

NATIONAL TRANSPORTATION SAFETY BOARD Investigative Hearing



Washington Metropolitan Area Transit Authority Metrorail train 302 that encountered heavy smoke in the tunnel between the L'Enfant Plaza Station and the Potomac River Bridge on January 12, 2015

Agency / Organization

Title



Railway Management Maturity Model (RM³)

(Version 1.02)

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Introduction

This document sets out the criteria we use to assess an organisation's ability to achieve excellence when controlling health and safety risks.

The European Foundation for Quality Management (EFQM) describes truly excellent organisations as those which "strive to satisfy their stakeholders by what they achieve, how they achieve it and what they are likely to achieve". Excellence is not a theory – it relates to the real achievements of an organisation in what it does, how it does it, the results it gets and the confidence that these results will continue into the future.

An excellent organisation also meets its legal requirements in an efficient way – it considers the benefits to the organisation as a whole and actively looks for further improvements in controlling risk.

Excellent organisations will show similar features. Safety management systems guidance such as HS(G) 65 and OHS18001 set out some of these features. Recent accident reports and academic research have identified other features. ORR have incorporated these features into a model (the Railway Management Maturity Model) that assesses an organisation's ability to achieve excellence in risk control. For each of these features we have defined assessment criteria. The model is demonstrated in the diagram below. The following section presents an overview of what excellence in safety management systems looks like.

The model provides a consistent way of evaluating the management arrangements required by the Railways and other Guided Transport Systems (Safety) Regulations 2006 (ROGS) and the Management (Health and Safety at Work) Regulations 1999.

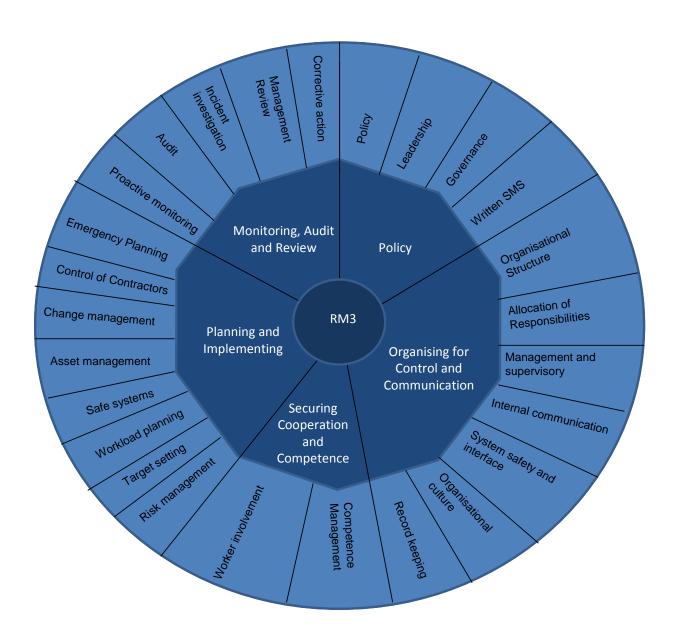


Figure 1 – Overview of the Railway Management Maturity elements.

Excellence in safety management systems

Our aim is for organisations to achieve excellence in risk control. An organisation can only achieve this through effective management. The following descriptions have been set for each of the main areas of an effective management system.

Governance, policy and leadership

- The organisation's policies are visionary, based on solid evidence of what the
 organisation can achieve, and promote a consistent approach to health and
 safety at all levels of the organisation.
- Leaders of the organisation set and communicate clear direction that reinforces a consistent approach to health and safety and shapes day-to-day activities.
- Leaders at all levels of the organisation act in a consistent way that reinforces the values, ethics and culture needed to meet their organisation's objectives.
- The leadership style throughout the organisation is transformational as opposed to transactional.

Organising for control and communication

- The organisation is structured to help put the organisation's policies into practice as efficiently as possible.
- There is a clear understanding of how each person's role affects the organisation's ability to achieve specific goals and the overall objectives.
- The organisation provides the framework for using people, plant and processes successfully.
- Communications are highly effective up, down and across the organisation.
- Communications from management should be appropriate for the target audience. The right message should be received at the right time, by the right people, and through the appropriate channels.

Securing the co-operation and competence of employees at all levels

 The competencies (knowledge, skills, experience and abilities) needed to work effectively, efficiently and safely are understood by the organisation.

- Recruitment, selection, training and continued development focus on meeting the organisation's objectives.
- Employees are actively involved in developing processes and making the business successful and safe.

Planning and implementation of risk controls through coordinated management arrangements

 Organisations systematically implement processes to make sure that the plant, people and processes are fully used, continually improving effectiveness, efficiency and safety to achieve the organisation's objectives.

Monitoring, reviewing and auditing to provide effective governance, management and supervision

- Monitoring is an important part of the organisation's management arrangements at all levels.
- Performance measures and audit programmes are used to continually encourage everyone to achieve the organisation's objectives and reduce the risk to the business.
- Variations from expected outcomes are reviewed to understand where the organisation is failing and what corrective action is necessary to restore performance.
- The organisation actively seeks opportunities to identify good practice from both within the organisation and from others.

Using the criteria

The model helps to guide our decision on whether an organisation's safety management system (SMS) can deliver excellence in risk control. The TEMS User Manual provides guidance on how we should plan inspections (both general inspections and specific SMS inspections) to gather evidence.

It is for the account holder to form an opinion on whether the criteria and sub-criteria are being met. The criteria are relatively general and should be used as a framework, taking account of the degree to which the criteria are established as normal in the organisation.

Most models include a definition of the process needed to meet the criteria. We believe that the duty holder is the best person to decide the process by which a goal is met. However, this model does allow us to judge whether the organisation is progressing towards excellence, using a five-point maturity scale.

The levels of maturity within the subcriteria are based on our experience with a range of duty holders. We will review the subcriteria as our experience increases. Version 2 of this model may include more detailed ways in which organisations can meet the criteria. It may also set out how organisations can progress within the criteria towards excellence.

The level an organisation reaches on the 5 point scale will be judged by the account holder based on the evidence collected from inspection work.

If there are mixed levels of achievement across objectives, the assessment should be based on what the majority of the evidence suggests, but with a comment which identifies areas for improvement.

It is important that the analysis covers only the areas assessed. For example, reviewing the track patrolling in one region would not provide enough evidence to form a national opinion. Similarly, a review of one train operating company's driver depot would not provide a robust opinion of other depots. Therefore the evidence scope and timeliness should be considered when using the criteria. The recording spreadsheet (TEMS Form 4) provides for these factors to be recorded.

The Railway Management Model's criteria Criterion SP: Policy, governance and leadership

- The organisation's policies are forward-thinking and based on solid evidence of what the organisation can achieve. Together with effective leadership, the policies promote a consistent approach to health and safety at all levels of the organisation.
- Leaders of the organisation set and communicate a clear direction for the organisation that reinforces a consistent approach to health and safety.
- Leaders at all levels of the organisation act in a consistent way to reinforce the values, ethics and culture needed to meet the organisation's objectives.
- The governance arrangements make sure that the organisation remains accountable for the health and safety of its workers and members of the public affected by their work.

Purpose

- To make sure that the organisation is effectively governed and led.
- To make sure that each policy clearly expresses the top-level management expectation, accurately defining what the organisation wants to achieve, how it will achieve it (through effective leadership) and how management will know when that expectation has been met.
- To make sure that the organisation (specifically the board) effectively challenges whether a policy and its associated activity is correct, in place and effective.

