Australian Government

Department of Education, Employment and Workplace Relations

PSPRAIL504A Review and promote safety culture

Revision Number: 2

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

PSPRAIL504A Review and promote safety culture

Modification History

PSPRAIL504A Release 2:   Layout adjusted. No changes to content.
PSPRAIL504A Release 1:   Primary release.

Unit Descriptor

This unit covers the review of the application of human factors principles, and the review and promotion of safety culture within rail safety activities. The unit applies to rail safety regulatory staff and is not targeted towards experts in human factors and safety culture.
No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Application of the Unit

In the workplace, staff members must be able to assess compliance with the human factors and safety culture requirements referred to in legislation, and confirm that organisational policies and practices are consistent with the principles that support the integration of human factors and the development of a positive safety culture. They must be able to assess whether there is evidence of human factors integration and a positive safety culture, provide information on the key elements to which organisations can aspire, and promote the benefits of human factors integration and developing a positive safety culture. A key requirement is tailoring their approach to different organisations in order to achieve the required outcome. Staff must develop a good understanding of human factors concepts and principles to be able to promote their importance and explain the reasons for their inclusion in rail safety requirements for industry. Staff must be able to identify whether human factors requirements have been adequately embedded in an organisation's systems, processes and assets.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. **Explain key principles of human factors relating to rail safety**	1.1 Current information on **human factors** is obtained and its applicability to rail safety confirmed in accordance with legislation
	1.2 **Aim** of integrating human factors principles and their application to rail safety are explained in accordance with legislation and with regard to the nature and size of organisations
	1.3 **Operating principles** that optimise inclusion of a human factors approach to safety are identified and promoted to rail transport operators in accordance with organisational policies, procedures and guidelines
2. **Assess application of human factors principles within rail safety activities**	2.1 Consideration of human factors concepts in rail safety management is promoted to industry in plain language, to encourage their integration into normal operations
	2.2 Integration of human factors within industry safety management systems is identified and acknowledged
	2.3 Human factors information is used to cross-check the presence or absence of **particular actions** by rail transport operators that may be relevant to an enquiry or investigation
	2.4 Human factors issues are examined equally along with engineering, technical and other factors that may contribute to an occurrence
	2.5 Reported findings, safety incident feedback and summaries that include human factors information are clearly expressed in operational terms, to reinforce general understanding within industry
	2.6 **Behavioural markers** and **skills** required for safe and effective work performance are identified and their applicability in rail safety work is analysed
3. **Review safety culture within an organisation**	3.1 Leadership and commitment of senior management to safety are examined to determine whether the basis for developing and maintaining a **positive safety culture** exists
	3.2 Resources committed to safety activities in relation to the size and complexity of operations are evaluated
	3.3 Attitudes, behaviours or systems that might be detrimental to safety are identified and noted
	3.4 Organisational systems, policies and procedures are analysed for their fit with a positive safety culture
	3.5 Evidence of a **just culture** is explored to determine whether there is acknowledgement of the difference between errors and violations and underlying system deficiencies, and the

ELEMENT	PERFORMANCE CRITERIA
	need to manage this with supporting systems and practices
	3.6 Standards of conduct and disciplinary processes are analysed for their fit with a just culture as part of a positive safety culture
4. Provide information to promote the development and maintenance of a positive safety culture within an organisation	4.1 Information is provided and explained about *key elements* for developing and enhancing a positive safety culture
	4.2 Information is tailored to the organisational context and provided on strategies to encourage staff to maintain vigilance and anticipate problems and issues before they escalate

Required Skills and Knowledge

This section describes the essential skills and knowledge and their level, required for this unit.

Required skills:

Look for evidence that confirms skills in:

- reading and understanding complex and formal documents, such as literature and guidelines relating to human factors, legislation and related materials
- communicating with others involving the explanation of complex information relating to the methodology, aims and application of a human factors approach to safety and the development and maintenance of a positive safety culture
- researching information related to safety culture and human factors
- explaining how safety culture can be assessed
- reading and analysing organisational documents to identify nature of organisation's safety culture
- assessing safety culture initiatives
- providing information and influencing improvement in safety culture in a supportive way that takes account of current organisational safety culture framework and the size and complexity of organisational operations
- influencing others about the benefits of integrating human factors into rail safety management systems
- problem solving to identify if human factors have been addressed
- self-management to work ethically and in accordance with legislation
- using technology to conduct research, make enquiries, review available data, access legislative requirements and guidelines, review available safety information and record outcomes
- responding to diversity, including gender and disability
- applying environmental and occupational health and safety procedures to on-site meetings when reviewing and promoting safety culture and when in the field attending accident/incident scenes

Required knowledge:

Look for evidence that confirms knowledge and understanding of:

- legislation and guidelines relating to the development and maintenance of a positive safety culture
- concept and key elements of a positive safety culture
- common safety climate survey tools
- organisational policies, procedures and guidelines relating to provision of information to industry on the development and maintenance of a positive safety culture
- background and guidelines relating to human factors
- principles and application of human factors
- behavioural marker system for rail safety
- areas of rail safety regulatory work where human factors apply

