



Australian Government

RIIARO308 Use data in an autonomous workplace

Release: 1

RIIARO308 Use data in an autonomous workplace

Modification History

Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 9.0. Newly created unit.
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Application

This unit describes skills and knowledge required to collect and use data to ensure continued safe and efficient operations in an autonomous work environment. It includes identifying data sources, collecting data with the human-machine interface (HMI), applying data analytics to inform decisions, and reporting information to key value chain stakeholders.

The unit applies to those working or intending to work in maintainer roles in an autonomous workplace, including mechanical and electrical trade roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Coal mining

Metalliferous mining

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element
1. Source data from autonomous equipment or systems	1.1 Locate and examine work instructions and/or procedures for tasks performed alongside autonomous equipment or system controlling a related device 1.2 Access and apply current work health and safety (WHS) documentation relevant as detailed in work instructions 1.3 Receive relevant equipment and systems performance and maintenance data from remote operations controllers 1.4 Interpret information or data to confirm diagnostic work that may be required 1.5 Confirm that sensors, system components, and equipment interfaces used to source diagnostic data are in correct

ELEMENT	PERFORMANCE CRITERIA
	operational mode
2. Retrieve data through the HMI	2.1 Identify safety risks associated with data retrieval and apply workplace personal safety procedures relevant to own role, as required 2.2 Identify diagnostic tools and devices needed to collect relevant equipment or environment data 2.3 Prepare data acquisition tools or device according to task requirements and/or manufacturer operational guidelines 2.4 Receive and record data from sensors and/or the device interfacing with the equipment 2.5 Collect and save appropriate data in accordance with work task requirements and organisational procedures
3. Analyse data and apply data-driven decision making	3.1 Interpret data for preliminary indication of faults to inform decision making in real time, according to level of own responsibility and escalate according to procedures 3.2 Analyse data points, trends, and patterns using mathematical processes to confirm that components and environment conditions are within the normal safety limits, according to organisational protocols 3.3 Identify anomalies in data and assess accuracy and correlation to decreased operational efficiency and/or safety in line with organisational and manufacturer requirements 3.4 Diagnose potential issues and malfunctions and determine the best workable solution to rectify or optimise according to level of own responsibility, and escalate malfunctions where required
4. Finalise reporting activities and work processes	4.1 Identify internal and external end users of the data within the value chain 4.2 Clearly, promptly, and securely communicate data and recommendations to remote operations controller and other identified personnel in accordance with organisational communication protocols 4.3 Monitor impacts to confirm the desired results and report on outcomes to aid continuous improvement, as required by organisational processes 4.4 Exit work area according to autonomous system and component manufacturer specifications and site requirements 4.5 Securely document and store data, and log findings in accordance with operational requirements 4.6 Prepare diagnostic tools and devices for storage or further use according to manufacturer and operational instructions

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Reading	• Determines data requirements and sources from work instructions and control room information
Numeracy	• Uses basic mathematical operations to calculate and compare numerical information with expected values • Selects from and uses a variety of problem-solving strategies in a range of familiar and less familiar contexts
Communication	• Uses digital technologies and applications to access, organise and share data and information within organisation's network • Receives and presents information using a variety of mediums in an autonomous workplace
Digital literacy and technology	• Operates computer-based data acquisition tools and devices to collect, interpret, and analyse data in differing formats

Unit Mapping Information

No equivalent unit. Newly created unit.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>