Introductory notes

Failure to consider health and safety risks when the board makes decisions can have catastrophic results. Poor leadership has caused many high-profile safety failures. An organisation's approach to health and safety often reflects the attitudes of those who make business decisions, and it leads the opinions and attitudes of the staff who work within the organisation.

The overall policy and associated procedures produced by the senior management is vital to setting and maintaining the organisation's approach to health and safety. The policy should give a clear understanding of how the organisation intends to manage health and safety. The senior team and other managers should also lead by example and act in ways that reinforce the messages contained within the policy.

Executive officers within the organisation must be accountable for their actions relating to health and safety. The board's role is to ensure governance and hold the executive officers to account. This function is vital for preventing incidents such as

that described in the Baker Report into the Texas City accident, and even the Walker Report into the governance of the UK banking system.

Relevant guidance and toolkits

- HSE Guidance Document HS (G) 65
- The Baker Report
- The Walker Report

Subcriteria

SP1: Leadership

SP2: Safety policy

SP3: Board governance

SP4: Written safety management system

Sub-criterion SP1: Leadership

Good leadership relating to safety management involves:

- deciding and communicating the reasons for risk controls and the importance of good management, and promoting continued improvement;
- communicating and co-ordinating risk-control (including safety management) and improvement strategies across the organisation;
- making sure that all the units and managers act in line with the organisation's goals and strategies;
- adjusting the performance-management and reward systems so they help the organisation achieve its goals and strategies for improving safety and performance; and
- monitoring the organisation's improvement activities and results, and taking corrective action when necessary.

The attitudes and decisions of senior managers are critical in setting and delivering the organisation's priorities.

Two guidance documents are available. These are IND 277 'Leadership in the Major Hazard Industries' and INDG 417 'Leading Health and Safety at Work'.

Level of achievement according to evidence

Goal (excellence)

- Leaders at all levels of the organisation show shared values directed at continually meeting the business objectives safely.
- Leaders search for opportunities to make risk control in their area of the organisation as effective and efficient as possible.
- Leaders can inspire confidence and commitment, and safely take their teams through periods of change.

Level 4 (predictable)

- Leadership activities are consistent with and reinforce the organisation's health and safety policies. The activities aim to have the maximum positive effect on the workforce.
- Leaders at all levels of the organisation are credible and open to ideas for improvement. Non-technical management skills are recognised and developed within the organisation.

Level 3 (standardised)

- Leadership is still largely viewed as a senior management role.
- Senior management focus on improving ways to apply processes in a standardised way.
- The organisation is built around a command-and-control structure with little feedback.

Level 2 (managed)

- Leadership is viewed as a senior management role.
- Managers demonstrate leadership skills but these are not recognised or used consistently within the organisation.

Level 1 (ad hoc)

• There is no evidence of positive leadership at any level in the organisation.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

None specifically.

Subcriterion SP2: Safety policy (not including written safety management systems)

Effective health and safety policies set a clear direction for the organisation to follow. They contribute to all aspects of a business's performance as part of a commitment to continuous improvement.

Level of achievement according to evidence

Goal (excellence)

- The health and safety policy is used to challenge the organisation to achieve business performance that is in line with the best-performing organisations.
- The health and safety policy recognises that managing health and safety risks is not a separate function but an integral part of a productive, competitive and profitable organisation.
- Health and safety risks are recognised as a risk to business performance.

Level 4 (predictable)

- The health and safety policy is consistent with the actions of everyone acting in the management chain.
- The health and safety policy includes a realised commitment to continually improving the efficiency and effectiveness of risk controls. There is evidence of extensive collaboration throughout the management chain.
- The health and safety policy and any associated policies are:
 - o consistent with each other;
 - o reviewed and revised to drive improvements in a predictable way; and
 - interpreted in the same way by all parts of the organisation that apply them.

Level 3 (standardised)

- The health and safety policy and any other associated policies are used as a focus for managers, which results in them being interpreted in the same way by all staff.
- Employees are actively involved in reviewing and revising the health and safety policy and how it is applied.

Level 2 (managed)

- The health and safety policy is up to date and is communicated within the organisation, but local managers and supervisors have inconsistent approaches or interpretations. This results in the policy being applied in different ways across the organisation.
- The policy is not seen as vital to maintaining safety.

Level 1 (ad hoc)

- The policy statement is out of date or has not been communicated within the organisation.
- There is no evidence of employees being consulted.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Schedule 1, 2 (a) a statement of the safety policy which has been approved by the chief executive and communicated to all persons carrying out work or voluntary work directly in relation to the operation;

Subcriterion SP3: Board governance

This establishes executive accountability for the management and performance of the organisation's work and results.

From a health and safety perspective, business governance involves:

- defining the organisation's tolerance to risk;
- defining and communicating the organisation's goals for health and safety (see also the section on policy);
- establishing the business workflows and structure needed to meet the organisation's goals for health and safety (see also the section on organising for control and communication);
- defining measures of the organisation's business goals, and performance measures for the activities to achieve the business goals;
- developing and communicating the organisation's policies to guide actions and decide how work is performed in the organisation (this is also covered in leadership);

- making sure that the responsibilities and activities of each part of the organisation work together to control the health and safety requirements of the products, services and business needs of the organisation (this is also covered in planning and implementing); and
- monitoring the workflow of the different parts of the organisation and how those parts rely on each other (this is also covered in the monitoring and review criteria).

There is more guidance on governance in the Hutton-Cave, Turnbull and Baker reports, the combined code and the Walker Report.

Level of achievement according to evidence

Goal (excellence)

- The board shows a balanced approach to continuous improvement, looking for examples of good practice from outside the organisation that will add value to the business and challenge management to deliver improvement.
- Executive members of the board show a commitment to identifying areas for improvement and effectively manage how the improvements are put into practice.
- Non-executive members are ready, able and encouraged to test strategies put forward by the executive members.
- The organisation knows about and regularly measures its activities against recognised good practice.
- The board carries out a formal and extensive evaluation of its own performance against health and safety objectives.

Level 4 (predictable)

- Non-executive directors have a strong and independent role in challenging safety issues.
- Health and safety risk is recognised as part of the overall risk to the organisation.
- Appropriate training is provided to board members, particularly non-executive directors, so they can understand the business risk of the organisation.

Level 3 (standardised)

 The board and executives show a clear wide-ranging understanding of the business as a system. • It is clear how responsibilities relating to health and safety are defined both between the board and the executive management.

Level 2 (managed)

- Executive management bring activities in line with the organisation's goals. They approve, measure and manage the business activities of the organisation's individual parts.
- The board is not as thorough as possible in reviewing the effectiveness of risk controls within the organisation.
- There is little difference between the role of the board and the role of the executive.

Level 1 (ad hoc)

The board shows little or no consideration of health and safety issues.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Schedule 1, 1 (d) show how continuous improvement of the safety management system is ensured.

Subcriterion SP4: Written safety management system

The purpose of the written safety management system is indicated in Schedule 1, 1 of the Railways and other Guided Transport Systems (Safety) Regulations 2006. In particular, the safety management system will:

- (a) describe the distribution of responsibilities, within the operation, for the safety management system;
- (b) show how control of the safety management system by the management on different levels is secured:
- (c) show how persons carrying out work (or voluntary work) directly in relation to the operation and their representatives on all levels, are involved with the safety management system; and
- (d) show how continuous improvement of the safety management system is ensured.

