Australian Government

MSS405060 Develop the application of enterprise control systems in an organisation

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSS405060A Develop the application of enterprise control systems in an organisation

Application

This unit of competency covers the skills and knowledge required to continuously modify and improve or develop new enterprise-wide information technology (IT) based control systems, such as Supervisory Control and Data Acquisition (SCADA), Enterprise Resource Planning (ERP), Materials Resource Planning (MRPII) and similar. Typically the development of such a system will be in liaison with an appropriate technical expert who may be an internal expert or an external consultant.

This unit applies to an individual responsible for the development and implementation of new systems or modifications/changes to the current system. While the individual might generate the ideas for change themselves and also undertake a significant part of the final implementation, they may also be working closely with an appropriate technical expert (such as the software system supplier) who may actually make the modifications.

This unit primarily requires the application of skills associated with communication in gathering, analysing and applying information and consulting with stakeholders. Teamwork, problem solving, initiative and enterprise, and planning and organising skills are required to determine and implement effective enterprise systems and modifications. This unit also requires computer skills and aspects of self-management and learning to ensure feedback and new learning is integrated into system planning.

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

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.		demonstrate achievement of the element.	
1	**Monitor information and control needs of organisation**	1.1	Check the use of current information.
		1.2	Check the operation of current control systems.
		1.3	Communicate regularly with key information users regarding any new or changed information control needs, including information needs from and to value stream.
		1.4	Identify short comings in information and control provision.
		1.5	Take action on information and control needs to meet organisational needs.
2	**Check the current system against organisation needs**	2.1	Check the routine use of the system.
		2.2	Check any system alarm or non-conformance notification and control operation.
		2.3	Communicate regularly with key stakeholders about current system use and application.
		2.4	Determine effect of non-conformance on enterprise system.
		2.5	Identify problems/issues.
		2.6	Take action on problems and issues.
3	**Determine developments needed in a new or significantly modified system**	3.1	Identify needs requiring a new system or development of modifications to the current system.
		3.2	Draft scope, specifications and outcomes required.
		3.3	Liaise with key stakeholders and relevant technical experts to refine scope, specifications and outcomes needed in new or modified system.
		3.4	Agree final scope, specifications and outcomes.
4	**Develop system**	4.1	Develop project plan.

4.2 Ensure ongoing consultation with all relevant stakeholders.

4.3 Manage development project.

4.4 Manage trialling of modified system.

4.5 Ensure modified system meets organisational requirements.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- 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.

SCADA refers 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

In the continuous operations sector, the SCADA system is sometimes integrated into other sophisticated computer control systems, such as distributed control system (DCS) and indeed 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).

Stages where value stream actions may occur include one or more of:

- 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.

Items in the value stream include one or more of:

- physical elements of the production system, such as sites, workstations, equipment and material, including stock, work in progress and finished products
- information needed to meet customer requirements, such as designs, drawings, work instructions, standard operating procedures (SOPs), standards, material lists and pricing
- information not directly related to current customer requirements but required by the organisation.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS405060A Develop the application of enterprise control systems in an organisation

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998