To improve the flexibility of the questions it was decided that it was more appropriate to provide questions that are worded simply as memory prompts for inspectors. Inspectors will be able to use the prompts to word questions appropriately according to the particular person or role being interviewed.

Amendments to the Format and Layout of the Question Set

The A4 layout proved to be too cumbersome during the inspection visits. The size of the toolkit needed to be smaller, especially when conducting interviews in operational settings (i.e. in workshops). A smaller format would make it easier to hold when interviewing.

An inspector’s workload during an interview can be quite challenging. He/she will have limited time to read the question; ask the question; listen to the response; write the response down (if conducting the interview alone); interpret the response, and think about what he/she needs to ask next. Due to such time constraints, it may be difficult for the inspector to take full advantage of the information about scenarios and documentation that may be required as evidence. It was therefore decided that it would be more useful to include only the key information needed to conduct the visit, such as the questions and evidence points. Whilst the other information is useful it would be more suitable to present this information within the inspectors’ guide, for reference.

A brief one-page instructions page provided at the beginning of the question set was also included to remind inspectors of how to use the question set.

A one-page summary of the five indicators was also added to provide a reference point to which inspectors could refer to when explaining the purpose of the safety culture assessment to interviewees.

A colour scheme runs throughout the toolkit which corresponds to the five safety culture indicators. These colours have also been used to explain which safety culture indicator is applicable to each assessment criteria. The inclusion of a small key to the five safety culture indicators.
culture indicators alongside the assessment criteria assists the inspector in understanding to which indicator each assessment criterion relates.

4.2.14 Presenting the questions in a flow diagram structure proved to be very limiting. It was not easy to follow the flow chart during an interview. It was therefore decided that it would be simpler to present the questions as bullet points so that the inspectors can ask the question in any order.

4.2.15 It was identified that the categorisation of questions under the headings of the health and safety management framework did not add any value during an interview. Understanding that the questions have been structured according to the framework is useful, but this is an underlying theme. Therefore, it was decided that the relationship of this framework to the questions should be included in the inspectors’ guide for reference.

4.3 Final Version of The Question Set

4.3.1 Based upon the issues outlined above, the question set was edited to enhance its usability. The modifications made were tested throughout the remaining validation visits and no significant further modification requirements were identified.

4.3.2 The final version of the question set is presented in A5, portrait layout and printed double sided with a spiral bound at the left hand spine. The question set is laminated to allow for outdoor usage and to make it more durable. The final version of the question set is presented in Annex A.
5. **THE POCKET CARD**

5.1 **Initial Development**

5.1.1 The purpose of the pocket card is to provide inspectors with a memory prompt for the features that can be used to measure safety culture. This card will allow inspectors to glance quickly at the high level features of the scenarios, five indicators of safety culture, health and safety management framework and assessment criteria included within the question set. It is envisaged that this will be most useful in informal settings, for example when talking to staff during walkabouts in operational / frontline areas.

5.1.2 The pocket card has been designed with the intention that it should be suitable to fit inside a jacket pocket. The card is double sided, laminated and presented in colour to reflect the colour theme that runs throughout the question set. The two sides of the initial version of the card illustrated the following:

- Side A depicted the six scenarios and their associated assessment criteria.
- Side B depicted the five safety culture indicators and the health and safety management framework.

5.1.3 The initial version of the pocket card is presented in Appendix B.

5.2 **Evolution to the Final Version of the Pocket Card**

5.2.1 During the pilot and validation visits it was identified that the design of the pocket card was sufficient for the visits that were undertaken. However, the technical content has been refined to reflect the revisions made to the content of the question set discussed in the previous section, such as the expansion of the assessment criteria.

5.2.2 The indicators and health and safety management framework did not provide any obvious assistance during the inspection process. Therefore, side B of the pocket card was refined to display the assessment criteria according to each of the five indicators, i.e. all the criteria that measure leadership have been listed together. It was perceived that the refined version would provide inspectors with a reference source that would help collate the findings from the interviews against the indicators being assessed. To see the final versions of the pocket card, please refer to Annex B.
6. **THE OVERVIEW DIAGRAM**

6.1 **Initial Development**

6.1.1 The overview diagram summarises the principles of best practice in relation to each of the five indicators. This diagram provides more detailed information compared to the pocket card, and provides the inspectors with an alternative option for use during inspections.

6.1.2 The diagram is presented on an A3 page and is colour coded to be consistent with the other components of the toolkit. The diagram is structured as a matrix to demonstrate the relationship between the following underlying features of the toolkit:

- The health and safety management framework.
- The six scenarios.
- The assessment criteria for each of the six scenarios.
- A brief description of the type of evidence that will be required to satisfy the assessment criteria.

6.2 **Evolution to the Final Version of the Overview Diagram**

6.2.1 The design of the overview diagram was perceived to be sufficient for the visits that were undertaken. Minor amendments have been made following the pilot and validation visits to ensure that the technical content reflects that of the final question set. To see the final version of the overview diagram, please refer to Annex C.
7. **THE INSPECTORS’ GUIDE**

7.1.1 The inspectors’ guide is a handbook to guide HMRI inspectors on how to prepare for safety culture inspections and how to use the toolkit. It is intended to provide guidance on all stages of the inspection process including planning, assessing and reporting. It gives a detailed account of the inspection methodology and techniques that should be used to achieve a valid and reliable assessment.

7.1.2 The inspectors’ guide has been developed in parallel with the other toolkit components.

7.1.3 The guide is comprehensive and easy to use and includes the following features:

- The guide specifically outlines the main aims and objectives of the toolkit.
- The underlying features of the toolkit are also outlined within the guide, such as the vertical slice approach that should be used when interviewing; the applicability of the toolkit to a variety of rail organisations, and an explanation of the underlying health and safety management framework that has been used to structure the questions.
- Information about the specific content of the different components of the toolkit has been provided. For example, detailed information in relation to the six scenarios, to provide an understanding of how context can help to facilitate the interview.
- Evidence points have been included that correspond to the evidence points in the question set, however expanded information has been provided to help the inspector to determine whether the responses made during an interview are consistent with a positive or negative safety culture.
- Instructions on when and how to use the different components are included. For example, the applicability of the pocket card when conducting site visits.
- A pro forma recording sheet has also been provided. This should allow inspectors to record during an interview the main strengths and weaknesses related to each safety culture indicator.
- A pro forma letter and assessment plan that can be used by the inspector to confirm arrangements for the inspection, and outline the details of the assessment with the company being inspected.
- A template to formally report the findings of the inspection has also been developed. This will allow inspectors to report the main findings of the inspections in a structured and consistent format.
- A legislative framework has been outlined to provide a quick reference to the health and safety regulations to which rail companies should adhere.

7.1.4 The final version of the guide is available as an A4 spiral bound booklet and is presented in Annex D.
8. SUMMARY OF THE DEVELOPMENT OF THE TOOLKIT

8.1.1 The toolkit provides inspectors with a range of options to use when conducting safety culture inspections, namely: a question set, a pocket card, and an overview diagram.

8.1.2 In summary, the features of the question set include:

- Six scenarios to provide a context against which interviews could be structured.
- A series of questions that can be used to identify the extent to which the company is satisfying the evidence points associated with the specific assessment criteria relevant to each of the five indicators of safety culture.
- Positive and negative evidence points that are to be used to evaluate the company against each of the assessment criteria.

8.1.3 The pocket card outlines the five indicators, assessment criteria, and the scenarios. These are presented on two sides of the card:

- Side A- Assessment criteria organised according to scenarios.
- Side B- Assessment criteria organised according to the five safety culture indicators.

8.1.4 The overview diagram presents the following information in a matrix format:

- The five safety culture indicators.
- The six scenarios.
- The health and safety management framework.
- A brief description of the type of evidence that will be required to satisfy the assessment criteria.

8.1.5 An inspectors’ guide has also been developed which describes the aims and objectives of the toolkit and provides an outline of how to conduct the inspection in a consistent and objective manner.

8.1.6 The toolkit was tested during a pilot visit and six further visits to a range of rail organisations. A few issues related to the technical content and format of the question set were identified. The refinements to the question set consisted of:

- Expanding the assessment criteria and evidence points.
- Refining the questions to ensure that they are not ambiguous in any way.
- Reducing the size of the question set format.
- Presenting the questions as bullet points.

8.1.7 Minimal changes were made to the structure of the pocket card and the overview diagram. Those refinements that were made were undertaken to reflect the modifications made to the specific technical content of the question set. The final versions of the different components of the toolkit have been presented within the following annexes:

- Annex A- Question Set
- Annex B- Pocket Card
- Annex C- Overview Diagram
- Annex D- Inspectors’ Guide
9. **SUMMARY OF FINDINGS FOR THE VALIDATION VISITS**

9.1 **Overview**

9.1.1 In order to validate the toolkit a pilot inspection and six further inspection visits were conducted at a range of railway organisations, including train operating companies, freight operating companies, a maintenance company, and an organisation responsible for infrastructure management. This section of the report outlines the strengths and weaknesses in safety culture that were identified using the toolkit at the organisations visited. The findings of the visits are confidential, and therefore the summaries are anonymous.

9.2 **Company A**

*Summary of the Main Strengths*

9.2.1 The assessment identified a generally positive and encouraging culture of safety within Company A. Management are clearly aware of the need for effective safety management and have already implemented many successful initiatives which support and maintain the existence of a positive safety culture, such as the introduction of safety days and an open-door policy. There is also a strong and consistent emphasis on safety.

9.2.2 The series of steps taken to communicate effectively the safety message throughout the organisation are aspects that can be particularly commended. Staff were generally positive and confident about their safety roles, had a high level of awareness of safety, and expressed good safety reporting behaviour.

*Specific Issues*

**Safety Leadership**

- **Senior Executive Visibility in Operational Areas** - Whilst the company have a structured system of conducting management safety tours, concerns were raised that senior executives do not take part in these tours at a sufficient frequency, and are subsequently at risk of generating a communicative distance between themselves and operational areas.

- **Safety Climate Surveys** – Minimal efforts were made to make operational staff fully aware of the outcome and actions taken in response to the safety climate surveys that had been undertaken.

**Two-Way Communications**

- **Safety Concern Information Central Database** – The company may need to ensure that there is a central mechanism, to enable the collation and transfer of safety concern information that is reported to management.

**Employee Involvement**

- **Consultation with Employees at all Stages of the Change Programme** - Whilst affected parties were consulted regarding proposed changes, the company would also benefit from the involvement of affected employees and subject matter experts at every step of the change management programme, including design, development, evaluation and trials.

- **Safety Validation Process** – Concerns were raised that the safety validation process is not always complete prior to the change actually being implemented.

**Evidence of a Learning Organisation**

- **Objective Selection of Issues for Investigation** – It was identified that safety issues are selected for analysis based on the investigators personal experience of what is priority, rather than any other measure.
• **Consistent Information about Mitigation Measures** - Safety information that is disseminated to staff outlines the safety issues that have recently been identified, however no efforts are made to explain how to reduce the risk of the issues occurring again.

**Attitude Towards Blame**

• **Employee Wellbeing During Incident Investigation** – It was identified that the incident investigation procedure is putting the employee through psychological distress and embarrassment as employees feel that they are perceived as “guilty until proven innocent”.

### 9.3 Company B

**Summary of the Main Strengths**

9.3.1 Positive efforts are made by senior management to conduct safety tours at a range of locations and functions. Feedback about the safety tours is forwarded to the locations visited. It was confirmed by frontline, middle and senior management that safety is always paramount and that staff adhere to rule books and working procedures.

9.3.2 Management have made visible attempts to develop an informative organisation, such as introducing a safety newsletter, conducting safety briefings every 13 weeks, and displaying safety information in notice cases and safety boards. Senior management also demonstrated that they are committed to safety by conducting and attending safety meetings, such joint safety committee and safety management group meetings.

9.3.3 There was evidence to suggest that safety representatives and union representatives are involved in decision-making. Positive efforts were demonstrated for the involvement of driver team managers in the design of the cab for new rolling stock, prior to its introduction.

9.3.4 It was reported that accident statistics, trends, and excessive hours are monitored. The extent to which this takes place was not confirmed.

9.3.5 There are clear systems in place for investigating incidents. For example, a “SPAD form” and “SPAD Investigation Checklist” are used to identify why a SPAD has occurred. An “Incident and Welfare Post-Interview Questionnaire” and “Health and Welfare Post-interview Questionnaire” are also used to identify any precursors to the incident.

**Specific Issues**

**Safety Leadership**

• **Safety Vs. Performance Message** - It was reported that maintenance staff often jump down from platforms on to the track. This is not considered to be safe practice.

**Two-Way Communications**

• **Clarification of Briefings** - There was no evidence that the safety briefings provide the opportunity for two-way communications to take place between operational staff and management.

• **Cascaded Information** - Senior management confirmed that they do not believe that all information is disseminated down appropriately to all operational levels.

• **Verbal Safety Concern Communication System** - It was confirmed that safety concerns are usually reported verbally to direct line managers and are rarely written down.

• **Effective Feedback Mechanisms** - Frontline staff and senior management reported that feedback is not provided in a timely manner.

• **Open Reporting** - Management reported that there have been a few cases where safety concerns have been reported directly to CIRAS, rather than directly with...
the company. This may be an indication that staff are reluctant to raise issues to management.

Employee Involvement

- **Operator Involvement** - During a training programme, it was highlighted by operational staff that there were functions in the cab that were not appropriate. Involving the end user in the design and risk assessment of the cab on a proactive basis would have been a better approach to identifying any problems with the cab design.

Existence of a Learning Organisation

- **Learning from Others** - It was reported that there have been limited efforts made to learn from other train operating companies. Management expressed that each company has different risks, therefore there have been limited efforts to learn from other companies.

Attitude Towards Blame

- **Usage of the Refusal to Work System** - It was reported that a refusal to work procedure exists although this has only been used once in the last five years. The company has not investigated the reason why this system may not be used.
- **Three Strikes Out** - It was identified that there is strong perception that if a driver has three SPADs then they will lose their job. Although this is not a policy, it was confirmed by middle management that this is often normal practice within the organisation.
- **Guilty Until Proven Innocent** - It was reported that drivers are considered to be blameworthy if they have been involved in misconduct. If the incident was caused by human error then the driver is considered not to be blameworthy.

9.4 Company C

**Summary of the Main Strengths**

9.4.1 There are a number of best practice initiatives in place to promote two-way communications, for example frontline staff have a positive attitude towards communicating safety concerns to management, and a number of mediums are used to communicate safety information, such as briefings, notices, videos etc. A confidential reporting system also exists.

9.4.2 The interviews revealed a positive learning culture. For example, efforts are made to learn from other companies, incidents are logged in a database, and a tracking system exists to monitor recommendations from incidents.

9.4.3 There was also positive evidence of a “just” culture rather than a blame culture. It was identified that a good chain of care process is in operation, the incident investigation procedures consider a number of influencing factors, and staff reported that the disciplinary system is fair.

**Specific Issues**

**Safety Leadership**

- **Management’s Perception of Staffing Requirements** - Concern was raised with regard to the shortage of drivers. Whilst it is recognised that senior management have made concerted efforts to recruit trainee drivers, it was indicated by staff that there is an immediate requirement for qualified drivers to meet current workload demands.
- **Rolling Issues** - It was verified from documented evidence and verbal reports that there are numerous rolling issues that are recorded repeatedly.
Two-Way Communications

9.4.4 No issues related to two-way communications were identified at this company.

Employee Involvement

- **Involvement of Health and Safety Representatives**: There was some inconsistency highlighted about the lack of representation of health and safety representatives during safety meetings, joint safety committees, incident investigations.

- **Safety Validation Process**: Concerns are raised that the safety validation process is not always complete prior to the change actually being implemented.

Existence of a Learning Organisation

- **Appropriate and Timely Feedback about Incidents**: It was reported that feedback about reported incidents is usually communicated through the grapevine, on a need to know basis, or is sometimes communicated via briefings. Timely feedback is also not always provided.

Attitude Towards Blame

9.4.5 No issues related to attitude towards blame were identified at this company.

9.5 Company D

**Summary of the Main Strengths**

9.5.1 Company D has demonstrated positive efforts towards conducting regular safety audits (in which operational staff are actively involved), safety walkabouts, and prioritising safety over performance. Local committee meetings are also held to discuss safety matters.

9.5.2 Safety information is disseminated via an array of sources, such as notice boards, posters, weekly safety briefings, safety refreshers (to communicate any new learning points), special instructions, traction bulletins, and training programmes.

9.5.3 There is evidence to suggest that information is communicated clearly between shift teams using a handover sheet, and with the provision of an overlap in shift times for the handover to take place.

9.5.4 Senior management involve operational staff when conducting safety tours. Here safety issues are discussed and the actions to be undertaken are decided.

9.5.5 Clear efforts have been made to encourage a culture of learning, for example actions stated in National Incident Reports have been used, and statistics have been analysed from internal incidents and accidents for discussion at safety meetings.

9.5.6 Company D have tried to undertake many positive steps to establish a fair culture that is supportive and understanding to staff. It was reported that there are positive efforts to investigate the underlying cause(s) of incidents, rather than merely apportioning blame to the frontline operator.

**Specific Issues**

Safety Leadership

- **Consistent Approaches to Health and Safety Management**: It has been highlighted by senior management that health and safety practices differ across the various depots in the company.

Two-Way Communications

- **Safety Tours**: Safety tours are used as an opportunity to observe working practices, instead of using this opportunity to discuss safety issues with operational staff.
Verbal Communication Systems - It was reported that safety concerns are communicated verbally to safety representatives, and supervisors. A verbal communication process for communicating concerns is weak.

Reliable Communication System - It was noted that numerous issues have been reported about the unreliability of the radios that safety critical staff must use to communicate critical information to each other. It was reported that this issue has been raised to management on a number of occasions by a range of staff, however no action has been taken.

Employee Involvement

Clear Roles, Responsibilities and Lines of Communication - There is evidence to suggest that the introduction of a new staff grade has caused resistance and dissatisfaction amongst frontline staff and has left staff confused as to what they should do if they have a concern, and to whom they should report the concern.

Existence of a Learning Organisation

Feedback about Safety Concerns/Incidents - Staff indicated that they do not receive feedback about safety concerns that have been reported. It was reported that feedback about incident investigations is only provided to those concerned in the incident, although on most occasions this only happens if the member of staff asks to receive it.

Attitude Towards Blame

Assigning Blame - It was reported by frontline staff that the perception exists that if they report a concern, then they will be blamed for its occurrence. It was also reported that some middle management think that there is a perception from frontline staff that reporting may involve undergoing intense interviews with management.

9.6 Company E

Summary of the Main Strengths

9.6.1 Senior and middle management are required to conduct safety tours as part of their performance objectives.

9.6.2 A cascade based briefing system is used throughout the organisation to communicate safety information from senior management, such as incident investigation outputs, safety meeting outputs, safety responsibilities, changes etc. It was also reported that management often send newsletters to employees’ home addresses. Late notice cases are also used to communicate any safety critical information that may be required regarding working practices.