Also, the safety management system will contain information relating to the specific elements in schedules 1 and 2 of the Railways and other Guided Transport Systems (Safety) Regulations 2006.

The written safety management system allows the organisation to set out how risk will be controlled within the organisation and how the risk controls will be kept under review.

The written safety management system arrangements should reflect what happens in reality and be supported by more detailed procedures, standards, guidance and forms which form the day-to-day parts of the safety management system.

Level of achievement according to evidence

Goal (excellence)

 The written safety management system demonstrates how the organisation will identify opportunities to improve, not only against its own targets but against other organisations' targets which have been identified as being excellent.

Level 4 (predictable)

 The written safety management system presents a clear approach to managing safety. It shows how the organisation proactively controls risk through continual improvement of its internal arrangements.

Level 3 (standardised)

 The written safety management system presents a systematic approach to controlling risk, with appropriate checks and balances, and all aspects of health and safety are considered.

Level 2 (managed)

- The written safety management system meets the elements laid down in Schedule 1 of the Railways and other Guided Transport Systems (Safety) Regulations 2006.
- There is evidence of the safety management system being used properly and meeting regulation 19 of the Railways and other Guided Transport Systems (Safety) Regulations 2006.
- It is not clear how more general occupational health and safety arrangements are applied.

Level 1 (ad hoc)

There is no written safety management system, or it is incomplete.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

ROGS Regulation 19 (5) - elements

Schedule 1 (all of it)

Criterion OP: Securing co-operation, competence and development of employees at all levels

Purpose

- To find out whether the organisation has employees with the competencies (knowledge, skills, experience and abilities) needed to perform effectively, efficiently and safely.
- To see if the organisation's recruitment, selection, training and development policies focus, as far as possible, on meeting the organisation's health and safety objectives.
- To prove how much the organisation consults its employees at all levels to make sure that knowledge and experience are shared and health and safety becomes 'everybody's business'.

Introductory notes

Employees' involvement supports risk control by encouraging their 'ownership' of health and safety policies and procedures. It makes sure the organisation as a whole, and people working in it, benefit from good health and safety performance. Sharing knowledge and experience means that health and safety becomes 'everybody's business'.

Organisations need an effective system for managing competence to help make sure that their staff have the appropriate skills. Making sure that workers, supervisors and managers have, and keep, the appropriate skills helps those members of staff to carry out their work safely, reducing risks to themselves and to other people. ORR guidance on competence management systems ('Developing and maintaining staff competence', Railway Safety Publication 1, second edition, published in 2007) explains the legal basis for duties relating to competence management systems.

Subcriteria

OP1: Worker involvement and internal co-operation

OP2: Competence management system

Subcriterion OP1: Worker involvement and internal co-operation

By law, all employees in Great Britain must be consulted on, not just told about, health and safety issues in the workplace that affect them. There are two sets of general regulations under which a duty holder must consult the workforce about health and safety:

- the Safety Representatives and Safety Committees Regulations 1977; and
- the Health and Safety (Consultation with Employees) Regulations 1996.
- These regulations encourage employers and employees to work together to:
- develop, maintain and promote measures for protecting health and safety at work; and
- check the effectiveness of those measures.

Successful organisations often go further than the law specifies and actively encourage and support consultation in different ways.

Effective organisations will actively involve the workforce to encourage them to use their knowledge and experience and build commitment to achieving shared objectives.

Level of achievement according to evidence

Goal (excellence)

- The organisation makes full use of its employees' potential and actively involves them to develop shared values and a culture of trust, openness and empowerment.
- The organisation uses involvement to gather ideas for improvement and put them into practice.
- Employees show that they understand how they contribute to achieving the
 organisation's goals. That understanding is consistent with the organisation's
 relevant policies and vision of the senior team.
- Employees show a commitment to exceeding those goals by following existing processes and indicating where they can be improved.

Level 4 (predictable)

- The organisation has a policy of seeking to involve employees at all levels of the organisation, and there is a clear structure through which it can communicate this policy.
- The organisation regularly consults its workforce in a range of ways, such as through surveys, workshops, meetings with managers and safety tours.
- Employees are motivated to deliver the business objectives and demonstrate a consistent understanding of how this is achieved.
- Employees feel able to make decisions within a goals-setting framework.
- People in similar roles apply standards consistently.
- Employees understand the need for change and confirm that they are consulted on how changes are introduced.

Level 3 (standardised)

- The organisation has a way of making sure that employees are consulted on health and safety matters.
- Employees understand how they contribute to their safety and the safety of the railway.
- People in similar roles apply standards in the same way.

Level 2 (managed)

- Employees understand that they are responsible for their own safety and colleagues, but this is not consistent across the organisation.
- There is some consultation on health and safety matters, but it is not carried out in a systematic way or it does not involve all employees.

Level 1 (ad hoc)

- There is little or no consultation.
- Employees do not understand how they contribute to their own safety and to the safety of the people that they work with,

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, **organisation**, control, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements

Schedule 1, 1 (c) show how persons carrying out work or voluntary work directly in relation to the operation and their representatives on all levels are involved with the safety management system;

Subcriterion OP2: Competence management system

Under regulation 24 of the Railways and other Guided Transport Systems (Safety) Regulations 2006 (see below), workers carrying out specific work that has a major effect on safety must be competent to carry out that work. To meet the requirements of this regulation most organisations will need to have a system for managing competence.

Once a competence management system is set up it can be applied more widely than the safety-critical tasks defined in regulation 24, and excellent organisations will apply the same system to make sure all employees are competent in their roles.

Level of achievement according to evidence

Goal (excellence)

- The organisation makes full use of its employees' potential and actively involves them through shared values and a culture of trust, openness and empowerment.
- The organisation uses employee involvement to gather ideas for improvement and put them into practice.

Level 4 (predictable)

- Policies on recruitment, selection and training are in line with identified objectives.
 They are based on thorough risk assessments of tasks, to create a clear competence management system.
- Mentoring is used and changes of role are well planned-out.

Level 3 (standardised)

- The organisation has an effective competence management system in place.
 This covers the competencies needed to meet the objectives of the business and to manage risks.
- The organisation has ways of making full use of the competencies of their staff.
- Appropriate priority is given to managing competence by sharing resources.

Level 2 (managed)

- Training is provided within business units, but this does not form part of a clear competence management system.
- Recruitment, selection and training policies are not in line with the business objectives.
- Training is provided by chance as and when training needs are identified locally.

Level 1 (ad hoc)

- There is no evidence of any clear approach to managing competence.
- Employees may have the competencies they need, but there are no arrangements to check this.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 24 (for safety critical work)

- (1) Every controller of safety critical work shall, so far as is reasonably practicable, ensure that a person under his management, supervision or control, with the exception of where that person is receiving practical training in a safety critical task, only carries out safety critical work where—
- (a) that person has been assessed as being competent and fit to carry out that work following an assessment by an assessor;
- (b) there is an accurate and up to date record in writing of that person's competence and fitness which references any criteria for determining competence and fitness against which that assessment of competence was made;
- (c) the record, or an accurate summary of the record referred to in sub-paragraph (b) is available for inspection, on reasonable request, by any other controller of safety critical work or any operator who may be affected by any safety critical work carried out or to be carried out by that person, for the purposes of establishing that person's competence and fitness to carry out safety critical work; and

- (d) there are in place arrangements for monitoring the competence and fitness of that person.
- (2) Every controller of safety critical work shall without unreasonable delay review any person's competence or fitness assessment where—
- (a) they have reason to doubt the competence or fitness of a person to carry out that safety critical work; or
- (b) there has been a significant change in the matters to which the assessment relates,

and where, as a result of any such review a reassessment of competence or fitness is required, that reassessment of competence or fitness shall be carried out to ensure that the requirements of paragraph (1) are met.

