



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

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS405060 Develop the application of enterprise control systems in an organisation

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, across an organisation or department/section, to:

- analyse organisation needs and match to enterprise control system features
- determine critical features required in enterprise control system
- modify system/have system modified as a result of trials or changing needs.

Knowledge Evidence

Must provide evidence that demonstrates sufficient knowledge to interact with relevant personnel and be able to develop and implement new enterprise control systems, including knowledge of:

- capability of resource planning/SCADA systems, as appropriate
- information and control needs of organisation/process
- project management
- support/training/skill development mechanisms available for access by personnel.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project where the development and implementation of new enterprise control systems or modifications/ changes to the current enterprise control system occur in an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

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