9.6.3 Safety critical staff are provided with mobile phones to allow them to communicate with each other when out on site visits.

9.6.4 There is active involvement of health and safety representatives as well as union representatives when decisions are made that will affect operational staff. Operational staff reported that they are often invited to attend safety tours, and are invited to contribute to discussions regarding changes.

9.6.5 Personnel highlighted that a variety of methods are used to learn lessons from others, or from experiences internal to Company E, such as National Incidents Reports, management’s attendance at a variety of committees/meetings with other parties, and daily conference calls are held between depot managers to discuss any maintenance issues, safety issues etc.

9.6.6 A near-miss reporting system exists. Senior management stated that all accidents are reported formally and investigated by conducting a mock up.
Specific Issues

Safety Leadership

• Safety Priority in Relation to Shift Times - Drivers reported that they are often asked by management to work over the recommended 12 hour shift duration.

Two-Way Communications

• Reluctance to Report Safety Concerns - There is the perception by some staff that if they report a concern it will not be dealt with. No feedback is provided to staff regarding any action that is taken; therefore, there is reluctance to report concerns.

Employee Involvement

• Change Verification Process - It was reported by senior management that this process is not always completed prior to the change actually being implemented.

• The Role of Health and Safety Representatives - Health and safety representatives highlighted that their job role takes priority over their health and safety responsibilities, and they often find it difficult to get release from their work activities to assist in the investigation of incidents, or risk assessments.

Evidence of a Learning Organisation

9.6.7 No issues related to evidence of a learning organisation were identified at this company.

Attitude Towards Blame

• Blame Culture - Concern was raised regarding the tendency towards blaming the driver for an incident. The extent to which root cause analysis is undertaken could not be concluded.

• Fear of Reporting Safety Concerns - It was reported by all occupational levels that if they report a safety concern it is likely that disciplinary action will be taken.

9.7 Company F

Summary of the Main Strengths

9.7.1 One of the most impressive and consistent indicators of a positive safety culture is the strong emphasis from management upon the importance of safety.

9.7.2 Communication is generally good, with health and safety representatives used as the key mediators between frontline staff and management at all levels. Effective channels are in place that allow safety information to be disseminated to staff at all levels within the organisation. Safety related information is communicated to staff at all levels using a variety of sources, such as during the induction training, briefings, posters, and via a LED screen.

9.7.3 It was evident from discussions with employees that there is a positive relationship between frontline staff and union representatives. Monthly representative meetings are held, to which frontline employees are invited to provide an input. Opportunities also exist for frontline staff to voice their opinions concerning any decisions that are likely to affect them.

9.7.4 Management revealed that they try to encourage staff to fill in accident report forms, communicate safety concerns, report near misses, and the accident investigation system described to Human Engineering at the time of the visit appeared to be thorough. The use of disciplinary action against employees was perceived as being fair by most of those interviewed, and was reported by those interviewed to be applied generally within a “just” manner.
Specific Issues

Safety Leadership

• Senior Management Participation in Safety Tours - There was no evidence of any structured and scheduled visits conducted by senior management.

• Reactive Approach to Risk Management – Whilst risk assessments have been carried out for all new equipment, in some areas of the company risk assessments are carried out on a reactive rather than a proactive basis. There was no evidence of the implementation of an objective system that is used to decide whether a risk assessment is required.

• Formal Safety Management System - There is no formal health and safety management system within the company.

Two-Way Communications

• Frequent Communication to Senior Management - There seems to be no other formal method for informing senior management on a more regular basis about safety concerns apart from during quarterly committee meetings.

• Real-Time Communication System for Drivers - There are limited methods that drivers can use to communicate to the depot if they have any safety concerns whilst driving their route. The existing communication systems are limited because they do not allow drivers to report their concerns immediately. It was reported that company mobile phones are available but these are reserved for the drivers of the last shift at night.

• Verbal Communication Systems - The assessment identified that there is a strong culture to report safety concerns, or communicate safety issues verbally.

• Safety Boards - It was reported by frontline staff that they often suffer from “notice fatigue” which arises because there are too many posters to read.

Employee Involvement

• Employee Participation in the Change Process - It was reported that staff are not consulted about any major changes that are implemented to operational procedures. It was apparent that staff are only informed about these changes once they have been implemented.

Evidence of a Learning Organisation

• Comprehension of Posters/Notices – It was reported that there is frequently no justification provided about why changes to existing instructions, or new instructions, are implemented (e.g. changes to speed restrictions).

Attitude Towards Blame

• Health and Safety Responsibilities - Health and safety responsibilities are not defined specifically within staff job descriptions.

9.8 Company G

Summary of the Main Strengths

9.8.1 The general impression gained about Company G is that a positive and effective safety culture exists. In particular, commendable efforts were demonstrated in relation to two-way communication; for example, monthly briefings are conducted that provide the option for operational staff to feed information back to management. The organisation also appears to be keen to learn from incidents and defects reported both externally through the National Incident Reporting system, and internally through the defect databases. Evidence was acquired to highlight the involvement of employees in decisions that are likely to affect them. There was also no evidence to suggest that an unjust blame culture exists at the depot that was visited.
Specific Issues

Safety Leadership

- **Rolling Issues** - Although it was evident that safety management meetings take place, it was reported that a number of rolling issues are raised on repeated occasions.

- **Safe Access and Egress to Vehicles** - It was reported by middle management that safe provision for the access and egress to vehicles by cleaners is not provided.

- **Health and Safety Representatives for Cleaners** - Currently there are no health and safety representatives acting on behalf of the cleaning staff.

Two-Way Communications

- **Verbal Reporting of Safety Concerns** - It was reported that cleaning staff usually report their concerns verbally to management.

Employee Involvement

9.8.2 No issues related to the involvement of employees were identified at this company.

Existence of a Learning Organisation

9.8.3 No issues related to the existence of a learning organisation were identified at this company.

Attitude Towards Blame

9.8.4 No issues related to the organisation’s efforts to display a blame culture were identified at this company.
10. CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions

10.1.1 This work programme has provided the opportunity to develop a validated, objective and consistent toolkit that is suitable to assess the effectiveness of a rail organisation’s safety culture. The toolkit has been developed to ensure that:

- It is focused on the five indicators of safety culture specified in the scope of the work provided by the HSE.
- Clarity and ease of use have been considered.
- The toolkit is comprehensible.
- It is applicable to a range of rail organisations and organisational levels.
- It is reliable and evidence based, and is based on good practice guidance.

10.1.2 The HMRI Safety Culture Inspection Toolkit provides a flexible approach to conducting inspections. The different components of the toolkit provide the inspector with a variety of options that can be used during inspections to suit their personal inspection styles.

10.1.3 The flexibility in the design of the toolkit allows the inspector to measure all five safety culture indicators. However, the toolkit also provides the flexibility to concentrate on any one particular indicator of safety culture, if required. For example, if the inspector wanted to investigate specifically the extent to which employees are involved in decision making, safety planning, and providing ideas for improvement then the toolkit allows for this. The presentation of the assessment criteria and evidence points in the question set provides insight into the type of evidence that should be present within the organisations.

10.1.4 Based on the pilot and validation visits, it was possible to verify that the toolkit can be used within a range of rail organisations to identify the strengths and weaknesses of the companies visited to be identified in relation to the five indicators of safety culture. It is also possible to conclude that the toolkit can be used to interview staff at all organisational levels. A separate confidential report summarises the findings of the visits (Reference 5).

10.2 Recommendations

10.2.1 One of the components of the toolkit is the Inspectors’ Guide. This provides a comprehensive account of how to plan, assess and report the safety culture inspection using the toolkit. The guide has been developed to be self-explanatory. However to increase understanding of the whole approach it is recommended that the guide be used as a training manual to accompany a formal training course. A training course will allow all HMRI inspectors to gain an in-depth understanding of the background to the tool and how to use the toolkit. This will also allow inspectors to resolve any concerns that they may have with the toolkit.

10.2.2 The toolkit was used to conduct a number of visits to assess the state of an organisation’s safety culture, and also to test the toolkit’s usability. Human Factors consultants from Human Engineering Limited undertook these visits. It is recommended that the effectiveness of the toolkit and its approach be evaluated once it has been fully integrated within the HMRI, and after a reasonable period of time. This will allow any issues or concerns regarding its usability to be addressed and resolved.

10.2.3 The scope of this work programme was to develop a pragmatic approach and methodology for the inspection of safety culture which focuses on five indicators of safety culture. It should be appreciated that these five indicators are not conclusive and that there are other features of safety culture, which the toolkit may not be measuring but which should be reviewed for incorporation within the toolkit in the future.
11. REFERENCES


### D: Safety Consideration During Change Management

**Scenario:** A procedural or operational change project

<table>
<thead>
<tr>
<th>Key Issue</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Focusing on the characteristics</td>
<td></td>
</tr>
<tr>
<td>Employee Involvement in safety decision making</td>
<td>Are personnel at all levels involved in safety initiatives</td>
</tr>
<tr>
<td>Individual 'ownership' of safety responsibilities</td>
<td>Do all personnel have responsibilities for safety?</td>
</tr>
</tbody>
</table>

**Scenario Overview**

**AIM:**
The scenario focuses on asking the interviewee to talk through details about a major change project that has been realised, or is being realised, within the organisation. Of particular interest is the extent to which:

- Procedure change involves relevant employee participation;
- There is consultation with end-users;
- Risk assessments incorporate input from employees.

**USE OF THE SCENARIO**

1) **Vertical Slice:** The scenario is applicable to present to interviewees from all levels of the organisation. Management will give an account of the change management processes, systems and initiatives that are in place. Frontline staff or immediate supervisors should give details of what actually happens, and how they are involved in the changes.

2) **Company Type:** The same approach can be used for each type of rail company, however the nature and type of change projects may differ.

**EXAMPLES OF SCENARIOS**
The interviewee should be asked to give an account of what would have happened or what has happened during a change project. Examples should be taken, if possible, from, or similar to those described in the box below, or ones of a similar nature. If it is unable to discuss any of these scenarios at length, then the inspector should ask them to provide a

<table>
<thead>
<tr>
<th>RAIL COMPANY</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOC</td>
<td>Introduction of a new type of rolling stock e.g. automatic doors rather than slam door.</td>
<td>Changes to the rule book or procedures e.g., driver and signaler communication protocol following the introduction of a new radio system.</td>
</tr>
<tr>
<td>FOC</td>
<td>Introduction of a new type of rolling stock.</td>
<td>Changes to the rule book or procedures e.g., driver and signaler communication protocol following the introduction of a new radio system.</td>
</tr>
<tr>
<td>Network Rail</td>
<td>Risk assessment of signals during a signalling project e.g. introduction of colour light signal to replace semaphore; or the refurbishment of a signal box.</td>
<td>Changes to the rule book or procedures e.g., driver and signaler communication protocol following the introduction of a new radio system.</td>
</tr>
<tr>
<td>Maintenance Company</td>
<td>Introduction of a new type of rolling stock e.g. automatic doors rather than slam door.</td>
<td>Changes to the rule book or procedures e.g., protocol following the introduction or new maintenance equipment or radios.</td>
</tr>
</tbody>
</table>

**Scenario:** Consider a time when the organisation underwent a significant change. What were the processes involved?
### APPENDIX A:

**EXAMPLE OF THE INITIAL VERSION OF THE QUESTION SET**

<table>
<thead>
<tr>
<th>Planning and Organisation (what systems are in place?)</th>
<th>Control (Who is responsible?)</th>
<th>Effectiveness (How is it done in practice?)</th>
<th>Information Flow (What happens to the information gained?)</th>
<th>Monitoring and Reviewing (Are systems assessment and actions taken?)</th>
<th>Performance Indicator (Examples of how demonstrated?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1. Is there a systematic approach to managing the change?</td>
<td>See Documentation: internal change management documentation</td>
<td>Satisfactory: The organisation has made a systematic and rigorous attempt to identify possible hazards when considering a change, organisation conduct necessary risk assessments to aid this. Unsatisfactory: There is no systematic process that exists, or the process is limited, i.e., it does not consider all the possible hazards that could occur.</td>
<td></td>
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</tr>
<tr>
<td>D2. Is there a designated person responsible for ensuring that the end-user is involved in the process of significant change?</td>
<td>See Documentation: internal change management documentation</td>
<td>Satisfactory: Key management personnel are responsible for ensuring that the end-user is consulted (e.g., Human Factors personnel or a User Acceptance Manager). They do document this information so all affected staff are aware of this person. Unsatisfactory: There is no specific role within the project dedicated ensuring end-user involvement, or staff, when asked, are not aware of this responsibility.</td>
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<td></td>
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</tr>
<tr>
<td>D3. Are employees from all levels of the organisation given specific responsibilities for the change?</td>
<td>See Documentation: Job roles and details of responsibilities.</td>
<td>Satisfactory: There are designated people across all levels of the company responsible for the changes. These roles include not only management but also employees, i.e., employee representatives. Unsatisfactory: Only management are responsible for the safety aspect of the change. There is no evidence that other employees (e.g., frontline) share some responsibility.</td>
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</tr>
<tr>
<td>D4. How are affected employees encouraged to become involved in the change process?</td>
<td>See Documentation: internal change management documentation</td>
<td>Satisfactory: There are opportunities or designated times for face-to-face discussion between project personnel and affected staff and users (e.g., discussion groups, prototype trials, user trials, workshops), promotional and informing activities regarding the project (e.g., newsletters, notices), adequate resources provided for employees wanting to take part, e.g., cover. Project managers go frequently ask employees if they have concerns or questions regarding the project. Unsatisfactory: The project is not published effectively to affected staff. There are subtle adverse consequences of becoming involved (e.g., stress and the behaviour is not career enhancing).</td>
<td></td>
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</tr>
<tr>
<td>D5. Is the end-user involved in assessing the impact of the change?</td>
<td>See Documentation: internal change management documentation</td>
<td>Satisfactory: There is a process where affected parties and users are able to contribute towards the decisions about the change and its process. Contributions can be made by a variety of methods (e.g., suggestion boxes or face-to-face communication). Risk assessments could also be contributed to incorporate relevant employees. The cost of those activities is planned and budgeted for. Unsatisfactory: Relevant employees have limited involvement in the change management process. There is no formal system in place.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>D6. Is the change management system successful in creating a change, with the aid of employee participation?</td>
<td>See Documentation: Evidence of successful change programmes where employees have improved (or worked) in the process. Unsatisfactory: A change management system has been used, however there are deficiencies in the new process or procedure that has been changed. Employees are not happy with the change, they have not been included in the decision making</td>
<td>Satisfactory: There is evidence of successful change programmes where employees have improved (or worked) in the process. Unsatisfactory: A change management system has been used, however there are deficiencies in the new process or procedure that has been changed. Employees are not happy with the change, they have not been included in the decision making.</td>
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</tbody>
</table>

**Key to Indicators**

- **Leadership**
- **Two-Way Communication**
- **Employee Involvement**
- **Learning Culture**
- **Blame Culture**

**D7. What is done with any issues or concerns identified by employees? I.e., as a risk assessment or discussion group.**

<table>
<thead>
<tr>
<th>Satisfactory:</th>
<th>See Documentation: review documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely and appropriate actions are taken if issues arise from the feedback. The issues logged and their progress tracked. The reoccurrence of particular issues (e.g., by several employees) is monitored. Unsatisfactory: Employees issues not recorded or monitored, some are not taken into consideration.</td>
<td></td>
</tr>
</tbody>
</table>

**D8. Is the change process monitored and reviewed, and continuously improved, and are staff are involved in the process?**

<table>
<thead>
<tr>
<th>Satisfactory:</th>
<th>See Documentation: review documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a system in place to review the change process (e.g., a safety audit, a quality assessment). It does include the opinions of all relevant staff (e.g., with the use of questionnaires or interviews for verbal comment). Unsatisfactory: There is no monitoring or reviewing of the change process, or risk assessment process. Or the monitoring or review process is limited as it does not include the perceptions of the employees.</td>
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</tr>
</tbody>
</table>
Scenarios and their Associated Assessment Criteria

A: Normal Operations of the Day
- Promotion and awareness of safety culture
- Awareness and adherence to personal accountabilities

B: Safety Issues
- Safety concern reporting
- Safety concern investigation

C: Degraded Operations: Time Critical or Difficult Situation
- Performance vs. safety priority

D: Safety Consideration During Change Management
- Employee involvement in safety decision making
- Individual ownership of safety responsibilities

E: Incident Operations: Incident Management
- Incident investigation
- Presence of a just culture

F: Management of Safety
- Safety management leadership
- Discussion and awareness of safety issues

Key to Indicators:
- Leadership
- Two-Way Communication
- Learning Culture
- Employee Involvement
- Attitude to Blame

5 Safety Culture Indicators
- Leadership
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Attitude to Blame

Management of Safety Framework

Control: Who is responsible?
Planning and Organisation: What systems are in place?
Effectiveness: How is it done in practice?

Monitoring and Reviewing: Are outcomes measured and actions taken?
Information Flow: What happens to the information gained?
Her Majesty's Railway
Inspectorate Safety
Culture Inspection
Question Set
Aims of the 5 Safety Culture Indicators

**Leadership**
There are explicit and continuous steps taken by management to ensure that goals, targets and issues are made clear, and are known to all personnel. An indicator of good safety leadership is that safety is always prioritised over performance.

**Two-Way Communication**
There are multiple channels for the discussion of safety matters, concerns and goals between and within all levels of the organisation. The flow of information should be in an upwards as well as a downwards direction.

**Employee Involvement**
Personnel from all levels within the organisation are involved in decision-making, safety planning, and providing ideas for improvement. Employee participation and feedback is actively sought.

**Learning Culture**
Steps are taken to monitor known problems, identify new ones, detect trends over time and develop effective preventative measures. Efforts are made to ensure that lessons are learnt from incidents, including the wider application to other situations. Intervention measures are introduced for all situations.

**Attitude Towards Blame**
Developing a just culture is the acceptance that the ultimate responsibility for incidents lies with the organisation, and investigations take full account of multi-causality. The purpose of investigations is not to assign retribution or blame, but to learn from incidents.
How to use this Question Set

This booklet has been divided into six sections that correspond to six scenarios.

Page 1 of each scenario section provides:

- The scenario topic. This should be used to provide context for the interview questions.
- Information about who should be interviewed and what information the scenario could reveal about these people.
- A description of the scenario to help set the scene before starting the interview.
- Question prompts that may be used to direct the interview.

Pages 2 and 3 of each scenario section provides:

- The scenario topic.
- Examples of evidence points that are indicative of satisfactory and unsatisfactory behaviour or practice for each of the assessment criteria. These can be used to help assess whether the organisation has implemented and is maintaining a positive safety culture.
- The key to the 5 safety culture indicators.

N.B. Both positive and negative points should be identified and reported in relation to each scenario!
Questions
Safety Management

This scenario should reveal important information about:

- Senior and middle management’s commitment to safety in the company.
- Operational staff awareness of safety and how safety is managed.