(3) Where a reassessment of competence or fitness under paragraph (2) is required, the controller of safety critical work shall, so far as is reasonably practicable ensure that, as a result, the health and safety of persons on a transport system is not prejudiced.

Schedule 1, 2 (e) provision of programmes for training of persons carrying out work or voluntary work directly in relation to the operation and systems to ensure that the competence of such persons is maintained and that they carry out tasks accordingly;

Criterion OC: Organising for control and communication

Purpose

- To set out responsibilities for meeting the organisation's health and safety objectives.
- To make sure that important information is available to those making decisions.
- To make sure the organisation's arrangements and actions promote a culture that makes excellence in risk control possible.
- To make sure that organisations have controls in place to make sure that risks are identified and adequately controlled.

Introductory notes

Health and safety policies set the direction for health and safety, but organisations need to create a strong framework for management activities. They also need to set out the relationships and responsibilities that will improve performance. Two important areas within this framework are control and communication.

Control is the foundation of a positive health and safety culture, and maintaining control is central to **all** management functions. Control of health and safety is achieved by allocating and carrying out responsibilities which relate to health and safety objectives. It is important that all levels of staff from the board down accept their allocated health and safety responsibilities. Safety representatives can also make an important contribution. Staff should be focused on developing and maintaining systems of control before events happen – not on blaming people for failures after events.

Communication is often a challenge to organisations. It is important that the messages which senior managers want people to understand are the ones the people actually hear. Effective communication about health and safety relies on accurate and clear information coming into the organisation, flowing within it, and going out from it.

Subcriteria

OC1: Allocation of responsibilities

OC2: Management credibility and supervisory performance

OC3: Organisational structure (management cascade etc.)

OC4: Communication arrangements

OC5: System safety and interface arrangements

OC6: Culture management

OC7: Record keeping

Subcriterion OC1: Allocation of responsibilities

This means giving people and teams roles, tasks and objectives which work together to meet the organisation's health and safety objectives. This contributes to having the right people doing the right thing at the right time.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, with evidence that staff at all levels take responsibility within a strong management framework.

Level 4 (predictable)

- As for level 3 below, with clear links between the organisation's objectives and individual responsibility.
- Individuals show that they understand how their activities affect the organisation.
- Safety activities and decision-making activities are given to the people who are best placed to carry them out.
- Health and safety responsibilities are allocated with the same consideration as other business responsibilities. This makes sure that the right resources are available and used.

Level 3 (standardised)

• Responsibilities are identified and given in writing to teams or individuals who accept them in order to meet health and safety objectives.

Level 2 (managed)

- Important safety roles are allocated, some in job descriptions or objectives, though not consistently.
- Most staff, but not all, know what is expected of them.
- There is no overall policy on, or evidence of, responsibility being allocated in a consistent and systematic way.

Level 1 (ad hoc)

- Health and safety roles, tasks and objectives are not defined, or not defined well enough.
- Responsibilities relating to safety are not allocated to individuals and teams.

Responsibilities relating to safety are not recorded in job descriptions.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Schedule 1, 1 (a) describe the distribution of responsibilities, within the operation, for the safety management system;

(b) show how control of the safety management system by the management on different levels is secured;

Subcriterion OC2: Management and supervisory accountability

Those given roles, tasks and objectives relating to safety should be accountable for meeting the safety objectives they are responsible for. Adequate supervision, along with providing information, instruction and training, is needed to make sure that an organisation's health and safety policy is effectively put in place and developed. Good supervision can form a powerful part of a proper system of management.

Level of achievement according to evidence

Goal (excellence)

 As level 4, but with evidence of the organisation actively seeking to draw in good management practice from other world-class organisations.

Level 4 (predictable)

- As for level 3 below, but with competent managers and supervisors having control to make sure they consistently meet their own safety responsibilities.
- There are effective and fair reward systems to reinforce good behaviour.
- Supervisory processes are aligned to monitoring systems and information management to give total confidence in actual safety performance.
- Systems are in place to tackle non-achievement.

Level 3 (standardised)

- Teams and individuals responsible for controlling significant risks are regularly overseen.
- There are processes in place to allow managers to identify failings and use appraisal systems to correct problems.

Level 2 (managed)

Some processes for controlling responsibilities have been given out, through procedures or performance reviews, but not for all significant risks.

Level 1 (ad hoc)

- Managers and supervisors rarely, if ever, hold their staff to account for their safety duties.
- There is inconsistency between accountability for safety and accountability for other business objectives.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Schedule 1, 1 (b) show how control of the safety management system by the management on different levels is secured;

Subcriterion OC3: Organisational structure

The purpose of this subcriterion is to aid an understanding of how the organisation is structured to meet the organisation's safety policy. There may be layers of work that support this from policy and strategic perspectives.

Risk controls should fit sensibly into management structures so that responsibility for meeting the business objectives safely is clear and effectively deals with interfaces.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, but with effective reviews of the organisation's structure, at all levels, against achievement of business objectives.

Level 4 (predictable)

 As for level 3 below, but with responsibilities from the top to the bottom of the organisation, not just at working levels, being in line with each other.

Level 3 (standardised)

- Responsibility for risk-control systems is in line with responsibility for other business objectives. This provides clarity and consistency between similar activities and business units.
- Overall policies and strategies are consistent with those of the relevant business units.

Level 2 (managed)

- The structure of the organisation means that most risks are managed by the people or teams carrying out the work, but some risks are split so that there is or could be conflict between safety and other objectives.
- There is little consistency between the activities of a business unit and the wider aims of a strategy or policy.

Level 1 (ad hoc)

• The organisation's management structures bear no relation to its safety objectives, so staff responsibilities and accountabilities are easily confused.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Schedule 1, 1 (b) show how control of the safety management system by the management on different levels is secured;

Subcriterion OC4: Internal communication arrangements

These arrangements make sure that any member of staff making a decision or performing a task has the right information, in the form of:

- corporate messages;
- procedures and standards;
- factual data and intelligence; and
- instructions and reports.

Level of achievement according to evidence

Goal (excellence)

 Communication arrangements are kept under regular review against identified good practice in other sectors.

Level 4 (predictable)

- Everything listed at level 3 below is in line with the main risk-control systems.
- The right information is available for making decisions.
- Effective procedures for gathering feedback make sure that communications are understood.

Level 3 (standardised)

- Most of the following applies.
 - Written business-safety objectives, standards and procedures for controlling significant risks are in formats suitable for users.
 - Factual information is used to share experiences and guide future performance and decisions.
 - Managers give instructions which reinforce procedures to help achieve safety objectives.
 - Staff report their performance and experiences because the organisation encourages them to do so.

Level 2 (managed)

- Some procedures and standards relating to risk controls are available to staff.
- Some information is used to guide decisions.