Evidence Guide

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, The range statement and the Assessment Guidelines for the Public Sector Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms: • the knowledge requirements of this unit • the skill requirements of this unit • application of employability skills as they relate to this unit • review and promotion of safety culture in a range of 3 or more contexts or occasions, over time
Context of and specific resources for assessment	Valid assessment of this unit requires: • a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when reviewing and promoting safety culture, including coping with difficulties, irregularities and breakdowns in routine Resources essential for assessment include: • legislation and guidelines relating to the integration of human factors and the development and maintenance of a positive safety culture • organisational procedures/guidelines and protocols relating to the review and promotion of a safety culture framework in a range of rail organisations • background information, literature and guidelines relating to human factors • scenarios and/or case studies to capture the range of situations likely to be encountered when reviewing and promoting safety culture • access to relevant systems
Method of assessment	Assessment methods suitable for valid and reliable assessment of this unit must use authenticated evidence from the workplace and/or training courses and may include, but are not limited to, a combination of 2 or more of: • demonstration • observation • simulation or role plays • case studies/scenarios • workplace projects • portfolios

- authenticated evidence from the workplace and/or training courses

The assessment environment should not disadvantage the candidate and where the person has a disability the principle of reasonable adjustment should be applied during assessment.

Assessment methods should reflect but not exceed workplace demands, such as literacy demands and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people
- people in rural and remote locations

Suggested units that may be co-assessed with this unit to increase the efficiency and realism of the assessment process include, but are not limited to:

- PSPETHC501B Promote the values and ethos of public service
- PSPGOV507A Undertake negotiations
- PSPGOV512A Use complex workplace communication strategies
- PSPLEGN501B Promote compliance with legislation in the public sector
- PSPRAIL501A Operate within the regulatory framework for rail safety
- PUAPOL013A Create, maintain and enhance productive working relationships

Guidance information for assessment	For consistency of assessment:

For consistency of assessment:

- evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

Assessing employability skills:

- employability skills are integral to effective performance in the workplace and are broadly consistent across industry sectors
- the way these skills are applied varies between occupations and qualifications due to the different work functions and contexts
- employability skills embedded in this unit of competency should be assessed holistically with other relevant units that make up the skills set or qualification, and in the context of the job role

In practice, reviewing and promoting safety culture overlaps with

other generalist or specialist work activities, such as acting
ethically, promoting compliance with legislation, using complex
workplace communication, operating effectively within the
regulatory framework for rail safety, and leading quality audits.
Co-assessment with units of competency addressing these other
activities could be considered.

Range Statement

The range statement provides information about the context in which the unit of competency is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The range statement also provides a focus for assessment. It relates to the unit as a whole. Text in **bold italics** in the Performance criteria is explained here.

Human factors are:	• a multidisciplinary field concerned with optimising the performance of individuals and teams in the workplace
	• a domain that considers the relationship of individuals and groups with technology as interdependent, aiming to optimise the relationship so as to improve productivity and reduce error or failure
	• an applied science that draws on methods and principles from psychology, other behavioural and social sciences, engineering, ergonomics and physiology
	• concerned with the study of people as components of a socio-technical system, i.e. a system made up of hardware, software, physical surroundings, people, procedures, laws and regulations, data and data structures
	• concerned with the capabilities and limitations of the individual, as well as the collective role of all people in the system, which includes organisational culture
Aim of a human factors approach is:	• to reduce and mitigate error and improve safety and efficiency through an understanding of human capabilities, limitations and the way people interact with their work environments, including the equipment they use, the rules and procedures they work under, and how they communicate with other people to successfully accomplish a wide range of tasks
	• threat and error management at the individual and collective level
Operating principles include:	• valuing people's knowledge, skills and judgment in carrying out their work safely
	• recognising human limitations and potential for error
	• just treatment when errors are made
	• acceptance that organisations are imperfect and will only improve if they are open to feedback and prepared to learn and adapt
Particular actions may include:	• whether questions were asked to clarify understanding
	• whether risk was assessed before starting an unusual or difficult task
	• whether clear, unambiguous instructions, information and explanations were given
	• whether a proper handover occurred for critical operational

	tasks
Behavioural markers are:	• short, precise statements each describing a single non-technical skill or competency, such as using correct radio protocols and asking questions to clarify understanding
Skills may include:	• leadership • task management • teamwork • communication • risk management • situational awareness • decision making • emergency management • self-management
Safety culture is:	• the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation's health and safety management (Advisory Committee on Safety of Nuclear Installations, Human Factors Study Group: Third Report - Organising for safety, HSE Books 1993

Positive safety culture is characterised by:	• communication founded on mutual trust
	• shared perceptions of the importance of safety
	• confidence in effectiveness of preventive measures
	• shared concern for, commitment to and accountability for safety
	• key elements that include:
	  • keeping people informed
	  • maintaining vigilance
	  • promoting a just culture environment
	  • promoting organisational flexibility
	  • encouraging willingness to learn

Just culture is:	• transparent and establishes clear accountability for actions • neither blame free (total immunity for actions) nor punitive (disciplinary responses regardless of whether acts were unintentional or deliberate) • one where uncensored reporting of near miss occurrences and worker participation in safety issues is encouraged • one which acknowledges human error and the need to manage it by supporting systems and practices that promote learning from past errors or mistakes
Key elements may include:	• commitment and leadership of senior management • accountability and responsibility of line management • importance of open communication about safety matters and of

engaging and consulting with staff at all levels and with other stakeholders

- need to proactively seek, analyse and act on information on safety issues across the organisation
- need to provide an environment in which all employees are encouraged to raise safety issues, trusting that they will be fairly treated
- systems and processes designed to assist the organisation to learn from its experience and those of others inside and outside the industry
- processes that permit the organisation to adapt to the unexpected and which empower staff to respond effectively

Unit Sector(s)

Not applicable.

Competency field

Rail Safety Regulation.