Setting the Scene:
Think about how senior and middle management manage safety.

The following questions may be useful:

- What formal systems are in place for managing safety in the workplace, i.e. safety tours, safety management systems, policies, safety briefings etc?

- Are safety responsibilities defined?
  - Are all personnel, including contractors, aware of their responsibilities for their own safety, and the safety of others?

- Do management spend time in operational areas?
  - How often, and what is the impact?

- How effective are management when they conduct safety tours?
  - Are management aware of the risks in the operational areas?
  - How are the risks identified and the priorities associated with each risk assessed?

- How is the effectiveness of safety management systems/procedures and policies monitored?
  - Does this include any formal trend analysis?
  - How are changes in legal requirements/industry practices tracked, and how is the safety management system updated to reflect these changes?

- Do management involve staff at all levels in safety related decision making?
  - Are there opportunities for operational staff and management to communicate with each other?

- Do management monitor and review employee thoughts, opinions, and feelings concerning the effectiveness of safety management within the organisation?
  - How is this done (i.e. safety climate / culture surveys)?
  - Who takes part in this?
  - Are the results fed back to all staff?
Safety Management

Management Visibility

Satisfactory:
✓ There are systems in place to manage safety.
✓ Regular safety tours of operational areas are conducted (best practice: one hour per week for senior executives, one hour per day for middle managers).
✓ Safety management systems such as safety tours are used to identify risks and mitigate them.
✓ Management give high visibility to improvement programmes.
✓ There is clear evidence that action lists are developed, signed and tracked.

Unsatisfactory:
✗ The safety management process is not formalised and entered into managers’ schedules.
✗ Safety management systems serve as a monitoring, auditing and checking function only.
✗ Safety issues are not actively sought out by management.
✗ Safety issues identified by management are not dealt with, but are just "filed".

Safety Culture/Climate Monitoring

Satisfactory:
✓ There are opportunities for operational staff and management to communicate with each other.
✓ Recipients of the safety culture/climate survey have explained to them, why the survey is being done and how the results will be used.
✓ The survey results are produced in an action plan to address the most serious weaknesses.
✓ Actions are implemented as soon as possible after completion of the survey, and are fed back to the surveyed group as rapidly as possible.
✓ Issues or areas of weakness are discussed with the respondents to clarify details.
✓ There is a dwell time between surveys of 18 months to 2 years.
✓ The survey is completed by a representative proportion of the company.

Unsatisfactory:
✗ Results are not fed back to the surveyed group in an appropriate manner.
✗ No, or limited effort, is made to assess safety perceptions of employees within the company.
✗ Management's vision of safety is not shared by all staff, and vice versa.
✗ No actions or priorities result from the survey.
Employee Involvement in Safety Discussions

**Satisfactory:**
- Employees are invited to comment on decisions about their job roles that may affect their safety or the safety of others.
- Safety management methods serve to provide an opportunity to all staff for open discussion of safety, to identify risks and mitigate against these risks.

**Unsatisfactory:**
- Employees are not invited to comment on safety.
- Management use safety tours as an opportunity to talk at operational staff, instead of using this as an opportunity to identify employees' opinions and safety concerns.

---

**Key to indicators:**
- Leadership
- Employee Involvement
- Two-way communication
- Learning Culture
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Safety Concern

This scenario should reveal important information about:
- What senior and middle management do when a safety concern is reported to them.
- What operational staff do when they have a safety concern.

Setting the Scene:
Think about what happens when someone has a safety concern.

The following questions may be useful:

- What systems are there in place for staff to report safety concerns e.g. confidential systems, approachable management etc?
  - Do staff know who to report safety concerns to?
  - Who do staff actually report safety concerns to?
  - Do staff find it easy to approach management about safety concerns?

- How effective are management in dealing with safety concerns?
  - Do management recognise the report as an issue that needs addressing promptly?
  - Do they deal effectively with organisational, as well as personal safety concerns?

- Do management accept that it is their responsibility to deal with the safety concern, once it has been reported?

- What do management do with the information obtained from the safety concern reports?
  - How often do the issues get resolved, always? occasionally? never?
  - Do staff feel action is appropriate and timely?

- How competent/effective are management in dealing with the safety concerns raised?

- Are staff provided with feedback about the outcome or progress of the reported concern?

- Is the effectiveness of the reporting system ever reviewed?

- Are the issues tracked from the time that they are raised through to closure?
  - How is this done?
  - Is there a budget allocated for the management of safety concerns?
### Safety Concern

#### Internal Safety Concern Reporting System

**Satisfactory:**
- ✔ There are systems/procedures in place to report safety concerns.
- ✔ Clear and easy to follow procedures are in place for safety reporting.
- ✔ The system is accessible to all operational staff.
- ✔ The reporting system is structured.

**Unsatisfactory:**
- ✗ There is no system in place for reporting safety concerns.
- ✗ The system is time consuming, or there is inadequate time for reporting.
- ✗ Operational staff are not aware of, or encouraged to use the system.

#### Approachable Management

**Satisfactory:**
- ✔ There are opportunities for face-to-face discussion with management.
- ✔ Managers frequently ask if operational staff have any safety concerns.
- ✔ Operational staff report (when asked) that managers are approachable.
- ✔ Management take responsibility for dealing with safety concerns once they have been identified.

**Unsatisfactory:**
- ✗ Management fail to make decisions.
- ✗ The same issues are raised at each meeting, but are not resolved.
- ✗ Management have to be sought out, or are rarely available.
- ✗ Management take an 'it's not my problem' or 'just live with it' attitude.
- ✗ Management resist taking responsibility for safety concerns when they are faced with them.
- ✗ Management are seen to be concerned about safety issues, however actions are just "shelved".

#### Culture of Trust

**Satisfactory:**
- ✔ Operational staff regularly report concerns when it is appropriate to do so.
- ✔ In general, reports are made concerning a range of issues.
- ✔ The refusal to work system is used and is respected by management.
- ✔ Management take active responsibility for dealing with safety concerns once they have been highlighted.

**Unsatisfactory:**
- ✗ Operational staff concerns are not reported to management for reasons such as:
  - ● Staff are concerned that the report would get someone else in trouble.
  - ● Staff perceive that nothing would get done.
  - ● Employees feel that they may be deemed responsible for causing the issue.
Safety Concern

Safety Concern Investigation and Mitigation Procedure

Satisfactory:
✓ A prompt and thorough assessment of the risk and its consequences is conducted.
✓ A corrective action plan is developed to mitigate the concern.
✓ Operational staff receive feedback about the outcome and the progress of the report.

Unsatisfactory:
✗ The concern is not fully investigated, corrected or prevented.
✗ Progress is not monitored or tracked.
✗ Timely and effective mitigation measures are not applied to resolve the concern.

Safety Concerns Log

Satisfactory:
✓ All concerns are logged for reference by all staff.
✓ Repeat or similar concerns are gauged and analysed.
✓ The information is accessible to all.

Unsatisfactory:
✗ There is no log for reported concerns.
✗ The log is not monitored or updated on a regular basis.

Key to indicators: Leadership Two-way communication Learning Culture
Change Management

This scenario should reveal important information about:
- How changes are controlled.
- How senior and middle management involve operational staff in the change process.
- The extent to which operational staff are consulted and involved in safety related decisions.

Setting the Scene:
Consider a time when the company underwent a significant change.

The following questions may be useful:
- Are proposed changes planned using a structured method?
- Under the change process is a log maintained of the key risks and recorded action plans for the management of these risks?
- Are changes implemented in a controlled manner?
  - How is this done?
- Who is responsible for identifying and involving the appropriate staff in this process?
- Are there systems/procedures in place to assess the potential impact of the impending change?
  - Is a training needs analysis conducted?
  - How are changes to procedures, roles and responsibilities managed?
- How are staff at all levels involved in the change management process?
  - Are staff given the opportunity/encouraged to comment on proposed changes before they are implemented?
  - Do management involve staff in an effective and timely manner?
  - Do management recognise the limitations of not involving staff in the change process?
- How are staff informed of the change if they are not adequately involved in the change management process?
  - When is this done?
Change Management

Employee Participation in the Change Processes

**Satisfactory:**
- Key personnel in the change management team ensure that the end user is consulted.
- Discussion groups and briefings etc. are used to inform affected individuals.
- End-users are consulted and have the opportunity to contribute to decisions through activities such as workshops and user trials.
- Employees are actively encouraged to participate in all stages of the change process.
- There is a structured and planned process to manage change.
- The procedures to manage change are usable, and are easily applied.

**Unsatisfactory:**
- Affected parties are not kept sufficiently informed.
- End-users contribute only at the end of the design process.
- There is a lack of evidence that the information gained from workshops, discussion forums etc. is used.
- Affected parties are not informed about the change until it has been implemented.
- Management fail to recognise the limitations of not involving affected staff in the change process in an effective and timely manner.

Employee Training about the Change

**Satisfactory:**
- A training needs analysis is conducted to assess the levels of training required to prepare for the change.
- If required, the relevant individuals are trained to the required level of competencies before the change takes effect.
- Employees are given the opportunity to comment on, or contribute to the training process.
- Employees understand the training.
- Competency is ensured and maintained.

**Unsatisfactory:**
- Employees do not receive sufficient training to maintain operational safety during post-change operations.
- No training is provided to employees regarding the change.
- Training is not put into place in a timely manner, i.e. training is provided several days/weeks/months after the change has been implemented.
- There are no records of who has / has not been trained, or when training has taken place.
Change Management

**Employee Motivation**

**Satisfactory:**
- Employees report that they feel involved and included in the change process.
- Employees hold positive attitudes towards the planned changes.
- Employees have trust in management to implement an efficient and successful change.
- Employees have the opportunity to report their thoughts on the change programme.

**Unsatisfactory:**
- Employees are mistrustful of management's ability to implement the change safely.
- Employees hold negative attitudes towards the change process.
- Employees do not have the opportunity to raise their concerns about the change programme.
- Changes in roles and responsibilities are not understood.

**Active Response to Feedback**

**Satisfactory:**
- There are strategies in place for communicating the outcomes of the consultation process.
- It is ensured that employees receive rapid feedback in response to comments and suggestions made.
- Every attempt is made to incorporate employees' suggestions and comments into the design process.

**Unsatisfactory:**
- Employees report not receiving adequate feedback following consultation.
- No feedback is provided to operational staff about the suggestions that they have made.

**Key to indicators:**
- Leadership
- Two-way communication
- Attitude Towards Blame
- Employee Involvement
- Learning Culture
Transfer of Information About Shift Duties

This scenario should reveal important information about:

- How senior and middle management communicate safety critical information (including personal safety responsibilities) to operational staff.
- The extent to which operational staff receive and understand safety critical information that is communicated to them.

Setting the Scene:
Think about the chain of events at the start of a new shift or when there is a handover of duties.

The following questions may be useful:

- How is safety related information communicated to staff at the start of a new shift, shift handover, or where a handover of duties is required?
- Who, or what, is responsible for communicating this information to staff?
  - Is this communication effective?
- How is it determined what information must be communicated?
- What type of information is communicated?
  - Are all risks and mitigation measures communicated?
- What are the consequences of not communicating the information?
- What is done to ensure that the information communicated has been understood accurately?
  - Do staff have the necessary information to operate their shifts adequately?
  - Are all the risks and mitigation measures understood?
- Is the communication system reviewed and monitored for its success?
**Safety Information Communication System**

**Satisfactory:**
- Safety related information is communicated at the start of the shift or whenever there is a handover of duties.
- A range of safety related issues are covered, including both personal safety and major accident avoidance, and how to mitigate against these.
- Managers are on hand to deal with safety related concerns or issues.
- The communication system is reviewed and monitored for its success.
- Safety information is communicated face-to-face by management to all levels and/or via notices, log books etc.

**Unsatisfactory:**
- Not all safety issues are covered (e.g. information is limited only to one or two 'hot topics', neglecting other areas).
- Management have to be actively sought out, and/or staff are reluctant to approach them.
- The communication system fails to prepare the individual to operate their shift adequately and safely.
- Risks are stated, however there is a failure to communicate how to mitigate against these.
- The adequacy of the communication system is reviewed infrequently.

**Employee Awareness of Accountabilities**

**Satisfactory:**
- All staff are aware of their safety responsibilities.
- Regular checks are carried out to ensure that all staff are aware of their responsibilities (for instance using spot checks or briefing attendance signature records).

**Unsatisfactory:**
- Safety responsibilities are unclear and changeable.
- Temporary changes are not always considered.
- Management and operational staff generally fail to take responsibility for communicating the safety information.

**Comprehension of Safety Information**

**Satisfactory:**
- Staff are proactive in their approach to safety information.
- Staff have all the information necessary to conduct their shift safely.

**Unsatisfactory:**
- Staff are unable to give an overview of the safety information that applies to them.
- Approaches used to disseminate information are limited.
- The information communicated is ambiguous, or difficult to comprehend.
Time-Critical and Degraded Situation

This scenario should reveal important information about:

- The emphasis senior and middle management place on safety compared to performance, and how this is communicated to operational staff.
- Whether commitment to safety is reflected in operational staff behaviour during time-critical or degraded situations.

Setting the Scene:

Think about when there was a time critical and difficult / degraded situation.

The following questions may be useful:

● How is safety managed during a time critical and difficult / degraded situation?

● Do staff report feeling adequately prepared to deal with this type of situation?

● How is the message communicated to staff that safety is the highest priority?

● Do staff understand their roles and responsibilities in this situation?

● Are there any circumstances during which a member of staff is placed under pressure to meet performance objectives?
  - Where does this pressure come from?
  - Are management aware of where pressure is being applied and by whom?
  - Do management understand the risks posed when performance is prioritised?
  - Are management willing to take responsibility for any issues that emerge as a result of prioritising performance over safety?

● Do management check that safety is being prioritised by operational staff?
  - How is this done?

● Who is responsible for communicating the safety priority message to operational staff?
  - How do management remain confident that staff understand the balance between safety and operational performance?

● Are reviews conducted to ensure that management prioritise safety procedures?
## Time-Critical and Degraded Situation

### Safety Prioritised Behaviour

**Satisfactory:**
- Employees have the knowledge, skills and resources available to deal with the situation, without compromising safety.
- Safety is put first throughout.
- Employees report that there is no pressure from management or peers to maintain performance standards at the cost of safety.

**Unsatisfactory:**
- Employees report a pressure to maintain performance standards, potentially at the cost of safety.
- Safety has been compromised at the expense of performance.

### Performance vs. Safety Management Priority

**Satisfactory:**
- Management stipulate clearly and repeatedly to operational staff that safety is the first priority, using methods such as:
  - Verbal communication (safety tours, briefings, safety days).
  - Written communication (notices, within job profiles, safety publications and newsletters).
- Management demonstrate/promote the commitment to safety to customers and clients.
- There is a sufficient health and safety budget.
- Management monitor the emphasis placed upon safety by staff e.g. via spot checks.

**Unsatisfactory:**
- Evidence that safety could be swamped by the noise around performance e.g. hard hitting performance campaign.
- Commitment to achieving performance targets that is greater than demonstrated for safety.
- The emphasis placed upon performance at the expense of safety is not mentioned, and there is no "buy in" to this message.
Time-Critical and Degraded Situation

Safety Accountability

**Satisfactory:**
- Management take responsibility for the consequences when they prioritise performance over safety.
- Everyone is clearly informed and are aware of their roles and responsibilities in a time-critical and degraded situation.

**Unsatisfactory:**
- Management do not take responsibility for consequences when they prioritise performance over safety.
- Clear roles and responsibilities are not communicated adequately or understood by all staff in a time-critical and degraded situation.

**Key to indicators:**
- Leadership
- Two-way communication
- Attitude Towards Blame
- Employee Involvement
- Learning Culture
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Incident Management

This scenario should reveal important information about:
- The actions taken by senior or middle management to investigate the underlying causes of an incident, and then implement mitigating measures.
- The involvement of operational staff in the investigation and disciplinary process.

Setting the Scene:

*Think about the chain of events following an incident.*

The following questions may be useful:

- What proportion of incidents are investigated?
- Upon what criteria is an incident selected for investigation?
- How was/is the specific incident investigated?
- Who is responsible for investigating an incident, and why?
- What factors did/do the incident investigation procedure specifically investigate?
  - Is this sufficient to identify what really happened?
- How is/was the individual involved in the incident treated?
  - Was this appropriate?
- How is/was the cause of the incident determined?
- Are/were any actions taken to prevent the incident from occurring again?
  - Are/were immediate as well as long-term avoidance actions considered/implemented?
  - How is/was the risk of this type of incident re-occurring identified, and mitigated?
  - How quickly were/are actions implemented and understood by relevant parties?
- What disciplinary procedures were/are applied here, and how was/is this done?
  - Was/is this effective?
- Were/are the recommendations from the investigation communicated throughout the company?
  - Who was/is this communicated to?
  - What and how was/is this disseminated throughout the company, i.e. information pertaining to what actually happened, recommendations based on the incident, or just the outcome of the incident?
  - How was/is it confirmed that the information disseminated is understood by everyone?
Incident Investigation System

Satisfactory:
- A thorough root cause analysis investigates all possible underlying causes and events leading to the incident.
- A preventative and corrective action plan is developed to prevent re-occurrence.
- A key individual (or individuals) is/are designated to manage and supervise this process.
- The investigation process is completed within a sensible (usually prompt) time.

Unsatisfactory:
- The investigation does not commence immediately, or is drawn out over an inappropriate length of time (e.g. over several months).
- The investigation focuses on local or obvious faults, or individual failures and neglects other ‘hidden’ factors e.g. industry or company wide processes.
- No efforts are made to ensure that the incident does not occur again.
- The immediacy of responding is inadequate.

Fault Allocation Process

Satisfactory:
- Care is taken not to apportion blame before the root cause analysis is complete.
- The purpose of the situation is to learn from the incident, rather than to apportion blame.

Unsatisfactory:
- Blame is apportioned or insinuated prior to any investigation commencing.
- Blame is apportioned until the individuals involved are proven ‘not guilty’.
Incident Management

Disciplinary Process

Satisfactory:
✓ The procedures distinguish clearly between different degrees of culpability (e.g. blameless, system-induced or reckless errors).

Unsatisfactory:
✗ There are no clear procedures for deciding upon the relevant disciplinary actions.
✗ Disciplinary procedures are limited in distinguishing between different degrees of blameworthiness.

Feedback Systems

Satisfactory:
✓ There are strategies in place for communicating the outcomes of the investigation e.g. briefings, newsletter, articles in corporate magazines and notices.
✓ Preventative campaigns are installed throughout the organisation to raise awareness of the factors contributing to the incident.
✓ Hard (equipment) as well as soft (training and procedures) actions are highlighted.

Unsatisfactory:
✗ Communication does not target all safety-critical employees and is limited to certain areas.
✗ The information communicated is difficult to comprehend, and fails to serve its purpose.
✗ There is no personal feedback to those involved in the incident.