 Managers give instructions and receive reports relating to controlling risks, but there is a lack of consistency.

Level 1 (ad hoc)

- There is little attempt to find or communicate information. If procedures are in place, staff make decisions based on their own judgement.
- No intelligence collected or shared.
- Managers do not talk to staff, or talk ineffectively.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Schedule 1, 1 (b) show how control of the safety management system by the management on different levels is secured;

- (f) arrangements for the provision of sufficient information relevant to safety—
- (i) within the operation in question; and
- (ii) between the operator in question and any other transport operator or an applicant for a safety certificate or a safety authorisation who carries out or who intends to carry out operations on the same infrastructure;
- (g) procedures and formats for the documentation of safety information;
- (h) procedures to control the lay out of, and changes to, vital safety information;

Subcriterion OC5: System safety and interface arrangements

Risk Management (PI1) deals with the identification of interfaces and the associated risk controls. Effective teamwork and co-operation are needed to implement these controls and make sure systems across the organisation are safe.

Level of achievement according to evidence

Goal (excellence)

- As for level 4 below, and also looks to other sectors and countries to identify system-safety issues and developments to feed into these arrangements, where appropriate.
- Teamwork is used to get the best possible achievement of shared objectives.
- Where appropriate, good practice is shared with other organisations in the UK and the rest of the world.

Level 4 (predictable)

- All of 3, relating to all system safety and interface issues.
- Decisions and arrangements are consistent with the full range of information listed in level 3.
- There are arrangements for sharing information throughout the organisation in order to promote effective reviews and continual improvement.

Level 3 (standardised)

- Organisational interfaces are systematically identified.
- Procedures and standards are in place to control shared risks.
- There are written objectives for system safety.
- There is regular discussion with other organisations to agree objectives, standards, processes and arrangements.
- There are ways to share information at working levels.
- Communications outside the organisation are satisfactory to make sure that anyone making a decision relating to risk controls with cross organisational boundaries is in possession of the right information (in the form of procedures and standards); factual data and intelligence; and instructions and reports.

Level 2 (managed)

- Procedures identify interfaces between business units at a working level. There
 is liaison with the other organisations over procedures and standards
 implemented. These are used by staff for some shared risk controls.
- There is co-ordination of practical issues at working level between individuals of organisations but there is no overall organisation, resulting in inefficient planning and execution.

Level 1 (ad hoc)

- The organisation makes little attempt to identify or collaborate on work with other organisations in respect of shared risk controls. Procedures to achieve this are weak or do not exist.
- No information is collected or shared.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Subcriterion OC6: Organisational culture

This subcriterion is about developing and maintaining a culture which brings out the best possible performance from staff. The organisation's safety culture is what emerges over time when its risk-management systems are applied.

There are three main ways of finding out about an organisation's safety culture.

- 1. By routinely gathering informal information about the safety culture during inspections, investigations and other dealings with employers and the workforce. For instance, workers on site during a routine preventive inspection may comment that performance pressures sometimes take priority over risk controls. In this case, as well as investigating the allegation, the background should be recorded to build up a picture of the organisation's safety culture.
- 2. An organisation may have recently carried out a **safety culture** or **safety climate assessment**. These assessments can provide useful information on

the current safety culture, but organisations do not have to carry them out. See RGD-2009-10, 'Guidance for inspectors on ORR's safety culture work in 2009-2010 and beyond', for more information.

3. If there is a particular concern about an organisation's safety culture, perhaps because of an incident or several informal reports of the type described in paragraph 1 above, an inspector may gather more formal information about the safety culture by using the HMRI Safety Culture Inspection Toolkit (www.hse.gov.uk/research/rrpdf/rr365.pdf). This would provide information and views about leadership, communications, learning culture, employee involvement and attitudes to blame.

Inspectors have to use their professional judgement to decide which of the methods explained above is most suitable in the circumstances. For instance, the organisation may deny that there are any cultural problems until they are given detailed supporting evidence from the HMRI Safety Culture Inspection Toolkit.

Level of achievement according to evidence

Goal (excellence)

- The organisation shows a culture which helps to deliver excellence in risk controls, and a commitment to continuously improve risk controls.
- There is no evidence that the organisation is complacent.
- The organisation:
 - respects, anticipates and responds to risks;
 - develops a fair, learning, flexible, adaptable, prepared and informed culture;
 and
 - aims to be resilient.
- The organisation shows excellent leadership relating to safety.
- There is excellent two-way communication between management and employees, excellent employee involvement, an excellent culture of learning, and mutual trust, where management and employees agree on acceptable and unacceptable standards.

Level 4 (predictable)

- Most staff are convinced that health and safety is important, both morally and for financial reasons.
- Management recognises that a wide range of factors leads to accidents, and the root causes are likely to stem from management decisions.

- Frontline staff accept responsibility for their own and other people's health and safety.
- The organisation recognises how important it is for all employees to feel valued and be treated fairly.
- The organisation takes measures to prevent accidents.
- Safety performance is monitored using all the information available.
- The organisation promotes a healthy lifestyle.
- The organisation tries to spot failings in the system and correct them before they cause a problem.

Level 3 (standardised)

- There is evidence that the organisation realises that employee involvement is essential for improving safety improvement, and that a wide range of factors – often coming from management decisions – lead to accidents.
- A significant proportion of frontline employees are willing to work with management to improve health and safety.
- Most staff accept responsibility for their own health and safety.
- Safety performance is monitored and the findings are used to make improvements.

Level 2 (managed)

- Safety is seen as a business risk, and management devotes time and effort to prevent accidents.
- Safety measures focus on keeping to rules, procedures and engineering controls.
- Accidents are seen as being preventable.
- Management feels that most accidents are due to the unsafe behaviour of frontline workers.
- Safety performance is measured with lagged indicators (indicators with a delayed effect, for example, injury rates).
- Safety incentives are based on reducing lost time.
- Senior managers only become involved in health and safety if accidents increase and enforcement action is likely to be taken against the organisation.

Level 1 (ad hoc)

- Safety measures focus on technical and procedural solutions, and keeping to regulations.
- Safety is not seen as an important business risk.
- The safety department, and not individuals, is considered to be responsible for safety.
- Many accidents are seen as unavoidable.
- Most frontline workers are not interested in safety. It is only used as a lever on other issues.
- Financial targets take priority over safety.
- There is poor leadership on safety issues.
- There is poor two-way communication between management and employees.
- There is poor employee involvement.
- The organisation's learning arrangements are poor.
- There is a blame culture (where focus is placed on finding out who is to blame) or a relaxed attitude to accountability (no blame culture).

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

None.

Subcriterion OC7: Record-keeping and document control

Excellent organisations provide a reliable record of important decisions, and information gathered over the years, to demonstrate that they are controlling risk at all levels.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, but making more use of the process to drive efficiency and effectiveness of the management system.

Level 4 (predictable)

- Comprehensive records of risk-related processes and standards, decisions and information are available to users and decision-makers.
- Records are used to inform reviews of risk controls.

Level 3 (standardised)

- There are records of processes and standards for main risks.
- Records are kept of important information and decisions that are likely to be valuable in the future.

Level 2 (managed)

 There are some records of information on important risk controls, but the records are inconsistent.

