MSS404061A Facilitate the use of SCADA systems in a team or work area

Release: 1

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Modification History

New unit, superseding MSACMT461A Facilitate SCADA systems in a manufacturing team or work area* - Not equivalent
* Prerequisite *MSACMT261A Use SCADA systems in manufacturing* - removed

Unit Descriptor

This unit of competency covers the skills and knowledge required by a team leader or technical expert to personally use and facilitate the use of System Control and Data Acquisition (SCADA), or other similar systems, and support the team in their use of SCADA.

Application of the Unit

This unit applies to team leaders and others who are providing guidance and support to assist employees to use SCADA. The person will access the SCADA system for their own work, but will also need to provide support and organise skill development programs for their team members.
This competency is also relevant to maintenance personnel using a SCADA system to coordinate maintenance activities.
This unit primarily requires the application of skills associated with using communication technology and supporting team use of SCADA systems. Problem solving, initiative and enterprise, and planning and organisational skills are required to ensure that system is used efficiently. This requires aspects of learning and self-management to ensure own performance and that of the team.

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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Identify scope of SCADA system	1.1	Identify categories of information held in and control options of SCADA system relevant to team or area
		1.2	Identify range of information able to be provided to SCADA system by team
		1.3	Identify range of information able to be provided to team by SCADA system
		1.4	Identify team or area functions impacted by SCADA system
2	Communicate using SCADA system	2.1	Send and receive information using SCADA
		2.2	Send and receive messages using SCADA
3	Make decisions using SCADA	3.1	Interrogate the SCADA system to find required current, historical or predicted information
		3.2	Take actions appropriate to the information
4	Monitor the use of SCADA	4.1	Routinely monitor SCADA information
		4.2	Identify poor uses of SCADA system within team and system inadequacies

		4.3	Identify system improvements required
		4.4	Take appropriate action to improve SCADA system and its use
5	Support team use of SCADA	5.1	Regularly communicate with team, both using SCADA-based communication and face to face
		5.2	Identify skill improvement needs
		5.3	Identify team members who require additional support
		5.4	Take appropriate action to provide support

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- entering and receiving information via SCADA terminals
- communicating with team and organisation SCADA support personnel
- engaging and motivating team in use of SCADA system
- identifying team or work area information requirements
- identifying scope of team or area processes controlled by SCADA system
- planning and organising improvements in team's use of SCADA

Required knowledge

Required knowledge includes:

- hierarchy of SCADA system and operation
- information available from and controls exercised by/through the SCADA system
- query, control and other facilities and information offered by SCADA
- support/training/skill development mechanisms available for access by team member

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: • identify team or area information and operations requirements and relate to SCADA system • lead and motivate others in using SCADA system • obtain regular and one-off information from SCADA system • make decisions using SCADA generated information.
Context of and specific resources	Assessment of performance must be undertaken in a

for assessment	workplace using or implementing one or more competitive systems and practices.
	Access may be required to:
	• workplace procedures and plans relevant to work area
	• specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee
	• documentation and information in relation to production, waste, overheads and hazard control/management
	• reports from supervisors/managers
	• case studies and scenarios to assess responses to contingencies.
Method of assessment	A holistic approach should be taken to the assessment.
	Competence in this unit may be assessed by using a combination of the following to generate evidence:
	• demonstration in the workplace
	• workplace projects
	• suitable simulation
	• case studies/scenarios (particularly for assessment of contingencies, improvement scenarios, and so on)
	• targeted questioning
	• reports from supervisors, peers and colleagues (third-party reports)
	• portfolio of evidence.
	In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge.
	Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the candidate and the work being performed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Competitive systems and practices	Competitive systems and practices may include, but are not limited to:
	• lean operations
	• agile operations
	• preventative and predictive maintenance approaches
	• monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems
	• statistical process control systems, including six sigma and three sigma
	• Just in Time (JIT), kanban and other pull-related operations control systems
	• supply, value, and demand chain monitoring and analysis
	• 5S
	• continuous improvement (kaizen)
	• breakthrough improvement (kaizen blitz)
	• cause/effect diagrams
	• overall equipment effectiveness (OEE)
	• takt time
	• process mapping
	• problem solving
	• run charts
	• standard procedures
	• current reality tree
	Competitive systems and practices should be interpreted so as to take into account:
	• the stage of implementation of competitive systems and practices
	• the size of the enterprise
	• the work organisation, culture, regulatory environment and the industry sector
SCADA	SCADA is a general term applied to a number of systems which automatically collect critical process data, perform required mathematical manipulations on it and then make

	control decisions and/or give required information personnel for action.
	SCADA systems are often used in manufacturing but can also be used in other industries. In the continuous sector, the SCADA system is sometimes integrated into other sophisticated computer control systems, such as Distributed Control System (DCS) and these systems do merge in advanced systems. These organisations may simply refer to their SCADA as the DCS or other similar term (such as the proprietary name of the computer system)
Value stream	The value stream begins with the customer and includes all actions (both value-adding and non-value added) by both internal sections/departments and external organisations to meet a customer requirement.
	Depending on the operations and the customer requirement stages where value stream actions may occur include:
	• sales outlet/representative
	• information gathering, data analysis and research
	• product design
	• raw material sourcing
	• intermediate processing
	• final assembler/ collation/preparation
	• support services (e.g. accounting, finance and legal)
	• storage and delivery to customer
	• after market support

Unit Sector(s)

Unit sector   Competitive systems and practices

Custom Content Section

Not applicable.