Key to indicators:
- Leadership
- Employee Involvement
- Learning Culture
- Two-way communication
- Attitude Towards Blame
Developed under the HMRI Rail Delivery Programme by Human Engineering Limited.
### Side A: Assessment Criteria organised according to Indicators

#### Leadership
- Management Visibility
- Performance vs. Safety Management Priority
- Safety Prioritised Behaviour

#### Two-Way Communication
- Internal Safety Concern Reporting System
- Approachable Management
- Active Response to Feedback
- Safety Information Communication System
- Comprehension of Safety Information
- Feedback Systems

#### Employee Involvement
- Employee Involvement in Safety Discussions
- Employee Participation in Change Processes
- Employee Training about the Change
- Employee Motivation

#### Learning Culture
- Safety Culture/Climate Monitoring
- Safety Concern Investigation and Mitigation Procedure
- Safety Concerns Log
- Incident Investigation System

#### Attitude Towards Blame
- Culture of Trust
- Employee Awareness of Accountabilities
- Fault Allocation Process
- Disciplinary Process
- Safety Accountability
Side B: Assessment Criteria organised according to Scenarios

**Safety Management**
- Management Visibility
- Employee Involvement in Safety Discussion
- Safety Culture/Climate Monitoring

**Safety Concern**
- Internal Safety Concern Reporting System
- Approachable Management
- Culture of Trust
- Safety Concern Investigation and Mitigation Procedure
- Safety Concerns Log

**Change Management**
- Employee Participation in Change Processes
- Employee Training about the Change
- Employee Motivation
- Active Response to Feedback

**Transfer of Information About Shift Duties**
- Safety Information Communication System
- Comprehension of Safety Information
- Employee Awareness of Accountabilities

**Time-Critical or Degraded Situation**
- Safety Prioritised Behaviour
- Performance vs. Safety Management Priority
- Safety Accountability

**Incident Management**
- Incident Investigation System
- Fault Allocation Process
- Disciplinary Process
- Feedback Systems

**Key**
- Leadership
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Attitude to Blame
HMRI SAFETY CULTURE TOOLKIT OVERVIEW DIAGRAM

**SCENARIOS**

A: Safety Management
- Management Visibility
- Safety Culture/Climate Monitoring
- Employee Involvement in Safety Discussions

B: Safety Concern
- Internal Safety Concern Reporting System
- Approachable Management
- Culture of Trust
- Safety Concern Investigation and Mitigation Procedure
- Safety Concerns Log
- Employee Involvement in Safety Discussions

C: Change Management
- Employee Participation in Change Process
- Employee Training about the Change
- Employee Motivation
- Active Response to Feedback

D: Transfer of Information about Shift Duties
- Safety Information Communication System
- Employee Awareness of Accountabilities
- Comprehension of Safety Information

E: Time-Critical and Degraded Situation
- Safety Prioritised Behaviour
- Performance vs. Safety Management Priority
- Safety Accountability

F: Incident Management
- Incident Investigation System
- Fault Allocation Process
- Disciplinary Process
- Feedback Systems

**ASSESSMENT CRITERIA**

Planning and Organisation (What systems are in place?)
- There is evidence that procedures, policies and schedules have been developed to deal with the management of safety.

Control (Who is responsible?)
- There is evidence that there are defined management roles with clear responsibilities for safety.

Effectiveness (How is it done in practice?)
- There is evidence that management display their commitment to safety to employees in a visible and consistent manner.

Information Flow (What happens to the information gained?)
- Management make concerted efforts to provide opportunities for frontline staff to comment on or discuss safety matters.

Monitoring and Reviewing (Are outcomes measured and actions taken?)
- All safety related systems / procedures are monitored and reviewed regularly.
- Safety climate surveys are completed by staff and the results are disseminated throughout the company.

Key to 5 Safety Culture Indicators:
- Leadership
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Blame Culture
Contents

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## Acronym List

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACSNI</td>
<td>Advisory Committee on the Safety of Nuclear Installations</td>
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<td>ACOP</td>
<td>Approved Code of Practice</td>
</tr>
<tr>
<td>COMAH</td>
<td>Control of Major Accident Hazards</td>
</tr>
<tr>
<td>FOC</td>
<td>Freight Operating Company</td>
</tr>
<tr>
<td>HMRI</td>
<td>Her Majesty’s Railway Inspectorate</td>
</tr>
<tr>
<td>HSC</td>
<td>Health and Safety Commission</td>
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<td>HSCER</td>
<td>Health and Safety (Consultation with Employees) Regulations</td>
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<td>International Atomic Agency Authority</td>
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<td>INSAG</td>
<td>International Nuclear Safety Advisory Group</td>
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<td>MHSW</td>
<td>Management of Health and Safety at Work Regulations</td>
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<td>TOC</td>
<td>Train Operating Company</td>
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<tr>
<td>SMS</td>
<td>Safety Management System</td>
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</table>

11 March 2005
1 Introduction to the Inspectors’ Guide

Key Questions:

➢ What is this document?
➢ Who is it produced for?
➢ What is the aim?
1.1 Introduction

Her Majesty’s Railway Inspectorate (HMRI) Safety Culture Inspection Inspectors’ Guide is a handbook for HMRI inspectors to use in conjunction with the HMRI Safety Culture Inspection Toolkit. It is intended to provide interpretative guidance on how to use the Safety Culture Inspection Toolkit, considering all stages of the inspection process including planning, assessing and reporting. It gives a detailed account of the recommended inspection methodology and techniques that should be used to achieve a valid, reliable assessment.

The production of this guide has been based upon:

- Consultation with current HMRI Inspectors,
- The findings of a series of inspections carried out at a range of UK rail organisations, which were used to validate the toolkit. (see Human Engineering Limited, 2005, ‘Development and Validation of the Inspection toolkit’).

1.2 Aims

The overriding objective of the Inspectors’ Guide is to provide a detailed overview of how the Safety Culture Inspection Toolkit should be used to conduct a valid and reliable safety culture inspection.

To achieve this objective, the Inspectors’ Guide provides a step-by-step account of the activities and procedures that it is recommended are followed during the inspection process.

The guide is laid out in six sections which are described briefly in Figure 1.

Figure 1: An overview of the six sections of the Inspectors’ Guide

<table>
<thead>
<tr>
<th>Key Question</th>
<th>Coverage</th>
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<tbody>
<tr>
<td><strong>Section 1</strong></td>
<td>Introduction This section provides a broad introduction to the</td>
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<td>guidance and describes how the document should be used.</td>
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<tr>
<td><strong>Section 2</strong></td>
<td>Background This section provides the background and rationale</td>
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<td>to the inspection process.</td>
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<tr>
<td><strong>Section 3</strong></td>
<td>Planning This section provides guidance on how to plan and</td>
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<td></td>
<td>prepare for the inspection.</td>
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<tr>
<td><strong>Section 4</strong></td>
<td>The Assessment This section discusses in detail the stages</td>
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<td>involved in a safety culture inspection using the toolkit.</td>
</tr>
<tr>
<td><strong>Section 5</strong></td>
<td>Reporting This section contains guidance on how to record</td>
</tr>
<tr>
<td></td>
<td>and report the findings of the inspection.</td>
</tr>
<tr>
<td><strong>Section 6</strong></td>
<td>Reviewing and Monitoring This section gives an account of</td>
</tr>
<tr>
<td></td>
<td>follow on activities.</td>
</tr>
</tbody>
</table>
2 Background

Key Questions:

- Why inspect for safety culture?
- What is the legislative framework?
- What are the objectives of the safety culture inspection?
- What makes up the Safety Culture Inspection Toolkit?
2.1 Why Safety Culture?

The importance of safety culture has been highlighted following recent inquiries into two major rail incidents. The Southall crash on 19 September 1997 resulted in 7 people losing their lives with 139 others being injured. The Ladbroke Grove rail crash on 5 October 1999 resulted in 31 deaths with over 400 other people injured. Public inquiries were chaired by Professor Uff\(^1\) and Lord Cullen\(^2\), who took a fundamental look at the rail industry and examined the generic safety issues facing it. The Government agreed that the 295 recommendations from the Public Inquiry reports set a convincing, necessary and challenging agenda for change. 25 of these recommendations related to the underlying conditions of culture and management practice. 

In the Ladbroke Grove Report (Chapter 5), Lord Cullen suggested that safety culture in the UK rail industry could be improved by increased safety leadership, employee involvement, communication, fault reporting and trust.

He felt that the improvement in safety culture was key to reducing the management deficiencies that lead to unsafe acts by employees. In the submission of the HSE “…the need for a positive safety culture is the most fundamental bought before the Inquiry”.

As the appointed enforcing authority for health and safety in the rail industry, HMRI has a fundamental role to play in the framework for the continued improvement of safety. Specifically, the review and inspection of safety culture is a crucial aspect of HMRI’s responsibilities. HMRI has launched an ongoing programme of work in relation to safety culture, including the development of clear programmes of work for inspectors to undertake.

A Safety Culture inspection methodology has been developed for use by HMRI inspectors. The toolkit outlines a consistent and effective method by which the characteristics of a positive safety culture can be measured. It provides a pragmatic approach and methodology for the inspection of safety culture in UK rail companies.

2.2 The Scope

A fair judgement of an organisation’s safety culture should be based upon the behaviour and attitudes of employees (organisational culture), as well as general knowledge and observation of the systems and procedures in place (corporate culture). A detailed picture of what is shaping the culture of the organisation should be built up over a period of time, considering a range of departments, services lines and employees.

This tool can be used as a basis for inspecting a variety of railway organisations (including Train and Freight Operating Companies, Infrastructure Management Companies and Train Maintenance Companies).

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2.3 Basis of Regulation

The safety culture assessment focuses on 5 key indicators of a positive safety culture that are implicit within the safety management system:

- Leadership
- Two-way communication
- Learning organisation
- Staff involvement
- Attitude to blame

Whilst no legal requirements make reference to safety culture in an explicit way, there are provisions identified relating to staff involvement and communications. Consultation and communication practices are particularly important to securing the benefits of a positive culture. Central are the requirements in the Management of Health and Safety at Work Regulations (MHSW), 1999 and ACOP\(^1\). Regulation 10 – Information for employees and Regulation 11 – Co-operation and co-ordination are highlighted. Of wider relevance are: MHSW Regulation 5 – Implement health and safety arrangements; Regulation 14 – Employees duties. Inspectors may also need to look for compliance with the requirements of the Safety Representative & Safety Committees Regulations, 1977; Health and Safety (Consultation with Employees) Regulations, 1996; and Health and Safety Information for Employees Regulations, 1989.

The current Railways (Safety Case) Regulations, 2000\(^2\) (amended) provide for a development plan that should call for continuous improvement in safety management systems (SMS). This disappears in the proposed new regulations but the SMS does have to be approved in the Part A certificate [Part A & B certificate replaces the safety case]. The SMS must be capable of controlling risks arising from normal operating conditions and foreseeable degraded, abnormal or emergency conditions. Many companies quite appropriately recognise that safety culture is one, key element of this. Deficiencies identified in the current safety culture assessment need to be related to the SMS and any enforcement action considered using (until revoked) Regulation 10 ‘Duty to comply with the safety case’. Regulation 11 ‘Co-operation’ may also be relevant.

The current approach to inspection requires assessment of both corporate and organisational behaviour. The general legal requirements for corporate issues, it is anticipated, would be covered by the Health and Safety at Work etc Act, 1974 Sections 2, 3, 4; whereas the personal behaviour would be taken under Sections 7, 8 and 37.

\(^1\)refer to L21 guidance publication
\(^2\)refer to L52 guidance publication
2.4 Safety Culture Inspection Objectives

**Objective 1:**
A consistent, structured approach
The Safety Culture Inspection Toolkit aims to provide a standardised framework for inspecting safety culture in the UK rail industry. The tool provides guidance to help HMRI inspectors judge the safety culture, based upon general knowledge of the systems in place (corporate culture), as well as the behaviour and attitudes of employees (organisational culture). The judgement should be based on a picture that is built up over a period of time, concerning a wide range of employees, departments and locations (e.g. depots, stations).

**Objective 2:**
Focused on five main elements of safety culture
Whilst there are many components of safety culture, the toolkit is focused on five key indicators (see Figure 2), which are specified in Lord Cullen’s Inquiry into Ladbroke Grove¹. Section 4.3 provides more detailed information of these indicators.

**Objective 3:**
Focus on organisational and corporate culture
The toolkit is specifically interested in the safety-related behaviour of employees, i.e. “how things are done around here” (organisational culture), as well as the systems and procedures in place (corporate culture). Judgements should be based upon walkthroughs and talkthroughs with employees, direct observations of documentation and procedures, and the inspector’s general knowledge of the organisation which has been established over time.

**Objective 4:**
Applicability to a variety of rail organisations
The toolkit is designed so that it can be used to assess safety culture within a broad range of UK railway organisations including Train Operating Companies, Freight Operating Companies, Infrastructure Maintenance Companies and Train Maintenance Companies. The toolkit offers a methodology for structuring the inspection process, however the inspector should be guided by what is appropriate and realistic within the inspection setting.

**Objective 5:**
Vertical Slice Approach
Judgements formed by the inspector should, in part, be based upon walkthroughs and talkthroughs with employees of the company. The inspection should include and compare the responses of employees through a ‘vertical slice’ of the organisation, i.e. from a variety of organisational layers. These layers include senior management, middle management and operational workforce (see Table 1 in Section 3.1 for more information).

**Objective 6:**
Flexibility
As familiarity with the toolkit method increases, the order and manner by which the questions are asked can be adapted depending on the context (e.g. the rail company, department, or the employee being spoken to).

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3 Planning

Key Questions:

- What needs to be prepared?
- What documents should be requested?
- How should the company be approached?
- How should the inspection be structured?
3.1 Assessment Planning

The inspector should decide:

- Who should be involved in the inspection,
- The areas that the inspection should target,
- The inspection timescale.

Assessment Methods

Walkthroughs and talkthroughs with employees should be used as the principal method for collecting data (in conjunction with direct observations of systems, procedures and written records). A sample of employees should be selected from different organisational layers of the organisation (in order that their responses can be recorded and compared). Organisational roles can be categorised into three broad areas which are:

- Frontline staff
- Middle management
- Senior management

Table 1 gives an overview of each of these organisational categories, and provides details of example job roles or titles belonging to each category with whom it would be appropriate to request an interview. It may prove useful to dedicate a period of time (e.g. a morning) to each organisational category.

Table 1: Description of organisational roles that should be included in the inspection

<table>
<thead>
<tr>
<th>Organisational Category</th>
<th>Description / Definition</th>
<th>Example of job titles</th>
</tr>
</thead>
</table>
| Front line staff        | Personnel who perform principally an operational role. In some organisations these may also be referred to as production staff. Some of these people may have responsibility for the supervision of small teams within their own work area. Of particular interest are those whose work is safety critical. | TOC/FOC:  
  • Train driver,  
  • Station staff.  
Infrastructure management:  
  • Signaller,  
  • P-way gang members  
Train Maintenance:  
  • Electrical or Mechanical fitters  
  • Fleet engineer |
| Middle management       | Personnel who are responsible for a department or operation within the company. Of particular interest are:  
  • Operational Managers: responsible for a group of frontline staff.  
  • Safety managers: responsible for a particular area of safety. | TOC/FOC:  
  • Driver Standards Manager  
  • Station Supervisor  
Infrastructure management:  
  • Engineering Supervisors  
Train Maintenance:  
  • Workshop Supervisor |
| Senior management       | Personnel who are responsible for a large area of the company and who make strategically critical decisions. They may be executive directors, or head of an area of the business. Of particular interest are members of senior management who take responsibility for safety, or operational areas. | All company types:  
  • Head of Safety  
  • Head of Operations  
  • Operations Executive  
  • Safety Managers |
How many people should be interviewed?
The objective of the inspection is to include as many individuals as possible from each of the organisational role categories depicted in Table 1. This will help to establish an informed judgement based on a range of individuals from different organisational levels, departments and experience.

How long should it last?
The inspector should plan for the safety culture inspection to be conducted over the course of several days. However, this time is likely to vary depending upon the size and geographical location of various departments of the company.

Where should the inspection take place?
The areas you visit will depend on:

• Which personnel you need to speak to;
• The nature and industry sector of the company.

The inspector should visit as many sites as possible (including head office, workshops, stations or depots), to build up a detailed picture of the general culture, rather than specific sub-cultures.

Frontline areas
When visiting frontline areas, it is recommended that talkthroughs take place in a quiet room or within the operational area, if suitable. The inspector may also ask to ‘walkthrough’ processes with employees within the operational area. Care should be taken not to compromise safety by removing a member of staff from the operational area. If required, the company being assessed needs to provide cover for any staff involved in the safety culture inspection.

Middle and senior management
Middle and senior managers will often have office facilities or meeting rooms available which could be used for interviews. It is recommended that the company is notified of the requirement to use such facilities prior to the inspection taking place.
3.2 Notifying the company and requesting documentation

How should I notify the company?
Figure 3 provides a summary of the activities that should be completed when preparing for the inspection. The preparation includes time for discussion with the company, which should serve to introduce the aims of the inspection and clarify logistical arrangements.

Figure 3: Preparation Checklist

The inspector should discuss with the company:

- The aims and justification for the inspection
- Likely areas to be visited
- Target personnel to be interviewed
- Proposed dates for the inspection

The inspector should request:

- Availability of meeting rooms or quiet areas for interviews

The following documentation:

- (1) Paperwork from 3 incident investigations
- (2) Change management documents relating to a major change project
- (3) Internal safety promotional material e.g. newsletters
- (4) The safety case

The inspector should send:

- A pro forma introductory letter
- A pro forma assessment plan

The inspector should contact the company as early as possible to discuss (a) the objectives and agenda for the inspection, and (b) appropriate timescales. A pro forma letter (see Figure 4) and an Assessment Plan (see Figures 5 and 6) should be sent to confirm the arrangements and outline clearly the details of the inspection.
Further to our recent telephone conversation, please find below further information regarding the proposed Safety Culture Inspection by Her Majesty’s Railway Inspectorate (HMRI).

There is ongoing work within HMRI on validating the implementation of recommendations from public inquiries. A number of themes have been identified within the extensive set of recommendations and one of these relates to ‘safety culture’. The progress report for 2003 on this theme noted that ‘the development of an improved culture is still patchy, with some companies pressing ahead more effectively than others’. On safety leadership and communication it was noted that ‘the effect of measures to secure cultural change has not yet penetrated down through all levels of all parts of the industry’. In light of these comments it was recommended that ‘the validation of these recommendations will benefit from clear programmes of work for inspectors to undertake’.

Safety Culture is an area for inspection within the implementation plan for the forthcoming year. As discussed, I would like to visit <company name> on <agreed date>, to conduct a safety culture inspection using the HMRI safety culture inspection tool. During the course of my visit it would be appreciated if you could act as a facilitator and guide to the necessary personnel, and provide access to relevant documentation. Where feasible I would wish to interview personnel at front line locations or in small groups. It is anticipated that I will be on site for no more than two days and shall endeavour to minimise any disruption to your operations.