Level 1 (ad hoc)

• There are few or no written records. No corporate, only individual memory.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Schedule 1, 2 (g) procedures and formats for the documentation of safety information;

(h) procedures to control the lay out of, and changes to, vital safety information;

Criteria PI and RCS: Planning and implementing risk controls through co-ordinated management arrangements

Purpose

 To make sure that the organisation has risk controls that enable the business to operate safely.

Introductory notes

The risk-control systems associated with planning risk controls and putting them in place should be co-ordinated to make sure they keep to relevant laws and allow the organisation to meet its objectives efficiently and effectively.

Subcriteria

PI1: Risk assessment and management

PI2: Objective/target setting

PI3: Workload planning

RCS1: Safe systems of work including safety critical work

RCS2: Management of assets (including safe design of plant)

RCS3: Change management (process, engineering and organisational)

RCS4: Control of contractors

RCS5: Emergency planning

Subcriterion PI1: Risk assessment and management

This is concerned with the means by which a hazard is identified, the risks assessed, and controls created.

Level of achievement according to evidence

Goal (excellence)

- Risk assessment is used to drive continual improvement in the risk profile of the organisation.
- The approach to risk management is embedded and applied consistently throughout the organisation.
- Removing risk at its source is part of a consistent approach and is reflected in the organisation's policies.

Level 4 (predictable)

- Risk assessments are built into other aspects of the business to make sure there
 is a systematic approach to risk control.
- All levels of the workforce, and outside organisations, can contribute to risk assessments.
- Risk assessments, including removing risk at its source, are part of the culture of the organisation.
- Reviews form part of the risk-assessment process.
- Risk-management principles are intelligently applied at all levels.

Level 3 (standardised)

- The organisation has clear policies on using risk assessments and what risks will be tolerated.
- Risk management is used in a consistent way in different parts of the organisation.
- There is effective use of the risk-control hierarchy and removal of risk at source.

Level 2 (managed)

- Risk assessments are completed, but overall co-ordination is poor.
- Control measures within an activity do not always include the measures identified by the risk assessment.
- Risk assessment is often only used to demonstrate that the risk controls already in place are adequate.
- Risk assessments are used to identify where risk controls are needed, but controls are not adequately put in place by management.
- Training has been provided on risk assessment.
- There is some evidence of the use of the risk control hierarchy.

Level 1 (ad hoc)

- Risk assessments are not completed or reviewed for all relevant activities of the business.
- Risk assessments are inappropriate for their intended use.

The hierarchy of risk control is poorly used.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 —(1) A transport operator shall—

- (a) make a suitable and sufficient assessment of the risks to the safety of any persons for the purpose of identifying the measures he needs to take to ensure safe operation of the transport system in question insofar as this is affected by his operation; and
- (b) implement the measures referred to in sub-paragraph (a).
- (2) When carrying out an assessment or a review under paragraph (1) or (3), a transport operator shall apply the CSMs to the extent that the operation is carried out on the mainline railway.
- (3) Any assessment under paragraph (1) shall be reviewed by the transport operator who made it if—
- (a) there is a reason to suspect that it is no longer valid; or
- (b) there has been a significant change in the matters to which it relates and where as a result of any such review changes to an assessment are required,

the transport operator concerned shall make them, and implement any changes to the measures identified pursuant to paragraph (1) as a result of the review.

- (4) The transport operator shall record in relation to any assessment or review under this regulation—
- (a) the assessment process undertaken, the methods of any calculation used and any assumptions made; and
- (b) the significant findings of the risk assessment including the measures in place and any further measures the transport operator intends to take to ensure safe operation of the transport system in relation to his operation.
- (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, control, monitoring and review of the measures identified pursuant to paragraph (1) or
- (3) and shall record such arrangements.

Schedule 1, 2(d) procedures and methods for carrying out risk evaluation and implementing risk control measures when –

(i) there is a change in the way in which the operation in question is carried out; or,

(ii) new material is used in the operation in question,

which gives rise to new risks in relation to any infrastructure or the operation being carried out;

Subcriterion PI2: Objective/target setting

Health and safety objectives need to be 'specific, measurable, agreed with those who deliver them, realistic and to a suitable timescale' (SMART). Both short- and long-term objectives should be set and prioritised alongside wider business objectives. Objectives at different levels or parts of an organisation should be aligned so they support the overall objectives of the organisation's policies. Personal targets can also be agreed with individuals to make sure the objectives are met.

Objective is defined as the desired end point.

Target is a measurable step taken towards achievement of an objective.

Level of achievement according to evidence

Goal (excellence)

As for level 4 below, but the organisation compares its performance against that
of others, within and outside the rail industry, to make sure that objectives
represent excellence.

Level 4 (predictable)

- Objectives are SMART, prioritised and in line with each other to support the overall policy.
- The safety management system makes sure that targets are set and achievement is measured.
- Achievement or non-achievement is recorded and used to help with continual improvement.
- Systems are in place to follow up on non-achievement.

Level 3 (standardised)

- Health and safety targets and objectives are set.
- Attempts are made to achieve SMART objectives and to prioritise objectives and targets and bring them in line with each other.

- Systems are in place to follow up on achievement.
- Achievement of objectives is not well aligned to the review process.

- There are objectives. Some may be SMART and prioritised, but objectives within different parts of the organisation are not aligned and do not always support the objectives of the organisation's overall policies.
- Personal targets are not related to the objectives of the organisation's overall policies.
- Failure to meet targets or objectives is tolerated.

Level 1 (ad hoc)

- There are few or no health and safety objectives.
- Any targets that exist are not SMART or prioritised.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, control, **monitoring and review** of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements

Schedule 1, 1(d) show how continuous improvement of the safety management system is ensured.

Schedule 1, 2 (b) qualitative and quantitative targets for the maintenance and enhancement of safety and plans and procedures for reaching those targets;

Subcriterion PI3: Workload planning

Good planning will significantly improve the way an organisation manages health and safety by making sure there are the right resources to carry out tasks. This will lead to effective risk control and efficient working.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below but with more focus on identifying good practice in other organisations, where appropriate.

Level 4 (predictable)

- The planning system includes regular reviews of workload at different levels of management.
- Major projects and other known tasks are planned and given out at the beginning of the work year.
- Extra work is planned and care is taken to make sure that nobody is overloaded with work.
- The organisation's culture is perceived as just.

Level 3 (standardised)

- A planning system is in place to make sure that tasks are given to the correct person and can be completed on time.
- There is some monitoring of workloads but people still become overloaded, leading to failures in risk control.
- The culture within the organisation is for people to accept extra work and become overloaded.

Level 2 (managed)

- Workloads vary, but some thought has been given to allocating tasks in a way that aims to even the load.
- Tasks which are critical to safety are prioritised.
- Workloads are not reviewed to monitor areas of overloading.

Level 1 (ad hoc)

- There is little or no control of workloads.
- Some people are overloaded while others are lightly loaded.
- There is evidence that poor performance in carrying out tasks is due to not enough time being given and tasks which are critical to safety not being prioritised properly.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective **planning**, **organisation**, control, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Subcriterion RCS1: Safe systems of work (including safety critical work)

The focus of this subcriterion is to evaluate an organisation's ability to identify risks relating to specific tasks and put appropriate controls in place to protect the health and safety of those carrying out and affected by those tasks.

Level of achievement according to evidence

Goal (excellence)

- As for level 4 below, plus a commitment to continually improve the systems by, for example, benchmarking within and outside the rail industry.
- The systems have the best possible blend of processes, plant and people to achieve excellent results, delivered efficiently and safely.

Level 4 (predictable)

- The systems of work are used to both implement risk controls and get feedback on how adequate they are.
- Changes to the systems of work are checked carefully and are well-managed. They produce the result that was predicted before the change was made.
- Extensive consultation is carried out with those affected by the systems.

Level 3 (standardised)

 There is a clear, consistent approach to developing and putting in place systems of work that use effective risk management.

- The tasks, including ones critical to safety, are clearly understood and can be repeated across sites and shifts.
- Arrangements for selecting and recruiting staff make sure those using the systems of work have the competence to deliver them.

- Systems of work are in place but there are clear differences in how they are applied across the organisation.
- The systems are sometimes less than adequate because the procedures cause mistakes or are not effective in achieving the intended result.
- Work that is critical to safety is recognised but is not managed consistently.

Level 1 (ad hoc)

- The systems of work actually used are not the same as the written procedures.
- The systems of work do not take account of risk, and tasks that are critical to safety are not always identified and prioritised.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

ROGS Part 4; Safety Critical Work.

Schedule 1, 2(e) provision of programmes for training of persons carrying out work or voluntary work directly in relation to the operation and systems to ensure that the competence of such persons is maintained and that they carry out tasks accordingly.

Subcriterion RCS2: Management of assets

Successful management of assets involves identifying the assets the organisation owns and manages. It also includes having systems in place to make sure that assets remain in a good condition so the organisation can meet its business objectives safely, effectively and efficiently.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, but reviews of inspection frequencies and schedules include information from outside the organisation or the rail industry.

Level 4 (predictable)

 As for level 3 below, but the frequency of inspections is reviewed systematically and the system allows flexibility to adapt to changes in the condition of assets.

Level 3 (standardised)

- The asset register is up to date, and inspection and maintenance schedules are based on risk and are followed.
- There may be some backlog of inspections, but this is recognised and managed.
- There is some reviewing of the frequency of inspections, and some ability to adapt to changes to the condition of assets.

Level 2 (managed)

- There are schedules for inspecting and maintaining most, but not all, assets.
- Frequencies of inspections are specified but not always on a risk basis.
- Failure to meet frequencies of inspection is accepted and so there are backlogs.
- The overall policy on managing assets does not aim to improve safety.

Level 1 (ad hoc)

- Active and reactive maintenance is carried out to schedules but there is no comprehensive asset register, so the organisation cannot be sure that all assets are maintained in a safe condition.
- There are few or no criteria for the design of plant.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Schedule 1, 2(c) procedures to meet relevant technical and operational standards or other requirements as set out in—

- (i) TSIs;
- (ii) national safety rules;

- (iii) other relevant safety requirements; and
- (iv) decisions of the Office of Rail Regulation addressed to the transport operator in question,

and procedures to ensure compliance with the requirements listed in this paragraph throughout the life-cycle of any relevant equipment or operation which is subject to the requirement in question.

Subcriterion RCS3: Change management (process, organisational and engineering)

The purpose of change management is to make sure that changes within an organisation are adequately planned, made and checked to help the organisation achieve its business objectives. Effective change management will control the risks presented by the change.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, but there is also an understanding that change affects other aspects of business. It leads to business risk being linked with health and safety risk during and as a result of any change.

Level 4 (predictable)

- As for level 3 below, but the review is carried out after a change is structured to also consider the effect the change has had on the culture of the organisation.
- The importance of involving employees in the change process is recognised to bring benefits.

Level 3 (standardised)

- There is an efficient approach to managing any process, organisational and engineering changes.
- There may be a structured approach to change, involving a number of steps in the change-management system.
- There is a consistent approach to risk assessment and risk control after a change is made.
- The effect a change has on the organisation's culture is considered.

- The importance of change management is understood and there is some degree of control over all types of change.
- Changes are planned but are not always adequate.
- There is no system for making changes, which leads to risks not being identified or controlled following a change.
- There is little consideration of the effects a change has on the organisation's culture.

Level 1 (ad hoc)

- Some types of change are recognised and aspects of it are managed.
- Not all risks associated with a change are identified and so are not controlled.
- The effect the change has on the organisation's culture is not considered.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

- (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or
- (3) and shall record such arrangements.

Schedule 1, 2(d) procedures and methods for carrying out risk evaluation and implementing risk control measures when –

- (i) there is a change in the way in which the operation in question is carried out; or,
- (ii) new material is used in the operation in question,

which gives rise to new risks in relation to any infrastructure or the operation being carried out:

Subcriterion RCS4: Control of contractors

Organisations need to effectively manage the health and safety of their contractors and those affected by their activities, wherever those activities are carried out.

The main elements of contractor control include:

- giving a clear specification of the job;
- choosing the contractor;
- making the contractor familiar with the site (if appropriate);
- control of product safety and quality;
- permit to work (if appropriate);
- handover at the end of the job; and
- monitoring and reviewing performance.

Level of achievement according to evidence

Goal (excellence)

- The contractor supply chain seamlessly delivers all of the organisation's objectives.
- The contractor's main health and safety activities are in line with the organisation's.

Level 4 (predictable)

- There is a systematic approach to contractor control.
- Effective prequalification arrangements take a balanced approach, including considering their safety performance.
- There is a clear understanding of responsibility at all stages of the contract work.
 Good working relationships between client and all contractors are delivered through effective interface arrangements.
- performance measures and post-contract reviews guide decisions on choice of contractors for further work.

Level 3 (standardised)

 The importance of contractor control is recognised and this is reflected in the organisation's relevant policy.

- Contractors are chosen on their ability to complete work safely and to a satisfactory standard.
- The contractor's performance is monitored during the contract, and appropriate performance measures are used effectively to track achievement.

• Some elements of a risk control system are in place for contractor control, but there is no systematic process from selection through to post contract review.

Level 1 (ad hoc)

- Contractors are appointed when needed, but when contractors are chosen there
 are few considerations other than cost.
- There is little planning for the work.
- There is little consideration of the responsibilities for risk control when deciding how to do the work.
- There is no monitoring of the contractors, or review of the completed contract.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, **control**, monitoring and review of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Subcriterion RCS5: Emergency planning

The overall aim of emergency planning is to make sure that appropriate measures will be used when and where necessary to prevent or reduce the harmful effects of major accidents.

Elements of emergency planning include:

- identifying foreseeable emergencies that could arise;
- developing arrangements to respond to those emergencies;

- providing adequate training and making sure that the necessary resources are available; and
- testing of plans, with other people and organisations where necessary.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, but with good practice, both within and outside the rail industry, being recognised.

Level 4 (predictable)

 As for level 3 below, but with feedback from exercise wash-ups being taken into account when procedures are reviewed to make sure emergency responses remain up to date and effective.

Level 3 (standardised)

- Potential emergencies arising from tasks are identified as part of risk assessments.
- Control measures, including training and resources, are in place to deal with emergencies.
- Joint emergency-response exercises take place with other organisations involved in a task.

Level 2 (managed)

- The organisation realises that emergency responses are an important part of a risk-control system.
- Major emergencies that could arise are identified and there are some plans in place to deal with them.
- Staff are trained in basic emergency responses.