The interviews will be structured around five indicators of safety culture:

- Leadership,
- Two-way communication,
- Learning culture,
- Employee involvement, and
- Attitude towards blame.

I may also ask to see and take photocopies of relevant documentation, for instance job profiles or meeting minutes. In order for the visit preparation to be completed, would you please send copies of documentation relating to three incident investigations. I shall choose one of the three to discuss during the visit. Relevant personnel will be asked to talk through the incident. I have attached a visit plan that contains further information regarding the inspection and a proposed outline for the visit.

Should you have any questions concerning the inspection, please do not hesitate to contact me.

Many thanks for agreeing to our visit.

Yours sincerely,

Name
<table>
<thead>
<tr>
<th>Safety Culture Inspection</th>
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<tbody>
<tr>
<td>Visit Plan</td>
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<td>Company Name:</td>
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| Day Two |
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<tr>
<td>---------------------------</td>
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<tr>
<th>Inspector</th>
<th>Irene Seymour</th>
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<th>Required Personnel</th>
<th>Individuals from a range of organisational levels will be required for walkthroughs/talkthroughs, including the following roles:</th>
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<td></td>
<td>• Senior Executive Manager</td>
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<td></td>
<td>• Senior Managers of Operations and Safety</td>
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<td></td>
<td>• Middle Management of Operations</td>
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<td></td>
<td>• Frontline Staff (those with a safety-critical role)</td>
</tr>
<tr>
<td></td>
<td>• Safety Representatives</td>
</tr>
<tr>
<td></td>
<td>• Union Representatives</td>
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<tr>
<td></td>
<td>In order to minimise disruption and maintain safety, we would be grateful if personnel cover could be organise to deputise for staff whilst they are being interviewed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facility Requirements</th>
<th>Meeting rooms will be required in which talkthroughs and focus groups with managers and frontline staff will be conducted.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A meeting room will also be required to conduct a management wash-up session at the end of the inspection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agenda</th>
<th>Day One</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9:00 – 10:00</td>
</tr>
<tr>
<td></td>
<td>10:00 – 12:00</td>
</tr>
<tr>
<td></td>
<td>13:00 – 16:00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 – 10:30</td>
</tr>
<tr>
<td>10:30 – 14:00</td>
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<td></td>
</tr>
<tr>
<td>14:30 – 16:00</td>
</tr>
<tr>
<td>16:00 – 16:30</td>
</tr>
</tbody>
</table>
4 The Assessment

Key Topics:
- Overview of the methodology
- Toolkit Components
  - Five safety culture indicators
  - Health and Safety Management Framework
  - Scenario Approach and Assessment Criteria
  - Six scenarios
- The Question Set
- The Pocket Card
- The Overview Diagram
4.1 Overview

The Safety Culture Inspection Toolkit has been developed to provide guidance and supporting materials for conducting a safety culture inspection. It comprises four components, details of which are provided in Section 4.2. The toolkit provides:

- A question structure for use during interviews and discussions,
- Details of documentation that should be reviewed,
- Information regarding assessment criteria, and evidence upon which a judgement can be based.

The toolkit outlines a methodology for discussions with employees at the organisation, which should be used to elicit information regarding the safety culture of the company. Discussions should be structured around six scenarios, which anchor the interview to realistic events or systems. A colour scheme has been utilised to bring clarity to the toolkit. The five safety culture indicators are colour coded. Figure 8 illustrates the colours used throughout the toolkit to depict the five indicators. Icons have also been used to represent each indicator, should it not be possible to print the toolkit in colour.

The content of the interview should be compared against performance on certain assessment criteria, which evaluate performance against evidence points that are indicative of satisfactory and unsatisfactory practice. The discussions should follow the health and safety management framework stages, described in Section 4.4.

4.2 Safety Culture Inspection Toolkit Components

The Safety Culture Inspection Toolkit provides materials, questions and a methodology for completing a successful safety culture inspection. As shown in Figure 7, the toolkit consists of a Question Set, a Pocket Card, an Overview Diagram and an Inspectors’ Guide (this document).

Figure 7: Summary of the materials used for Safety Culture Inspection
4.3 Five Safety Culture Indicators

This section describes

- What is meant by Safety Culture Indicators and Assessment Criteria
- How they are used within the Safety Culture Inspection Toolkit

What are Safety Culture Indicators?
The Safety Culture Inspection Toolkit was developed on the basis of 5 key indicators (outlined by Lord Cullen within the Ladbroke Grove Inquiry). These indicators should be addressed to achieve a successful safety culture. The five safety culture indicators, and a brief description of a good practice approach, are described in Figure 8.

Figure 8: The five safety culture indicators and a description of good practice

<table>
<thead>
<tr>
<th>Indicator Title</th>
<th>Good Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>There are explicit and continuous steps taken by management to ensure that safety goals, targets and issues are made clear to all personnel. The prioritisation given to safety is balanced with, or is greater than the prioritisation given to performance.</td>
</tr>
<tr>
<td>Two-Way Communication</td>
<td>There are multiple channels for the discussion of safety matters, concerns and goals between and within levels of the organisation. The flow of information should be in an upwards, downwards and horizontal direction.</td>
</tr>
<tr>
<td>Employee Involvement</td>
<td>Personnel from all levels of the organisation are involved in decision making, safety planning and providing ideas for improvement. Employee participation and feedback is actively sought.</td>
</tr>
<tr>
<td>Learning Culture</td>
<td>Steps are taken to monitor known problems, identify new ones, detect trends over time and develop effective preventative measures. Efforts are made to ensure that lessons are learnt from incidents, including the wider application to other situations. Intervention measures are introduced for all situations.</td>
</tr>
<tr>
<td>Attitude Towards Blame</td>
<td>The company accepts that the ultimate responsibility for incidents lies with the organisation, and investigations take full account for multi-causality. The purpose of investigations is not to assign retribution or blame, but to learn from incidents.</td>
</tr>
</tbody>
</table>
4.4 Health and Safety Management Framework

The Health and Safety Management Framework shown in Figure 9 incorporates Regulation 5 of the HSC’s Management of Health and Safety at Work⁴, and the POPMAR model outlined in HS(G)65: Successful Health and Safety Management². The POPMAR model provides best practice guidance on health and safety management; where as the Health and Safety at Work Regulations refer to the regulations that a company should adhere to in relation to health and safety management. These two approaches are complementary, and have thus been used as the basis for a suitable health and safety management framework that adheres to best practice guidance and regulations against which the toolkit was developed.

Table 2 illustrates how the framework has been used to ensure that the questions contained in the toolkit seek evidence concerning the fundamental principles of effective health and safety management.

Figure 9: The Health and Safety Management Framework stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Example of related question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and Organisation</td>
<td>These questions aim to ascertain what organisational provisions are available e.g. procedures, equipment, IT systems, documentation.</td>
<td>E.g. Is there an effective reporting system that can be used by employees to highlight safety concerns?</td>
</tr>
<tr>
<td>Control</td>
<td>These questions aim to establish if responsibilities have been defined and allocated to appropriate personnel.</td>
<td>E.g. Is there a designated person (or group of people) in place to monitor the reporting system and respond?</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>These questions aim to ascertain the success of the organisational procedures and systems in place, and the employee behaviour associated with them.</td>
<td>E.g. How many reports were made to management? What did they concern?</td>
</tr>
<tr>
<td>Information Flow</td>
<td>These questions aim to investigate if there are appropriate channels of communication in upwards, downwards and horizontal directions.</td>
<td>E.g. How is information regarding the safety concern communicated back to the respondent?</td>
</tr>
<tr>
<td>Monitoring and Reviewing</td>
<td>These questions aim to establish if the provisions in place are monitored and reviewed for effectiveness.</td>
<td>E.g. How is the success of the reporting system monitored and reviewed?</td>
</tr>
</tbody>
</table>

4.5 The Scenario Approach and Assessment Criteria

What are scenarios?
A scenario is an example of an event or process with which staff are likely to be familiar during company operations. The Question Set is structured into six scenario categories, which are listed in Figure 10.

Each scenario is designed to provide a realistic context for eliciting the required information regarding the company’s safety culture. The aim is for the scenario to act as a basis from which the interview can develop, in order to assess what actually happens, or how things are really done, within the company.

Section 4.6 provides further details about the context of each scenario, and gives examples of appropriate events that could be discussed during the interview.

How are the scenarios incorporated into the Question Set?
The Question Set booklet is structured around the six scenarios specified in Figure 10, with several pages dedicated to each scenario.

What are assessment criteria?
Safety culture should be measured against assessment criteria, which are key behaviours or company practices that are relevant to each of the five indicators. The assessment criteria provide information about how the five safety culture indicators should be evaluated, and what should be the focus of the interviews. For instance, the indicator ‘Attitude to Blame’ (see Figure 11) can be assessed in terms of five assessment criteria: Culture of Trust, Employee Awareness of Accountabilities, Fault Allocation Process, Disciplinary Process and Safety Accountabilities.

Each scenario tackles at least three or four assessment criteria. An overview of how the scenarios and assessment criteria relate to each other is provided in Figure 12. The assessment criteria are colour coded to show how they link to the five Safety Culture Indicators.

Figure 10: The six scenarios

- Safety Management
- Safety Concern
- Change Management
- Transfer of Information about Shift Duties
- Time-Critical and Degraded Situation
- Incident Management
A brief example of what each assessment criteria aims to assess is provided below:

- **Management Visibility** - All management should be committed to safety and should demonstrate this by conducting regular safety tours in all operational areas. Safety tours should provide the opportunity for all staff to discuss safety issues with management.

- **Employee Involvement in Safety Discussions** – Safety management methods should serve to provide an opportunity for all staff for open discussion of safety, to identify risks and mitigate against these risks.

- **Safety Culture/Climate Monitoring** - Management should monitor and review employee thoughts, opinions and feelings concerning the effectiveness of safety management, for example by conducting safety climate/culture surveys.

- **Internal Safety Concern Reporting System** - There should be clear and easy to follow procedures to report safety concerns. The reporting system or process should be accessible to all.

- **Approachable Management** - There should be opportunities for face-to-face discussion with management, and management should take responsibility for dealing with safety concerns once they have been identified.

- **Culture of Trust** - Operational staff regularly report concerns when it is appropriate to do so, and reports should be made that concern a range of issues.

- **Safety Concern Investigation and Mitigation Procedure** - The organisation should take specific steps to monitor known problems, identify new ones, detect trends over time and develop effective preventative measures.

- **Safety Concerns Log** – All concerns reported should be logged for reference, and efforts should be made by management to analyse repeated or similar concerns.

- **Employee Participation in the Change Process** - All personnel should be involved in any changes or new initiatives etc. that may affect their job roles.

- **Employee Training about the Change** – If required, the relevant individuals should be trained to the required level of competence before the change takes place.

- **Employee Motivation** – Employees should report that they feel involved and included in the change process.

- **Active Response to Feedback** – There should be strategies in place to communicate the outcomes of the consultation about the proposed change.

- **Safety Information Communication System** - Safety information (relating to both personal safety and major accident avoidance) should be communicated at the start of the shift or whenever there is a handover of duties.

- **Comprehension of Safety Information** – Staff should have all the information necessary to conduct their shift safely.

- **Employee Awareness of Accountabilities** - Personnel should be aware of, understand and adhere to personal accountabilities.

- **Safety Prioritised Behaviour** - There should be no pressure to maintain performance standards, potentially at the cost of safety.

- **Performance vs. Safety Management Priority** – There should be evidence that management stipulate clearly and repeatedly to operational staff that safety is the first priority.

- **Safety Accountability** – Management should take responsibility for the consequences when they prioritise performance over safety.

- **Incident Investigation System** - Incident investigation procedures should include root cause analysis and ensure that lessons are learnt. Improvement actions should be introduced throughout the organisation.

- **Fault Allocation Process** – Care should be taken not to apportion blame before the root cause analysis is complete. The purpose of the process should be to learn from the incident, rather than apportion blame.

- **Disciplinary Process** – Clear procedures for deciding upon the relevant disciplinary actions should be in place.

- **Feedback Systems** – There should be strategies in place for communicating the outcome of investigations, e.g. via briefings, newsletters etc.
### Figure 11: Safety Culture Indicators and Assessment Criteria

#### Leadership

There are explicit and continuous steps taken by management to ensure that safety goals, targets and issues are made clear to all personnel. The prioritisation given to safety is balanced with, or is greater than the prioritisation given to performance.

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Visibility</td>
</tr>
<tr>
<td>Performance vs. Safety Management Priority</td>
</tr>
<tr>
<td>Safety Prioritised Behaviour</td>
</tr>
</tbody>
</table>

#### Two-Way Communication

There are multiple channels for the discussion of safety matters, concerns and goals between and within levels of the organisation. The flow of information should be in an upwards direction.

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Safety Concern Reporting System</td>
</tr>
<tr>
<td>Approachable Management</td>
</tr>
<tr>
<td>Active Response to Feedback</td>
</tr>
<tr>
<td>Safety Information Communication System</td>
</tr>
<tr>
<td>Comprehension of Safety Information</td>
</tr>
<tr>
<td>Feedback Systems</td>
</tr>
</tbody>
</table>

#### Employee Involvement

Personnel from all levels of the organisation are involved in decision making, safety planning and providing ideas for improvement. Employee participation and feedback are actively sought.

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Involvement in Safety Discussions</td>
</tr>
<tr>
<td>Employee Motivation</td>
</tr>
<tr>
<td>Employee Participation in the Change Processes</td>
</tr>
<tr>
<td>Employee Training about the Change</td>
</tr>
</tbody>
</table>

#### Learning Culture

Steps are taken to monitor known problems, identify new ones, detect trends over time and develop effective preventative measures. Efforts are made to ensure that lessons are learnt from incidents, including the wider application to other situations. Intervention measures are introduced for all situations.

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Culture/Climate Monitoring</td>
</tr>
<tr>
<td>Safety Concern Investigation and Mitigation Procedure</td>
</tr>
<tr>
<td>Safety Concerns Log</td>
</tr>
<tr>
<td>Incident Investigation System</td>
</tr>
</tbody>
</table>

#### Attitude Towards Blame

The organisation accepts that the ultimate responsibility for incidents lies with the organisation, and investigations take full account of multi-causality. The purpose of investigations is not to assign retribution or blame, but to learn from incidents.

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture of Trust</td>
</tr>
<tr>
<td>Employee Awareness of Accountabilities</td>
</tr>
<tr>
<td>Fault Allocation Process</td>
</tr>
<tr>
<td>Disciplinary Process</td>
</tr>
<tr>
<td>Safety Accountability</td>
</tr>
</tbody>
</table>
Figure 12: Relationship between Scenarios, Assessment Criteria and Indicators

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Safety Management</td>
<td>- Management Visibility</td>
</tr>
<tr>
<td></td>
<td>- Employee Involvement in Safety Discussion</td>
</tr>
<tr>
<td></td>
<td>- Safety Culture/Climate Monitoring</td>
</tr>
<tr>
<td>B: Safety Concern</td>
<td>- Internal Safety Concern Reporting System</td>
</tr>
<tr>
<td></td>
<td>- Approachable Management</td>
</tr>
<tr>
<td></td>
<td>- Culture of Trust</td>
</tr>
<tr>
<td></td>
<td>- Safety Concern Investigation and Mitigation</td>
</tr>
<tr>
<td></td>
<td>- Safety Concerns Log</td>
</tr>
<tr>
<td>C: Employee Involvement in Changes</td>
<td>- Employee Participation in Change Processes</td>
</tr>
<tr>
<td></td>
<td>- Employee Training</td>
</tr>
<tr>
<td></td>
<td>- Employee Motivation</td>
</tr>
<tr>
<td></td>
<td>- Active Response to Feedback</td>
</tr>
<tr>
<td>D: Transfer of Information About Shift Duties</td>
<td>- Safety Information Communication System</td>
</tr>
<tr>
<td></td>
<td>- Comprehension of Safety Information</td>
</tr>
<tr>
<td></td>
<td>- Employee Awareness of Accountabilities</td>
</tr>
<tr>
<td>E: Time-Critical or Degraded Situation</td>
<td>- Performance vs. Safety Management Priority</td>
</tr>
<tr>
<td></td>
<td>- Safety Prioritised Behaviour</td>
</tr>
<tr>
<td></td>
<td>- Safety Accountability</td>
</tr>
<tr>
<td>F: Incident Management</td>
<td>- Incident Investigation System</td>
</tr>
<tr>
<td></td>
<td>- Fault Allocation Process</td>
</tr>
<tr>
<td></td>
<td>- Disciplinary Process</td>
</tr>
<tr>
<td></td>
<td>- Feedback Systems</td>
</tr>
</tbody>
</table>

**Safety Culture Indicators**

- **Leadership**
- **Two-Way Communication**
- **Learning Culture**
- **Employee Involvement**
- **Attitude to Blame**
4.6 Scenarios

During this section, each of the six scenarios will be discussed in more detail, and recommendations given regarding appropriate events that can discussed during the interview.

The interviewee will be questioned and asked to think about events that they are familiar with when they answer the questions. The discussion will then be based around the systems or processes that are in place.

The scenario examples should:
- Provide the means for eliciting the required information regarding the assessment criteria;
- Be a relatively significant event or occurrence,
- Be realistic and directly familiar to the interviewee.

Safety Management

Details
The Safety Management scenario considers the procedures and system in place for managing safety. Specifically it explores senior and middle management’s commitment to safety, and the operational employees’ understanding of safety and how it is managed.

This scenario assesses the following Assessment Criteria:

- Management Visibility
- Safety Culture/Climate Monitoring
- Employee Involvement in Safety Discussions
Safety Concern

Details
The Safety Concern scenario considers what happens when an employee has a concern about safety. The aim is to reveal information about the internal safety concern reporting methods, how they are used, and what happens when a concern is reported.

What are appropriate examples?
The interview should be based around an actual safety concern that has been reported, or a concern that the interviewee has had. Senior management may feel more comfortable with talking about the safety concern reporting system in general, rather than a specific example.

Safety concern examples that could be used during the interviews fall into four categories. These are listed in Table 3.

Table 3: Suitable Safety Issue concern examples that could be used during the interviews

<table>
<thead>
<tr>
<th>Type of Concern</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A technical or maintenance issue</td>
<td>• A relatively serious track or train defect</td>
</tr>
<tr>
<td></td>
<td>• Signal sighting issues</td>
</tr>
<tr>
<td></td>
<td>• Maintenance shortcomings</td>
</tr>
<tr>
<td>An issue with procedures, policies or rules</td>
<td>• Rostering issues e.g. staff shortages</td>
</tr>
<tr>
<td></td>
<td>• Inadequate training</td>
</tr>
<tr>
<td></td>
<td>• Lack of availability of procedures or rule books</td>
</tr>
<tr>
<td>A concern which may implicate another member of staff i.e. ‘get someone into trouble’.</td>
<td>• A colleague breaks a rule e.g. intoxication, not following procedures.</td>
</tr>
<tr>
<td></td>
<td>• Concerns regarding a colleague’s ability to speak or understand English.</td>
</tr>
<tr>
<td>A concern which is related to the behaviour of members of the public</td>
<td>• Trespass or vandalism</td>
</tr>
<tr>
<td></td>
<td>• Physical or verbal assault, or threat of assault</td>
</tr>
</tbody>
</table>
Change Management

Details
The Change Management scenario considers how changes are controlled and managed. The aim of this set of questions is to reveal information about how operational staff are consulted and involved in the change process. It is also to ensure that a structured and planned process to manage change exists.

What are appropriate examples?
The interview should be based around an actual major change project.

Table 4: Suitable change project examples that can be used during the interviews

<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Changes to new or used equipment    | • The introduction of new classes of traction, rolling stock or vehicles, which introduce a new type of risk  
                                       |   • The introduction of a new radio system which results in a change to working practices |
| Introduction of new operations      | • The introduction of passenger services by a duty holder who previously only operated freight services, or vice versa.  
                                       |   • The introduction of dangerous goods or container train operations where they have previously not been operated. |
| Organisational change.             | • Significant changes in resource levels of staff/contractors carrying out safety critical work. |
| Introduction of new risks          | • Changing the scope of operations, which introduces a type of risk which the duty holder does not currently manage. For example running trains on overhead lines or conductor rail where previously this was not the case. |

The inspector should view relevant change management documentation before, or during the inspection. Documents could include change reports, risk assessments, change management procedures, and any documents which outline how employees were consulted and involved during the change process (e.g. focus group agenda, briefing documents, human factors integration plan).
Transfer of Information About Shift Duties

Details
The Transfer of Information about Shift Duties scenario considers the procedures available for communicating safety critical information to and between operational staff. The aim is to examine the safety information communication system, and to investigate the extent to which employees are aware of relevant safety information and accountabilities.

This scenario assesses the following assessment criteria:

- Safety Information Communication System
- Employee Awareness of Accountabilities
- Comprehension of Safety Information

What are appropriate examples?
The interview should be based around a process whereby information must be transferred between employees of the same, or different levels of the organisation. The transfer of information should be critical for successful operations. This could include:

- The start of a new shift;
- During a shift handover;
- At the beginning of a process (e.g. maintenance of a new stretch of track).

If, during the interview, the interviewee is not aware of an appropriate case study that can be used, an hypothetical example can be used instead.
Time-Critical and Degraded Situation

Details
The Time-Critical and Degraded Situation scenario considers how safety is managed during a difficult, or degraded situation. The aim of this scenario is to reveal important information about the emphasis senior and middle management place on safety compared to performance, and whether this commitment to safety is reflected in operational staff behaviour during time-critical or degraded situations.

What are appropriate examples?
The interview should be based around a time-critical or degraded event that the interviewee has experienced. Figure three outlines examples of events that can be used during interviews.

Figure 13: Suitable degraded situation examples that could be used during the interviews
Incident Management

Details
The Incident Management scenario considers the chain of events following a major incident. The aim is to reveal information about how the company investigates the incident (in particular, how or if blame is allocated), and what the company does to ensure that lessons are learnt from the incident and appropriate mitigation measures introduced.

What are appropriate examples?
If possible the interview should be based around an actual incident that has taken place. Suitable incidents that could be used during the interviews are considered in Figure 14. These incidents types are intended to be used only as a guide. During the course of the inspection the inspector may come to learn of a more appropriate incident.

Figure 14: Suitable incident case studies that can be used during the interviews

The inspector should also read relevant investigation documentation. This would include documents such as the investigation report, details of the preventative measures taken, and updates to disciplinary procedures. Some of these documents can be collected during the inspection itself. However it would be advantageous to obtain some of the documents prior to the inspection to enable sufficient preparation to be undertaken.
4.7 The Question Set

The Question Set is structured into six scenarios. Each scenario section begins by providing information relating to the scenario, and how to introduce this to the interviewee. It also contains questions that could be used as a guide for the general structure of the interview. This will help to ensure that the relevant assessment criteria are being considered fully and effectively. A sample scenario section taken from the Question Set is provided in Figures 15 and 16.

Figure 15: Sample scenario taken from the Inspection toolkit Question Set

**Safety Concern**

This scenario should reveal important information about:
- What senior and middle management do when a safety concern is reported to them.
- What operational staff do when they have a safety concern.

**Setting the Scene:**

Think about what happens when someone has a safety concern.

The following questions may be useful:

- What systems are there in place for staff to report safety concerns e.g. confidential systems, approachable management etc?
  - Do staff know who to report safety concerns to?
  - Who do staff actually report safety concerns to?
  - Do staff find it easy to approach management about safety concerns?

- How effective are management in dealing with safety concerns?
  - Do management recognise the report as an issue that needs addressing promptly?
  - Do they deal effectively with organisational, as well as personal safety concerns?

- Do management accept that it is their responsibility to deal with the safety concern, once it has been reported?

- What do management do with the information obtained from the safety concern reports?
  - How often do the issues get resolved, always? occasionally? never?
  - Do staff feel action is appropriate and timely?

- How competent/effective are management in dealing with the safety concerns raised?

- Are staff provided with feedback about the outcome or progress of the reported concern?

- Is the effectiveness of the reporting system ever reviewed?

- Are the issues tracked from the time that they are raised through to closure?
  - How is this done?
  - Is there a budget allocated for the management of safety concerns?
Assessment Criteria

The Question Set describes the assessment criteria which are applicable to the scenario. These assessment criteria are related directly to the five safety culture indicators, which are colour coded for easy reference. Evidence points that are indicative of unsatisfactory and satisfactory practice are listed below each assessment criteria heading. A sample of the assessment criteria taken from the Question Set is provided in Figure 16.

Figure 16: Sample Scenario taken from the Inspection toolkit Question Set (continues from Figure 15).

**Safety Concern**

**Internal Safety Concern Reporting System**

**Satisfactory:**
- There are systems/procedures in place to report safety concerns.
- Clear and easy to follow procedures are in place for safety reporting.
- The system is accessible to all operational staff.
- The reporting system is structured.

**Unsatisfactory:**
- There is no system in place for reporting safety concerns.
- The system is time consuming, or there is inadequate time for reporting.
- Operational staff are not aware of, or encouraged to use the system.

**Approachable Management**

**Satisfactory:**
- There are opportunities for face-to-face discussion with management.
- Managers frequently ask if operational staff have any safety concerns.
- Operational staff report (when asked) that managers are approachable.
- Management take responsibility for dealing with safety concerns once they have been identified.

**Unsatisfactory:**
- Management fail to make decisions.
- The same issues are raised at each meeting, but are not resolved.
- Management have to be sought out, or are rarely available.
- Management resist taking responsibility for safety concerns when they are faced with them.
- Management are seen to be concerned about safety issues, however actions are just "shelved".

**Culture of Trust**

**Satisfactory:**
- Operational staff regularly report concerns when it is appropriate to do so.
- In general, reports are made concerning a range of issues.
- Management take active responsibility for dealing with safety concerns once they have been highlighted.

**Unsatisfactory:**
- Operational staff concerns are not reported to management for reasons such as:
  - Staff are concerned that the report would get someone else in trouble.
  - Staff perceive that nothing would get done.
  - Employees feel that they may be deemed responsible for causing the issue.
The Pocket Card

The Pocket Card (see Figure 17) provides an overview of the structure of the Safety Culture Inspection methodology in a pocket sized format. It is designed to be used by Inspectors as a memory prompt when the inspector chooses not to use the questions set.

The card is double sided. Side one of the card depicts the 22 assessment criteria organised according to the five safety culture indicators.

Side two depicts the same assessment criteria organised according to the six scenarios.

**Figure 17: The Pocket Card**

<table>
<thead>
<tr>
<th>Side One</th>
<th>Side Two</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Side A: Assessment Criteria organised according to Indicators</strong></td>
<td><strong>Side B: Assessment Criteria organised according to Scenarios</strong></td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td><strong>Safety Management</strong></td>
</tr>
<tr>
<td>- Management Visibility</td>
<td>- Management Visibility</td>
</tr>
<tr>
<td>- Performance vs. Safety Management Priority</td>
<td>- Employee involvement in Safety Discussions</td>
</tr>
<tr>
<td>- Safety Prioritised Behaviour</td>
<td>- Safety Culture/Climate Monitoring</td>
</tr>
<tr>
<td><strong>Two-Way Communication</strong></td>
<td><strong>Safety Concern</strong></td>
</tr>
<tr>
<td>- Internal Safety Concern Reporting System</td>
<td>- Internal Safety Concern Reporting System</td>
</tr>
<tr>
<td>- Approachable Management</td>
<td>- Approachable Management</td>
</tr>
<tr>
<td>- Active Response to Feedback</td>
<td>- Culture of Trust</td>
</tr>
<tr>
<td>- Safety Information Communication System</td>
<td>- Safety Concern Investigation and Mitigation Procedure</td>
</tr>
<tr>
<td>- Comprehension of Safety Information</td>
<td>- Safety Concerns Log</td>
</tr>
<tr>
<td>- Feedback Systems</td>
<td><strong>Change Management</strong></td>
</tr>
<tr>
<td><strong>Employee Involvement</strong></td>
<td>- Employee Participation in Change Processes</td>
</tr>
<tr>
<td>- Employee Involvement in Safety Discussions</td>
<td>- Employee Training about the Change</td>
</tr>
<tr>
<td>- Employee Participation in Change Processes</td>
<td>- Employee Motivation</td>
</tr>
<tr>
<td>- Employee Training about the Change</td>
<td>- Active Response to Feedback</td>
</tr>
<tr>
<td>- Employee Motivation</td>
<td><strong>Transfer of Information About Shift Duties</strong></td>
</tr>
<tr>
<td><strong>Learning Culture</strong></td>
<td>- Safety Information Communication System</td>
</tr>
<tr>
<td>- Safety Culture/Climate Monitoring</td>
<td>- Comprehension of Safety Information</td>
</tr>
<tr>
<td>- Safety Concern Investigation and Mitigation Procedure</td>
<td>- Employee Awareness of Accountabilities</td>
</tr>
<tr>
<td>- Safety Concerns Log</td>
<td><strong>Time-Critical or Degraded Situation</strong></td>
</tr>
<tr>
<td>- Incident Investigation System</td>
<td>- Safety Prioritised Behaviour</td>
</tr>
<tr>
<td><strong>Attitude Towards Blame</strong></td>
<td>- Performance vs. Safety Management Priority</td>
</tr>
<tr>
<td>- Culture of Trust</td>
<td>- Safety Accountability</td>
</tr>
<tr>
<td>- Employee Awareness of Accountabilities</td>
<td><strong>Incident Management</strong></td>
</tr>
<tr>
<td>- Fault Allocation Process</td>
<td>- Incident Investigation System</td>
</tr>
<tr>
<td>- Disciplinary Process</td>
<td>- Fault Allocation Process</td>
</tr>
<tr>
<td>- Safety Accountability</td>
<td>- Disciplinary Process</td>
</tr>
<tr>
<td></td>
<td>- Feedback Systems</td>
</tr>
</tbody>
</table>

- K: Leadership
- E: Two-Way Communication
- Y: Employee Involvement
- AV: Learning Culture
- AX: Attitude to Blame
The Overview Diagram

The overview diagram (see Figure 18) summarises the principles of best practice in relation to each of the five indicators. This diagram provides more detailed information compared to the pocket card, and provides the inspectors with an alternative option for use during inspections.

The diagram is presented on an A3 page and is colour coded to be consistent with the other components of the toolkit. The diagram is structured as a matrix to demonstrate the relationship between the following underlying features of the toolkit:

- The health and safety management framework.
- The six scenarios.
- The assessment criteria for each of the six scenarios.
- A brief description of the type of evidence that will be required to satisfy the assessment criteria.
Figure 18: The Overview Diagram

HMRI SAFETY CULTURE TOOLKIT OVERVIEW DIAGRAM

Health and Safety Management Framework

Planning and Organisation (What systems are in place?)

- Control (Who is responsible?)
- Effectiveness (How is it done in practice?)
- Information Flow (What happens to the information gained?)
- Monitoring and Reviewing (Are outcomes measured and actions taken?)

A: Safety Management

- Management Visibility
- Safety Culture/Climate Monitoring
- Employee Involvement in Safety Discussions

B: Safety Concern

- Internal Safety Concern Reporting System
- Approachable Management
- Culture of Trust
- Safety Concern Investigation and Mitigation Procedure
- Safety Concerns Log

C: Change Management

- Employee Participation in Change Process
- Employee Training about the Change
- Employee Motivation
- Active Response to Feedback

D: Transfer of Information about Shift Duties

- Safety Information
- Communication System
- Employee Awareness of Accountabilities
- Comprehension of Safety Information

E: Time-Critical and Degraded Situation

- Safety Prioritised Behaviour
- Performance vs. Safety Management Priority
- Safety Accountability

F: Incident Management

- Incident Investigation System
- Fault Allocation Process
- Disciplinary Process
- Feedback Systems

Key to 5 Safety Culture Indicators:
- Leadership
- Two-Way Communication
- Employee Involvement
- Learning Culture
- Blame Culture
4.8 Interview Principles

Principle 1:
Focus on five main elements of safety culture
The scope of the Safety Culture inspection was to concentrate on the five safety culture indicators, (see Figure 8) which are specified in Lord Cullen’s inquiry. A recording sheet is provided to note or organise key issues against each of the indicators (see Figure 19).

Principle 2:
Challenge Responses
Challenge all responses. The underlying reason for a particular response should be identified. A key question should be to ask why an individual responds in a certain way. The wide-ranging picture of the organisation as a whole should be built up, and the evaluation based on a wide sample of responses from many departments, individuals and locations. The inspector should identify and recognise the occurrence of sub-cultures, which can be formed as a result of a local factor (e.g. the personality of an individual manager), rather than larger scale organisational factors.

Principle 3:
Standardisation of the Toolkit
The question set offers a structured methodology that can be used during walkthroughs and talkthroughs. It is based around six scenarios and 22 assessment criteria. This helps to ensure that the assessment is standardised (a) between respondents, (b) between companies, and (c) between inspectors.
### Leadership
- Management Visibility
- Performance vs. Safety Management Priority
- Safety Prioritised Behaviour

### Two-Way Communication
- Internal Safety Concern Reporting System
- Approachable Management
- Active Response to Feedback
- Safety Information Communication System
- Comprehension of Safety Information
- Feedback Systems

### Employee Involvement
- Employee Involvement in Safety Discussions
- Employee Participation in the Change Process
- Employee Training about the Change
- Employee Motivation

### Learning Culture
- Safety culture/climate monitoring
- Safety Concern Investigation and Mitigation
- Safety Concerns Log
- Incident Investigation System

### Attitude Towards Blame
- Culture of Trust
- Employee Awareness of Accountabilities
- Fault Allocation Process
- Disciplinary Process
- Safety Accountability
5 Reporting

Key Topics:
- Critical evaluation
- Inspection reports
5.1 Evaluation

The toolkit is specifically interested in the safety-related behaviour of employees, i.e. how things are done around here, as well as the quality of systems and procedures in place. The performance of the organisation should be appraised critically against the satisfactory and unsatisfactory evidence points associated with each assessment criteria (see Appendix A for a detail overview). Consideration should be given to:

• The standard of other industry organisations,
• The associated risk consequence,
• The associated lost opportunities.

The inspector should reach a professional judgement about whether he or she is satisfied that the organisation fulfils each assessment criteria within the safety culture inspection.

An inspector’s recording sheet is provided in Figure 19. This recording sheet can be used by the inspector as a facility for taking notes during the discussions, or as a basis for organising assessment information post-inspection.

The Inspector’s professional judgement should be based on information gathered during the inspection, and previous visits to the organisation. Sources include:

• Employee responses from walkthroughs and talkthroughs,
• Analysis of documentation (e.g. procedures and job profiles),
• The inspector’s general knowledge of the organisation as it has developed over time.

5.2 Inspection Report

An inspection report should be produced that details the principal findings of the inspection in relation to each of the five indicators. The report should highlight both the positive and negative evidence identified during the inspection, and provide criteria for improvement.

A template structure for the report is provided in Figure 20, and an example answer provided in Figure 21.
## SAFETY CULTURE INSPECTION REPORT

<table>
<thead>
<tr>
<th>Company:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Date of Visit(s):</td>
</tr>
<tr>
<td>Site Inspector:</td>
</tr>
</tbody>
</table>

### Purpose of Visit

### Background

### Company Personnel Seen
## Findings of the Inspection

<table>
<thead>
<tr>
<th>Method</th>
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<tr>
<td>Safety Leadership</td>
</tr>
<tr>
<td>Two-Way Communication</td>
</tr>
<tr>
<td>Employee Involvement</td>
</tr>
</tbody>
</table>
Existence of a Learning Organisation

Attitude Towards Blame

Conclusions

Summary of Recommendations
SAFETY CULTURE INSPECTION REPORT

Company: Welsh County Trains
Address: 1 Station Road, Thomaston, Wales
Date of Visit(s): 21st and 22nd February 2005
Site Inspector: Irene Seymour

Purpose of Visit

The purpose of the inspection was to assess the safety culture of Welsh County Trains using the HMRI Safety Culture Inspection Toolkit. Stemming from the Ladbroke Grove Inquiry Report Part 2 (2001), five indicators of safety culture were focused on:

- Safety Leadership;
- Two-Way Communication;
- Employee Involvement;
- Existence of a Learning Culture;
- Attitude towards Blame.

Background

Welsh County Trains provides a freight rail service, and is based in North Wales. Every week, 1,000 rail freight services are operated by Welsh County Trains across many parts of Wales and Western England, powered by nearly 80 locomotives.

Welsh County Trains have agreed to the inspection taking place, following conversations between Irene Seymour, HMRI inspector, and Jason Steam, Head of Safety, Quality and the Environment at Welsh County Trains. This report summarises the findings from the inspection.

Company Personnel Seen

Welsh County Trains Headquarters: Station Road
- Head of Safety, Quality and the Environment
- Incident Investigation Manager
- Safety and Risk Manager

Morgan Depot
- 3x electrical fitter
- 5x drivers
- Depot manager

Dinwiddy Street Depot
- 3x health and safety representative
- 4x team leader
- Depot manager
- 5x fleet engineer
The visit was conducted over a two-day period at three different locations. During this time, interviews were conducted with a sample of twenty-five employees drawn from senior and middle management, and frontline staff. This number represents a relatively small sample of the total number of employees at Welsh County Trains.

Each participating member of Welsh County Trains staff was interviewed on an individual basis and each discussion began by the interviewee being asked about his/her job role. Efforts were also made to verify verbal information by requesting documentation, such as the safety case, incidents reports, change management documentation etc. The question set comprised six sections, each containing a different scenario upon which the questions were based:

- Safety Management
- Safety Concern
- Change Management
- Transfer of Information about Shift Duties
- Time-Critical and Degraded Situation
- Incident Management

Each member of Welsh County Trains staff was asked questions from sections relevant to his/her role and the responses were recorded. Evidence of documentation referred to during the discussions was requested, and provided.