Level 1 (ad hoc)

- There is no organised identification of possible emergencies and how to respond
 if they arise.
- The organisation relies on the emergency services to deal with all aspects of an emergency.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Schedule 1, 2 element j) provision of plans for action, alerts and information in the case of an emergency which are to be agreed with any public body, including the emergency services, that may be involved in such an emergency;

Criterion MRA: Monitoring, audit and review

Purpose

The aim is to make sure that risk controls are in place, working correctly and achieving the organisation's objectives.

Introductory notes

Organisations need to measure the effectiveness of risk controls to make sure that risk controls are identified and work in practice. Safe systems of work must be monitored to make sure they are appropriate and are actually being followed. Systems for monitoring, auditing and reviewing performance should be in place to make sure that the safety management system is working correctly.

An audit checks that the organisation is doing what it says it will do. It should be supported by regular reviews to make sure that the organisation's business objectives are correct. The review should also check that the arrangements put in place to meet the business objectives are working as intended.

Monitoring, audit and review form a feedback loop within the overall safety management system, and are an essential part of programmes for continual improvement and achieving excellence.

Subcriteria

MRA1: Proactive monitoring arrangements

MRA2: Audit

MRA3: Incident investigation and management

MRA4: Review at appropriate levels

MRA5: Corrective action/change management

Subcriterion MRA1: Proactive monitoring arrangements

Activities and equipment that are critical to risk control must constantly be monitored.

Level of achievement according to evidence

Goal (excellence)

The monitoring activities chosen are for critical and vulnerable systems. The
results of this monitoring are effectively co-ordinated throughout the organisation
to support reviews and effective control of improvement.

 Monitoring procedures are reviewed to make sure they remain relevant to the organisation's risk profile.

Level 4 (predictable)

- As for level 3 below, but with an understanding of the monitoring of essential and vulnerable systems.
- Managers and supervisors are well-trained and have the necessary resources, and there is evidence of challenge of systems of work.
- Middle and senior managers monitor outcomes on a risk basis.

Level 3 (standardised)

- Monitoring flows from the risk assessment, and all risk controls are monitored in a logical way.
- There is consistency across the organisation.
- Monitoring is process driven so critical or vulnerable systems are not prioritised over monitoring of less critical or vulnerable systems (measuring for the sake of it).

Level 2 (managed)

- Some processes are supervised and some equipment is inspected.
- Records are isolated.
- There is evidence of inconsistencies between different areas of the business.
- There is evidence that some people in the organisation do not understand the need to monitor risk controls.

Level 1 (ad hoc)

 There is little or no understanding of whether risk controls are in place or are working effectively.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

Regulation 19 (5) Every transport operator shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the extent of the undertaking, for the effective planning, organisation, control, **monitoring and review** of the measures identified pursuant to paragraph (1) or (3) and shall record such arrangements.

Schedule 1, 2(b) qualitative and quantitative targets for the maintenance and enhancement of safety and plans and procedures for reaching those targets;

Subcriterion MRA2: Audit

An audit is an independent, systematic check of risk-control systems and management arrangements to make sure that business objectives are being met.

Level of achievement according to evidence

Goal (excellence)

- As for level 4 below, but with more challenging business objectives and comparison against best practice.
- Peer to peer auditing activities could be included.

Level 4 (predictable)

- Audit activities are planned and prioritised.
- An appropriate combination of audit techniques is used to provide information on performance against business objectives.
- The organisation can show that audits are completed by competent auditors.

Level 3 (standardised)

• There is evidence of a co-ordinated, effective and planned approach to audits. Audit activity is focused on achieving compliance with legislation.

Level 2 (managed)

- There is some auditing, but the techniques used and areas covered do not take account of the nature or importance of the particular risk-control system.
- There are no co-ordinated plans for audits.

Level 1 (ad hoc)

- There is little or no evidence of audits being carried out.
- Audits that are carried out are not planned or prioritised, and the findings are not acted upon.

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Schedule 1, 2(k) provisions for recurrent internal auditing of the safety management system.

Subcriterion MRA3: Incident investigation

This is concerned with reviewing the performance of the management system and risk controls after an incident.

Level of achievement according to evidence

Goal (excellence)

- As for level 4 below, with an understanding of the implications of the findings from other organisations' investigations.
- There is evidence that the organisation's culture is seen as being just.

Level 4 (predictable)

- As for level 3 below, but the quality of investigation produces recommendations that can be applied both within and outside the organisation.
- The range of incidents investigated includes, where appropriate, disruptions to work and where expected outcomes are not achieved.

Level 3 (standardised)

- There are standard arrangements for when and how investigations are carried out
- The root cause of an incident is investigated, and investigations are also carried out after a near miss or near hit.

- Incidents are investigated but there is little guidance on how or what to investigate.
- Immediate causes are investigated.
- The range of incidents investigated is limited to accidents, and recommendations arising from investigations are limited to preventing the same thing happening again. They do not identify areas for wider improvement.

Level 1 (ad hoc)

 There is no evidence of effective investigations, and the culture of the organisation is to find someone to blame.

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Schedule 1, 2(i) procedures to ensure that accidents, incidents, near misses and other dangerous occurrences are reported, investigated and analysed and that necessary preventative measures are taken;

Subcriterion MRA4: Management review

This subcriterion relates to checking that the organisation's business objectives are likely to continually improve and deliver excellence.

Level of achievement according to evidence

Goal (excellence)

As for level 4 below.

Level 4 (predictable)

 As for level 3 below, but learning lessons from incidents in other organisations and other industries.

Level 3 (standardised)

- Management automatically uses findings from monitoring and audits to review the organisation's performance and make changes where necessary.
- Recommendations from reviews are clearly allocated, tracked and show that the wider implications are considered.

Level 2 (managed)

• The reviews carried out are not part of an ordered approach to improvement. They are often reactive and not planned as part of the management cycle.

Level 1 (ad hoc)

- There is no analysis of the findings of monitoring and audits.
- Business objectives are not reviewed.

Relevant parts of the Railways and other Guided Transport Systems (Safety) Regulations 2006

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Schedule 1, 1 (d) show how continuous improvement of the safety management system is ensured.

Schedule 1, 2(c) procedures to meet relevant technical and operational standards or other requirements as set out in—

- (i) TSIs;
- (ii) national safety rules;
- (iii) other relevant safety requirements; and
- (iv) decisions of the Office of Rail Regulation addressed to the transport operator in question,

and procedures to ensure compliance with the requirements listed in this paragraph throughout the life-cycle of any relevant equipment or operation which is subject to the requirement in question.

Subcriterion MRA5: Corrective action

Organisations should have arrangements in place for defining, allocating and completing actions arising from monitoring, investigation, audit and review.

Level of achievement according to evidence

Goal (excellence)

 As for level 4 below, and with corrective action put in place by sources within and outside the rail industry.

Level 4 (predictable)

- As for level 3 below, but with closure criteria and mechanisms for tracking progress.
- Corrective actions are linked to objectives set out in the safety management system to get the most benefit possible.

Level 3 (standardised)

- A process is in place to make sure the necessary actions identified by monitoring, audits and reviews are implemented and identify who is responsible for the actions and the timescales for carrying them out.
- Corrective action will be at any level of the safety management system.

Level 2 (managed)

- Simple findings from monitoring, audit and review give rise to simple actions and changes to low levels of the safety management system.
- No systematic process.

Level 1 (ad hoc)

 Monitoring, audits and reviews result in little or no change, either because none are carried out or they are not followed up.

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