**Findings of the Inspection**

**Safety Leadership**

The management of Welsh County Trains can be commended for their dedication to safety, and have already implemented many successful initiatives to demonstrate this commitment:

- There is positive commitment from all management levels to conduct safety tours within Welsh County Trains. All senior and middle management are required to conduct safety tours as part of their performance objectives, which are stated in their roles and responsibilities statements. For example, the Chief Executive Officer of Welsh County Trains is required to conduct 12 annual safety tours across the company. Management record any observations and discussions in their personal “Safety Tour Log”.

- Welsh County Trains can be commended on the efforts taken to establish and broadcast with conviction the message that the preservation of safety standards is always the priority over performance targets. Articles in the weekly Safety Briefing Newsletter, the regular occurrence of safety days, and direct management presence in frontline areas are strategies which contribute to the effective expression of this message.

- Frontline staff reported feeling prepared and confident about handling difficult, time pressured situations, and do not report feeling pressured to ever compromise safety.

- There are many positive indicators for effective middle management leadership. Welsh County Trains managers appear to have successfully instilled the message throughout the organisation that there is an open door policy on safety. Frontline staff report that they would feel confident about approaching managers to discuss safety issues and concerns.

**Issue One:**

**Safety Priority in Relation to Shift Times** - Drivers reported that they are often asked by management to work over the recommended 12 hour shift duration. Although drivers have the right to refuse overtime, it is perceived that management would not take too kindly to this. It could be suggested that indirect pressure is being placed upon drivers to practice unsafe working. In addition, it was also reported that this pressure is usually exerted from middle management rather than senior management. Management need to ensure that recommendations with regards to working hours are being adhered to, and consequently safety is always being prioritised.
Two-Way Communication

The steps taken by Welsh County Trains to promote two-way communication are discussed below:

• Frontline staff indicated that they have a positive attitude towards approaching some management. Middle management such as Depot Managers are usually in frontline areas, and are often approached by staff. This provides useful evidence of the management’s open-door policy, and a positive step towards two-way communication.

• There is extensive awareness within the company that the safety magazine includes a suggestion box page allowing staff to communicate safety related issues back to management.

• During a shift handover, it was reported by drivers that vital information is communicated verbally, whereas depot staff communicate shift information using a logbook. It was observed at the depot that team leaders record shift details on an electronic system, and an overlap in shift duties provides additional time for shift information to be relayed verbally.

Issue Two:

Reluctance to Report Safety Concerns- It was reported that there is the perception by some staff that if they report a concern it will not be dealt with. No feedback is provided to staff regarding any action that is taken; therefore, there is reluctance to report concerns. It was also openly reported by some middle management that they do not encourage staff to report minor incidents due to the amount of paper work that would need to be conducted as a consequence. It is recommended that management should recognise the limitations of this negative perception, and that they should provide widespread acknowledgement of the importance of reporting safety concerns. They should also respond to action concerns in a timely manner.

Employee Involvement

Employee involvement in safety is a necessary part of ensuring that management receive all relevant safety performance information and that user needs are taken into account during the development of new technology and new systems. The Health and Safety Executive document HSG48 maintains that staff at different levels of the organisation should be involved in identifying hazards, suggesting control measures and providing feedback. This would lead to a perception of greater “ownership” and involvement.

• Generally, Welsh County Trains staff appear to be fully aware of their safety responsibilities and feel empowered and positive towards their personal safety role. There is involvement of staff from all levels of the organisation in safety briefings and safety days.

• There is active involvement of health and safety representatives as well as union representatives when decisions are made that will affect operational staff. This is also verified in the safety case section relating to change management.

• The inspection looked specifically at employee involvement in the implementation of change projects, for instance the development of new technology or systems of working. During the change management programme sampled, affected parties were notified of the changes and invited to comment. Welsh County Trains uses a variety of channels to communicate this information, including weekly notices, briefings and email.

Issue Five: Consultation with Employees at all Stages of the Change Programme - Whilst affected parties were consulted regarding the proposed change, Welsh County Trains would also benefit from the involvement of affected employees and subject matter experts at every step of the change management programme, including design, development, evaluation and trials.

Issue Six: Safety Validation Process – Welsh County Trains should consider reassessing the process of approving and validating alterations. Concerns are raised that the safety validation process is not always complete prior to the change actually being implemented. It is recommended that Welsh County Trains should ensure that the certificate of safety validation is complete prior to any change taking place.
Existence of a Learning Organisation

Welsh County Trains personnel highlighted that a variety of methods are used to learn lessons from others, or from experiences internal to the organisation.

National Incident Reports are used to monitor incidents that may have implications for Welsh County Trains. For example, if there is an incident/safety issue raised by another freight operator, then the organisation can learn from this and respond promptly to investigate the issue internally.

Daily conference calls are held between depot managers to discuss any maintenance issues, safety issues etc. This provides a useful mechanism to learn.

It was highlighted by management that feedback is provided to relevant personnel about the outcomes, and recommendations of incident investigations. The extent to which this actually occurs at an operational level could not be confirmed.

An Aptitude Leadership System has recently been implemented to assist in the monitoring and scheduling of competency assessments, for all grades and skill groups. This system is available company wide and can be used to identify specific training requirements for all employees and to produce training reports.

Issue Six: Safety Culture/Climate Surveys - It was reported that safety culture/climate surveys have not been conducted. It is obvious that there are a number of organisational changes that are taking place within the different depots. It is recommended that management should look at the advantages of conducting regular organisation-wide safety climate/culture surveys in order to gain a more comprehensive understanding of the culture/climate at Welsh County Trains.

Issue Seven: Feedback about Safety Concerns/Incidents - Staff indicated that they do not receive feedback about safety concerns that have been reported. It was reported that feedback about incident investigations is only provided to those concerned in the incident, although on most occasions this only happens if the member of staff asks to receive it. It was however reported by one individual that following more serious incidents management have been known to take positive and timely action.

Attitude Towards Blame

An observation highlighted by the Ladbroke Grove Inquiry is the prevalence of a blame culture in some areas of the rail industry. A blame culture inhibits reporting, has a negative effect on staff motivation, prevents the thorough examination of incidents and is thus detrimental to learning.

Welsh County Trains have taken many positive steps towards establishing a fair culture that is supportive and understanding to staff. There are policies and procedures in place to ensure that during an investigation process, the wellbeing of involved individuals is considered.

Frontline staff generally tended to report that the system of assigning blame was fair, suggesting that the belief that justice will usually be dispensed is shared within the organisation.

Senior management stated that all accidents are reported formally. Forms are available on the company intranet and are recorded in a company log. The line manager of the individual concerned is responsible for investigating the cause of the accident.

Disciplinary procedures are clearly stated in the employee handbook.

Issue Nine: Employee Wellbeing During Incident Investigation – Whilst Welsh County Trains do generally demonstrate considerable care and concern towards its employees, the organisation should however consider reassessing the investigation process as this may make employees feel that they are perceived as guilty until proven innocent. There is the possibility that this process will put the employee through psychological distress and embarrassment, despite the fact that the cause of the incident could be a variety of factors.

Conclusions

Welsh County Trains can be commended for implementing several effective safety initiatives, which has resulted in significant progress in the development of a positive safety culture.

There are several issues that remain a concern within Welsh Country Trains, which are summarised in the next section.
Summary of Recommendations

Based upon the outcome of the inspection, consideration should be given to continuing improvement of the following:

Issue One  
Safety Priority in Relation to Shift Times  
Management should adhere to recommendations with regards to the drivers’ working hours, in order that safety is prioritised.

Issue Two  
Reluctance to Report Safety Concerns  
All management should support and disseminate widespread acknowledgement of the importance of safety concerns. They should also respond to action concerns in a timely manner.

Issue Three  
Consultation with Employees at all Stages of the Change Programme  
Clear safety benefits will arise from including employees and subject matter experts in all stages of the management process.

Issue Four  
Safety Validation Process Completion  
The organisation should ensure that the safety validation process is completed prior to the change being implemented.

Issue Five  
Safety Culture/Climate Surveys  
Regular organisation-wide safety climate/culture surveys will provide opportunities to gain a more comprehensive understanding of the culture/climate.

Issue Six  
Feedback about Safety Concerns/Incidents  
Good practice guidance highlights that strategies should be in place for communicating the outcomes of a safety concern/incident. This will allow for greater learning to occur within the organisation.

Issue Seven  
Employee Wellbeing during Incident Investigation  
The incident investigation process should be assessed to ensure that it is impartial and without prejudices.
6 Monitoring and Reviewing

Key Topics:
- Safety culture development plan,
- Human factors expertise team.
6.1 Overview

Following the production of the inspection report, the rail company, assisted by the inspector, should create a safety culture development plan outlining a strategy for the improvement of safety culture. The legal requirements for these companies in relation to health and safety should also be cross-referenced to produce this plan, these can be found in section 2.3.

The development plan should provide a clear direction forward, as agreed by both the inspector and the organisation. The safety culture development plan should include:

- Clear, measurable proposals for achieving safety culture objectives,
- Details of timescales, resources and allocation or responsibility for when improvements can be achieved;
- Details of how the plan will be implemented.

The production of the safety culture development plan, and the subsequent progress against the objectives in the plan, should be monitored by the inspector during liaison meetings.

If the inspector is content with the response then the need for monitoring and reviewing is reduced. However if there are serious shortcomings the inspector should consider appropriate actions, as guided by the Enforcement Management Model. The inspector should also contact the Human Factors National Expertise Team to discuss the appropriate actions.
7 Conclusion

This document is intended to be used by HMRI inspectors for the undertaking of safety culture inspections in UK Rail Industry organisations. It outlines the procedure and methodology for conducting a successful and objective assessment, covering planning, assessing, reporting and monitoring stages.

The Inspectors’ Guide should be used in conjunction with the following documents:
- Safety Culture Inspection Question Set,
- Safety Culture Inspection pocket card,
- Safety Culture Inspection overview diagram.
Appendix A

Detailed Evidence Points

Appendix A provides detailed information concerning the positive and negative evidence points, based upon those provided in the toolkit.

This information should be used by the inspector to make a professional judgement about the performance of the organisation.
Safety Management

Key Issue: “The more management focus on the delivery of safety as an integral part of the business, the more likely they are to succeed... Culture is a reflection of the overall attitude of every component of management within a company.” The Ladbroke Rail Inquiry, Part 2 Report, pp.60-61.

Evidence Points  ✓ = Satisfactory  ✗ = Unsatisfactory

Main Reference Source:

(1) Management Visibility

- There are systems in place to manage safety.
- Regular safety tours of operational areas are conducted.
- The safety management process is not formalised and entered into the managers’ schedules.
- Safety management systems such as safety tours are used to identify risks and mitigate them.
- There is clear evidence that action lists are developed, signed and tracked.
- Safety issues are not sought out actively by management.
- Safety issues identified by management are not dealt with, but are just "filed".
- Management give high visibility to improvement programmes.
- Safety management systems serve as a monitoring, auditing and checking function only.


Good practice guidance from a range of literature.

Arthur D Little, Managing Safety Through Culture, Learning Package.


(2) Safety Culture / Climate Monitoring

- There are opportunities for operational staff and management to communicate with each other.
- The survey is completed by a representative proportion of the company.
- There is a dwell time between surveys of 18 months to 2 years.
- No, or limited effort, is made to assess safety perceptions of employees within the company.
- Recipients of the safety culture/climate survey know why the survey is being done and how the results will be used.
- Actions are implemented as soon as possible after completion of the survey, and are fed back to the surveyed group as rapidly as possible.
- Issues or areas of weakness are discussed with the respondents to clarify details.
- Results are not fed back to the surveyed group in an appropriate manner.
- Management’s vision of safety is not shared by all staff, and vice versa.
- The survey results are produced in an action plan to address the most serious weaknesses.
- No actions or priorities result from the survey.


HSE. Railway Safety Case Assessment Criteria (Section 5).

HSE. Railway Safety Case Assessment Criteria (Section 5).


Good practice guidance from a range of literature.

The organisation should demonstrate that there is a system in place for systematically measuring employee attitudes and behaviours surrounding safety. Specifically, management should consider the advantages associated with conducting an organisation-wide safety climate survey at periodic intervals (every 18 months – 2 years) in order to gain a more comprehensive understanding of the culture/climate.

“During 2000/01, Railway Group members will undertake company-wide safety climate surveys followed by the introduction of appropriate improvement initiatives” (Objective 5d. Railway Group Safety Plan, 2000/01).

The HSE Safety Case Assessment Criteria promotes the use of behavioural and staff attitude surveys as part of the systematic examination of safety culture.

Providing feedback about activities that staff are involved in is a good precursor to a positive culture. This feedback should be timely and comprehensive in order to achieve a positive culture. This aids learning and encourages staff to take responsibility for ensuring that any risks are reduced.

Feedback can be verbal or written, and include briefing meetings, written summaries, or newsletters.

This action plans needs to be taken seriously and adhered to.

Monitoring is only effective if the results are used to initiate remedial action, including where appropriate organisational or policy changes. Arrangements should be in place covering how and where records are kept, how data will be analysed, how data is referred to relevant managers, and how recommendations and actions are tracked (HSE Safety Case Assessment Criteria, Section 5).
### Safety Management

(Continued…)

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Main Reference Source:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Employees are invited to comment on decisions about their job roles that may affect their safety or the safety of others.</td>
<td>HSE, (1999). <em>The Human Factors Guidance Note for COMAH Safety Report Assessors.</em></td>
</tr>
<tr>
<td>✓ Safety management methods serve to provide an opportunity to all staff for open discussion of safety, to identify risks and mitigate against these risks.</td>
<td>HSCER (1996) <em>A guide to the Health and Safety (Consultation with Employees) Regulations.</em></td>
</tr>
</tbody>
</table>

**Details**

Employees should be involved in the discussion of health and safety. This will allow employers to take account of employee opinions before making any decisions. There should be evidence that responses are used to identify and measure safety risks, and to plan health and safety training.

The organisation should demonstrate that safety discussions between management and employees occur in a systematic manner, either through safety representatives, or with employees directly.

The organisation should ensure that the content of the consultation is not to be used in disciplinary processes.

Elected representatives responsible for safety discussions should receive adequate training, time and facilities to carry out these roles.

Whilst safety management systems have an important role in monitoring safety standards, they also provide an opportunity for the two-way discussion of safety with staff members. The manager should ask a lot of questions, and the staff should be encouraged to comment on safety concerns.

The approach should be informal, rather than being a ‘state visit’.

Observed persons should not see the manager taking notes.
The refusal to work system is used and respected by management. Managers take active responsibility to deal with safety concerns once they have been highlighted. The refusal to work system is used and respected by management.

Evidence Points  ✓ = Satisfactory  ✗ = Unsatisfactory

Main Reference Source

1. Internal Safety Concern Reporting System

- There are systems/procedures in place to report safety concerns.
- The reporting system is structured.
- There is no system in place for reporting safety concerns.
- Clear and easy to follow procedures are in place for safety reporting.
- The system is time consuming, or there is inadequate time for reporting.
- The system is accessible to all operational staff.
- Operational staff are not aware of, or encouraged to use the system.


2. Approachable Management

- There are opportunities for face-to-face discussion with management.
- Management have to be sought out or are rarely available
- Operational staff report (when asked) that management are approachable.
- Managers frequently ask if operational staff have any safety concerns.
- Management take responsibility for dealing with safety concerns once they have been identified.
- Management take an ‘it’s not my problem’ or ‘live with it’ attitude
- Management are resistant to taking responsibility for safety concerns that they are faced with.
- Management are seen to be concerned about safety issues, however actions are just “shelved”.
- Management fail to make decisions


3. Culture of Trust

- Operational staff regularly report concerns, when it is appropriate to do so.
- In general, reports are made concerning a range of issues.
- Operational staff concerns are not reported to management for reasons such as:
  - Staff are concerned that the report would get someone else into trouble.
  - Staff perceive that nothing would get done.
  - Employees feel that they may be deemed responsible for causing the issue.
- Management take active responsibility to deal with safety concerns once they have been highlighted
- The refusal to work system is used and respected by management

Good practice guidance from a range of literature


RSSB Guidance

(1) Culture of Trust

- The organisation should have an informal ‘open door policy’, whereby frequent opportunities are provided for employees to speak to management about safety concerns (e.g. morning briefings, management safety tours and walkabouts). There must be some cue to the behaviour of reporting. Managers should frequently invite employees to give comments or report concerns. The employees should be aware of where they can find a more senior member of staff.

The organisation should ensure that there is a positive reaction to safety concern reports. Employees making reports should be thanked, and recognition given.

The manager to whom the concern was reported should take responsibility for investigating the safety concern, or, if this is not possible, pass this responsibility to a more appropriate member of staff.

The employee who made the report should be kept informed of any efforts made to investigate and mitigate the concern.

The employee should be informed of the outcome of the report. If the concern is not considered appropriate to investigate further, this should be explained to the employee.

Appendix

- Onerous and time-consuming reporting procedures have been found to affect the level of incident reporting. Employees should be encouraged to use the reporting system to ‘challenge’ safety.

- Provision is made for all staff to make reports with ease, for instance those without computer access should still be able to make a report. Staff are aware of and understand the reporting procedures, which are jargon free.

- The organisation should have an informal ‘open door policy’, whereby frequent opportunities are provided for employees to speak to management about safety concerns (e.g. morning briefings, management safety tours and walkabouts). There must be some cue to the behaviour of reporting. Managers should frequently invite employees to give comments or report concerns. The employees should be aware of where they can find a more senior member of staff.

- The organisation should ensure that there is a positive reaction to safety concern reports. Employees making reports should be thanked, and recognition given.

- The manager to whom the concern was reported should take responsibility for investigating the safety concern, or, if this is not possible, pass this responsibility to a more appropriate member of staff.

- The employee who made the report should be kept informed of any efforts made to investigate and mitigate the concern.

- The employee should be informed of the outcome of the report. If the concern is not considered appropriate to investigate further, this should be explained to the employee.

Management should communicate clearly that there are no adverse effects to reporting a concern or incident.

Management communicate clearly to all staff that it is fundamentally important to report concerns.

The organisation should monitor safety reporting figures to measure the extent of the ‘reporting’ culture. Issues are dealt with promptly so that staff can see the improvements that have resulted from their commitment.

A range of issues (including incidents, near misses and safety risks) should be reported and not just ‘hot topics’.

Good practice guidance recommends that management have a strategic objective to ensure that they take active responsibility for acting on safety concerns that have been reported. There should be evidence for a ‘just’ reporting culture that is understood by the workforce.

The organisation should demonstrate that all safety-critical staff have the right to refuse to work if they think the work conditions are not safe; doing this will not affect their career progression.
### Safety Concerns Log

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ All concerns are logged for reference by all staff.</td>
<td>HSC: Safety Case Assessment Criteria (Section 4)</td>
</tr>
<tr>
<td>✗ The is no log for reported concerns.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✓ The information is available to all.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✗ The log is not monitored or updated on a regular basis.</td>
<td></td>
</tr>
</tbody>
</table>

### Details

- The organisation should provide evidence that appropriate risk assessments are conducted following the reporting of a safety concern. Concerns should be prioritised and a proactive and systematic approach taken for their investigation.
- The organisation should follow the approach to risk assessment as documented in the Railways (Safety Case) Regulations 2000, including 2003 amendments.
- There is clear evidence that action plans are developed or that visible action is being undertaken to resolve the concern in both a timely and effective manner. The course of action should be communicated back to the person who reported the concern.
- The organisation should follow the approach to risk assessment as documented in the Railways (Safety Case) Regulations 2000, including 2003 amendments.
- There is positive evidence to suggest that feedback is given both to those who report the issue and to others who may benefit from the learning opportunity.
- The organisation should be able to demonstrate that they have a system or procedure for monitoring the progress made to resolve the safety concern. A tracking system should ensure that all progress is traceable.
- All concerns should be logged, and clear efforts made to analyse any trends and mitigate any issues. The organisation should provide evidence that the re-occurrence of similar issues can be detected and analysed.
- Employees within the company should be aware of the system and be able to access it if required. If this is not appropriate, employees should receive regular updates (e.g., CIRAS reports). Making this information available company-wide enhances employee understanding of where risks lie and how to prevent the concerns from occurring again. It also heightens the profile of the system.
## Change Management

**Key Issue**  
“There can be no doubt that, if the rail industry is to reach the level of performance required, highly motivated staff at all levels will be required…Good communications…are not about telling people what they should do; rather, they are concerned with involvement and participation.”  
Ladbroke Grove Inquiry Part 2, pp. 66 and 69

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Key personnel within the change management team ensure that the end user is consulted.</td>
<td>HSE, 2000. Improving Maintenance: a guide to reducing error. HFGR.</td>
</tr>
<tr>
<td>✗ Management fail to recognise the limitations of not involving affected staff in the change process in an effective and timely manner.</td>
<td></td>
</tr>
<tr>
<td>✓ Employees are actively encouraged to participate in all stages of the change process.</td>
<td>HSCER (1996) A guide to the Health and Safety (Consultation with Employees) Regulations.</td>
</tr>
<tr>
<td>✗ End-users contribute only at the end of the design process.</td>
<td></td>
</tr>
<tr>
<td>✓ Discussion groups and briefings etc. are used to inform affected individuals.</td>
<td>HSC (2002) Consulting Employees on Health and Safety: A guide to the law.</td>
</tr>
<tr>
<td>✗ Affected parties are not kept sufficiently informed.</td>
<td></td>
</tr>
<tr>
<td>✗ Affected parties are not informed about the change until it has been implemented.</td>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>✓ End-users are consulted and have the opportunity to contribute to decisions through activities such as workshops and user trials.</td>
<td></td>
</tr>
<tr>
<td>✗ There is a lack of evidence that the information gained from workshops, discussion forums etc. is used.</td>
<td></td>
</tr>
<tr>
<td>✓ There is a structured and planned process to manage change.</td>
<td>HSC: Safety Case Assessment Criteria.</td>
</tr>
<tr>
<td>✓ The procedures to manage change are usable, and are easily applied.</td>
<td></td>
</tr>
</tbody>
</table>

- **Details**

There should be evidence that a ‘user acceptance manager’, or a similar role, is appointed.
- The effects of the proposed changes on the stress levels and morale of staff should be considered. Positive indicators include the provision of clear, up-to-date information about the change, minimising the period of uncertainty, involving individuals in key decisions, providing information about the change.
- Good practice guidance from a range of literature. Consultation should cover: any change which may substantially affect health and safety at work; the health and safety consequences of introducing new technology; the safety implications of new procedures, equipment or ways of working.
- The organisation should be able to demonstrate how health and safety risks to as low as reasonable practical. The organisation should be able to demonstrate how health and safety measures are identified, and how changes are validated, both before and after the change process.
- The organisation should demonstrate how they assess the skills and abilities of the current workforce against post-change skill requirements. Evidence of a documented and structured training planning process should be provided.
- A key member(s) of the human resources or change management teams should be responsible for the training needs analysis and training planning.
- The organisation should demonstrate how they assess the skills and abilities of the current workforce against post-change skill requirements. Evidence of a documented and structured training planning process should be provided.
- A key member(s) of the human resources or change management teams should be responsible for the training needs analysis and training planning.
- Best practice is for the safety message to be integrated into all aspects of the training rather than keeping safety as an entirely separate subject. Good training increases employees’ attitudes to ‘new initiatives’.
- Training should be tailored to the needs of the audience (e.g. matching language style to the preferences of the trainees).
- Training should be tailored to the needs of the audience to ensure maximum understanding and uptake (e.g. matching language style to the preferences of the trainees).
- “Consultation with employees must be carried out on matters to do with their health and safety at work, including the planning of health and safety training” (HSC 2000). Good consultation methods could be the provision of feedback forms and the open invitation to comment.
- The organisation should demonstrate that written records of training history are kept in an appropriate manner and location. Good practice would be to allow the employee access to these records to increase individual involvement and responsibility for their own skill development.

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A: Detailed Evidence Points

<table>
<thead>
<tr>
<th>Main Reference Source</th>
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</thead>
<tbody>
<tr>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>Arthur D Little, Managing Safety Through Culture, Learning Package.</td>
</tr>
<tr>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>Good practice guidance from a range of literature.</td>
</tr>
</tbody>
</table>

Ladbroke Grove Inquiry Part 2, pp. 66 and 69
### Change Management (Continued…)

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(3) Employee Motivation</strong></td>
<td></td>
</tr>
<tr>
<td>✓ Employees hold positive attitudes towards the planned changes.</td>
<td></td>
</tr>
<tr>
<td>✗ Employees report negative attitudes towards the change process.</td>
<td></td>
</tr>
<tr>
<td>✗ Employees are mistrustful of management’s ability to implement the change safely.</td>
<td></td>
</tr>
<tr>
<td>✓ Employees have the opportunity to report their thoughts on the change programme.</td>
<td>Good practice guidance from a range of literature. HSG217 ‘Involving Employees in Health and Safety: Forming partnerships in the chemical industry’</td>
</tr>
<tr>
<td>✗ Employees do not have the opportunity to raise concerns about the change programme.</td>
<td></td>
</tr>
<tr>
<td>✗ Changes in roles and responsibilities are not understood.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(4) Active Response to Feedback</strong></td>
<td></td>
</tr>
<tr>
<td>✓ There are strategies in place for communicating the outcomes of the consultation process.</td>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>✓ Every attempt is made to incorporate employees’ suggestions and comments into the design process.</td>
<td>HSE (2003) Organisational Change and Major Accident Hazards. Information Sheet.</td>
</tr>
<tr>
<td>✓ It is ensured that employees receive rapid feedback following comments and suggestions they have made.</td>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>✗ Employees report not receiving adequate feedback following consultation.</td>
<td></td>
</tr>
<tr>
<td>✗ No feedback is provided to operational staff about the suggestions that they have made.</td>
<td></td>
</tr>
</tbody>
</table>

It is common for people to have negative perceptions about a change that may affect their working arrangements, their status or their social security, or they may be afraid of a higher workload. Change managers need to keep in mind these obstacles and maintain morale through the active involvement and participation of staff. Employees who feel that they are involved and have power over the change will respond more positively about the change.

A good indicator of a positive safety culture is that employees hold positive attitudes and trust for the management to direct the change in a way that is of benefit to the organisation as a whole, as well as the employees within it.

The organisation should demonstrate that they have communicated the benefits of the change to employees.

Evidence should be provided that employees are given clear opportunities, and are given encouragement to report their concerns, comments or thoughts in relation to the change process.

The organisation should be able to demonstrate that there are mechanisms in place for providing feedback following consultation exercises. Methods could include follow-up meetings, e-mail updates.

Evidence should be available that the consultation exercises are used to feed directly in to the design or change process. Where contributions are taken-up, direct feedback should be passed to the person responsible. An explanation should be given in cases where suggestions are not practical to be used.

All consultation exercises should be followed by active feedback to employees about the outcome of any suggestions made, or concerns identified. Employees should be able to track the handling of any contributions that they have made.
## Transfer of Information about Shift Duties

**Key Issue**

"...the requirement for clear safety rules and responsibilities is plain."

Ladbroke Grove Inquiry Part 2 pp.67

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Safety related information is communicated at the start of a shift or whenever there is a handover of duties.</td>
<td>International Atomic Energy Agency (IAEA). 2002. Self-Assessment of Safety Culture in Nuclear Installations.</td>
</tr>
<tr>
<td>✓ Safety information is communicated face-to-face by management to all levels and/or via notices, log books etc.</td>
<td>HSE. 1997. Successful Health and Safety Management. HSG 65. HSE Books. ISBN 0 7176 1276 7.</td>
</tr>
<tr>
<td>✗ The communication system fails to prepare the individual to operate their shift adequately and safely.</td>
<td></td>
</tr>
<tr>
<td>✓ Managers are on hand to deal with safety related concerns or issues.</td>
<td>HSC. 1993. ACSNI Study Group on Human Factors. Third Report: Organising for Safety.</td>
</tr>
<tr>
<td>✗ The communication system is reviewed and monitored for its success.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✓ A range of safety issues are covered, including both personal safety and major accident avoidance, and how to mitigate against these.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✗ Risks are stated, however there is failure to communicate how to mitigate against these.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✓ The adequacy of the communication system is reviewed infrequently.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✓ Staff are proactive in their approach to safety information.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✓ Staff have all the necessary information to conduct their shift safely.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✗ Staff are unable to give an overview of key safety information that applies to them.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✗ Approaches used to disseminate information are limited.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✗ The information communicated is ambiguous, or difficult to comprehend.</td>
<td>Good practice guidance from a range of literature</td>
</tr>
<tr>
<td>✓ All staff are aware of their safety responsibilities</td>
<td>HSC Safety Case Assessment Criteria. (Criteria 5.7)</td>
</tr>
<tr>
<td>✗ Management and all operational staff fail to take responsibility for communicating accountabilities</td>
<td>Arthur D Little, Managing Safety Through Culture, Learning Package.</td>
</tr>
<tr>
<td>✗ Safety responsibilities are unclear and changeable</td>
<td></td>
</tr>
<tr>
<td>✗ Temporary changes are not always considered</td>
<td></td>
</tr>
<tr>
<td>✓ Regular checks are carried out to ensure that all staff are aware of their responsibilities (for instance via spot checks or briefing attendance signature records)</td>
<td>Good practice guidance from a range of literature</td>
</tr>
</tbody>
</table>

### Appendix

Details

- There is a formalised communication process to prevent distorted or ambiguous information being communicated. Good practice guidance recommends that a variety of methods could be used to disseminate this information daily, for example, posters, notices, face-to-face communication by management, and daily team meetings.
- Management should be easily visible or reachable by all staff to deal with safety concerns or issues at the start of the shift.
- Good practice guidance suggests that all areas in relation to safety (not just limited to ‘hot topics’ e.g. SPAD management) are communicated to staff in a time-effective manner.
- Good practice guidance recommends that an organisation should not only be responsible for identifying any risks that are prevalent, but it should also actively provide workable solutions to prevent or mitigate further risks from occurring.
- To ensure that the communication system is effective, it is recommended that it be reviewed in a timely manner. Any discrepancies identified should be mitigated to ensure the system is fully functioning.
- A good indicator of a positive safety culture is that employees are enthusiastic and positive about their responsibilities for maintaining good safety knowledge.
- Staff should be able to give an accurate overview of the safety issues affecting them, including temporary, long term, and newly-arising issues. The staff should report feeling confident about their level of knowledge and have a good sense of preparedness for the shift ahead.
- The organisation should demonstrate that effective systems for the dissemination of safety information are in place, and that employees understand and can act on information that is provided at the right place and at the right time.
- Staff should be able to give an accurate overview of their safety responsibilities, including temporary, long term, and newly-arising accountabilities. There should be evidence for how health and safety responsibilities are allocated and communicated, which might be visible job profiles, performance reviews, or start of shift briefings.
- The organisation should have a system in place to allow for the monitoring and review of staff.
## Time-Critical and Degraded Situation

**Key Issue**  
"...the noise around performance must be tempered to ensure it does not swamp the noise around safety."  
[HSC, 2001a, page 65]

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>✓ = Satisfactory</th>
<th>✗ = Unsatisfactory</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1) Safety Prioritised Behaviour</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>✓ Employees have the knowledge, skills and resources available to deal with the situation, without compromising safety.</td>
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</tr>
<tr>
<td>✓ Safety is put first throughout.</td>
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<td></td>
</tr>
<tr>
<td>✓ Employees report that there is no pressure from management or peers to maintain performance standards at the cost of safety.</td>
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<tr>
<td>✗ Safety has been compromised at the expense of performance.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>✗ Employees report a pressure to maintain performance standards, potentially at the cost of safety.</td>
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</tr>
<tr>
<td><strong>(2) Performance vs. Safety Management Priority</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>✓ Management stipulate clearly and repeatedly to operational staff that safety is the first priority, using methods such as:</td>
<td></td>
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</tr>
<tr>
<td>• Written communication (notices, within job profiles, safety publications and newsletters).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>✓ Management demonstrate/promote the commitment to safety to customers and clients.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗ Evidence that safety could be over shadowed by performance e.g. hard hitting performance campaign.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗ Commitment to achieving performance targets is greater than that demonstrated for safety.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗ The emphasis placed upon performance at the expense of safety is not mentioned, and there is no “buy in” to this message.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(3) Safety Accountability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗ Clear roles and responsibilities are not communicated adequately or understood by all staff in a time-critical and degraded situation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ Management take responsibility for the consequences when they prioritise performance over safety.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗ Management do not take responsibility for consequences when they prioritise performance over safety.</td>
<td></td>
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</tbody>
</table>

## Appendix

### Details

In the words of Lord Cullen: "the noise around performance must be tempered to ensure it does not swamp the noise around safety" (HSC, 2001a, page 65).

The company should ensure that sufficient budget is allocated to safety, and that this is not outdone by the emphasis on performance.

In practice, safety should be put first during day-to-day operations.

Employees should not feel pressured to compromise safety in order to meet performance targets.

Employees need to be given the resources (in terms of skills and knowledge) to deal with a wide range of situations without compromising safety.

Organisations in the Rail Industry should be expected to demonstrate that they have in place, and implement, a system to ensure that senior management visibly and repeatedly demonstrate their commitment to safety.

Increasing management presence in frontline locations through scheduled management safety tours are a powerful means for management presence and provide the opportunity to 'walk the talk'.

Leadership is about causing people to share visions and share passions to achieve things.

It is recommended that the safety commitment is strongly and repeatedly mentioned in company bulletins and communications. Specifically this commitment must be visible and credible to every individual at every level of the organisation.

All staff should believe that all their managers place safety issues at a top priority.

The organisation should demonstrate that they have in place clear rules, responsibilities and accountabilities for safety (including clear contractual responsibilities and ownership of rules), which are understood by employees.

Accountability refers to assigning responsibilities for a situation in advance and requires clear communication to discuss common difficulties. The process of making individuals accountable recognises that everyone makes mistakes and views them as opportunities for learning and growing.

The organisation should ensure that the system, organisation or management process is recognised as often being a root cause of errors or incidents, rather than only blaming the individual involved in the situation.
### Incident Management

#### Key Issue

> “...Continuously learning the lessons of accidents and incidents in order to prevent them from re-occuring, and having clear and consistent processes to enable that to happen”.

#### Evidence Points

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>✓ = Satisfactory</th>
<th>✗ = Unsatisfactory</th>
<th>Main Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1) Incident Investigation System</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ A thorough root cause analysis investigates all possible underlying causes to events leading to the incident.</td>
<td></td>
<td></td>
<td>HSE (2004) Leadership for the major hazardous Industries. ISBN 0 7176 2905 9</td>
</tr>
<tr>
<td>✗ The investigation focuses on local, or obvious, faults and neglects other ‘hidden’ factors e.g. industry or company wide processes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ A key individual (or group of individuals) is designated to manage and supervise the process.</td>
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</tr>
<tr>
<td>✓ A preventative and corrective action plan is developed to prevent re-occurrence.</td>
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</tr>
<tr>
<td>✗ No efforts are made to ensure the incident does not occur again.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>✓ The investigation process is completed within a sensible (usually prompt) time.</td>
<td></td>
<td></td>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>✗ The investigation does not commence immediately, or is drawn out over an inappropriate length of time (e.g. over several months).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✗ The immedacy of responding is inadequate</td>
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</tbody>
</table>

#### (2) Fault Allocation Process

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Care is taken not to asport fault before the root cause analysis is complete.</td>
<td>Ladbroke Grove Inquiry (Part 2 Report) page 69.</td>
</tr>
<tr>
<td>✗ Blame is asportioned or insinuated prior to any investigation commencing.</td>
<td></td>
</tr>
<tr>
<td>✓ The purpose of the situation is to learn from the incident, rather than to asport blame</td>
<td>Ladbroke Grove Inquiry (Part 2 Report) page 7b-74. DuPont Report p 73 LG.</td>
</tr>
<tr>
<td>✗ Blame is asportioned or insinuated prior to any investigation commencing.</td>
<td></td>
</tr>
</tbody>
</table>

#### (3) Disciplinary Process

<table>
<thead>
<tr>
<th>Evidence Points</th>
<th>Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ The procedures distinguish clearly between different degrees of culpability (e.g. blameless, system induced or reckless errors)</td>
<td>Good practice guidance from a range of literature.</td>
</tr>
<tr>
<td>✗ Disciplinary procedures are limited to distinguishing between different degrees of blameworthiness.</td>
<td></td>
</tr>
<tr>
<td>✗ There are no clear procedures for deciding relevant disciplinary actions</td>
<td></td>
</tr>
</tbody>
</table>
Incident Management
(Continued…..)

Evidence Points

(4) Feedback Systems

| ✓ | There are strategies in place for communicating the outcomes of the investigation e.g. briefings, newsletters, articles in corporate magazines, notices. |
| ✗ | The information communicated is difficult to comprehend, and fails to serve its purpose. |
| ✗ | Communication does not target all safety-critical employees and is limited to certain areas. |
| ✗ | There is no personal feedback to those involved in the incident. |
| ✓ | Preventative campaigns are installed throughout the organisation to raise awareness of the factors contributing to the incident |
| ✓ | Hard (equipment) as well as soft (training and procedures) actions are highlighted. |

Main Reference Source

Ladbroke Grove Inquiry (Part 2 Report) page 74

Lessons learnt from the incident should be communicated to the individual involved in the incident, and efforts should be made to disseminate this information to the rest of the organisation, if required. Efforts should also be made to communicate mitigation measures to inform staff how to prevent the incident from occurring again.

Lessons should be learnt from the industry and shared with the employees in the organisation. Employees should also know where to go to ascertain information of this nature.

Industry knowledge is widely available and this information should be communicated throughout organisations. For example, information is available on the RSSB website about work that has been undertaken to research the many underlying factors that contribute towards incidents, such as SPADs.