**The RAM Competency Checklist**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Role 1** | **POLICY DEVELOPMENT** | **Performed** | | | **Required** | | |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 1.1** | **Analyse policy requirements** |  |  |  |  |  |  |
| E1.1.1 | Define the corporate goals the AM policy must help achieve |  |  |  |  |  |  |
| E1.1.2 | Define the stakeholder groups and socio-economic issues the AM policy must take into account |  |  |  |  |  |  |
| E1.1.3 | Define the stakeholder requirements the AM policy must address |  |  |  |  |  |  |
| E1.1.4 | Define the opportunities and constraints the AM policy must take into account |  |  |  |  |  |  |
| **Unit 1.2** | **Develop the AM policy** |  |  |  |  |  |  |
| E1.2.1 | Define the decision criteria for selecting amongst policy options |  |  |  |  |  |  |
| E1.2.2 | Assess policy options using appropriate agreed criteria |  |  |  |  |  |  |
| E1.2.3 | Define the AM policy goals and aspirations |  |  |  |  |  |  |
| E1.2.4 | Define the implications of the AM policy for all stakeholders |  |  |  |  |  |  |
| E1.2.5 | Make effective use of internal and external expertise in the development of AM policy |  |  |  |  |  |  |
| E1.2.6 | Ensure stakeholders are engaged in AM policy development as appropriate |  |  |  |  |  |  |

| **Role 2** | **STRATEGY DEVELOPMENT** | **Performed** | | | **Required** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 2.1** | **Analyse strategic requirements** |  |  |  |  |  |  |
| E2.1.1 | Define the AM policy aims and objectives the AM strategy must achieve and support |  |  |  |  |  |  |
| E2.1.2 | Define all risks the AM strategy must take into account |  |  |  |  |  |  |
| E2.1.3 | Define the constraints the AM strategy must take into account |  |  |  |  |  |  |
| E2.1.4 | Define the implications of current and forecast asset condition for AM strategy development |  |  |  |  |  |  |
| E2.1.5 | Analyse the current and future customer requirements the AM strategy must take into account |  |  |  |  |  |  |
| E2.1.6 | Define the legal, social, environmental and economic factors and trends the AM strategy must take into account |  |  |  |  |  |  |
| E2.1.7 | Define the stakeholder groups the AM strategy must take into account |  |  |  |  |  |  |
| **Unit 2.2** | **Forecast and analyse future user requirements and demands** |  |  |  |  |  |  |
| E2.2.1 | Use effective tools and techniques to analyse current demands |  |  |  |  |  |  |
| E2.2.2 | Use historical data to support forecasts of demand and costs and required levels of service |  |  |  |  |  |  |
| E2.2.3 | Use effective tools and techniques to forecast costs and demands |  |  |  |  |  |  |
| E2.2.4 | Forecast and assess relevant external products and technological developments and their likely impacts |  |  |  |  |  |  |
| **Unit 2.3** | **Develop the AM strategy** |  |  |  |  |  |  |
| E2.3.1 | Define the aims and objectives of the AM strategy |  |  |  |  |  |  |
| E2.3.2 | Develop key strategies for the overall system, asset portfolios and/or asset groups that support strategic aims and objectives |  |  |  |  |  |  |
| E2.3.3 | Define the expected outcomes of all AM strategies |  |  |  |  |  |  |
| E2.3.4 | Ensure stakeholders are engaged as appropriate in the strategy development process |  |  |  |  |  |  |
| E2.3.5 | Make effective use of internal and external expertise in strategy development |  |  |  |  |  |  |
| **Unit 2.4** | **Plan the implementation of the AM strategy** |  |  |  |  |  |  |
| E2.4.1 | Define, prioritise and optimise the AM strategy |  |  |  |  |  |  |
| E2.4.2 | Prepare financial projections using suitable good practice models |  |  |  |  |  |  |
| E2.4.3 | Prepare business plans using suitable good practice models |  |  |  |  |  |  |
| E2.4.4 | Define requirements for market research, systems development and management team-building |  |  |  |  |  |  |
| E2.4.5 | Define how effectiveness of the AM strategy will be measured and monitored |  |  |  |  |  |  |

| **Role 3** | **ASSET MANAGEMENT PLANNING** | **Performed** | | | **Required** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 3.1** | **Appraise investment options** |  |  |  |  |  |  |
| E3.1.1 | Define criteria for identifying and evaluating investment options |  |  |  |  |  |  |
| E3.1.2 | Identify investment options for achieving the AM strategy and AM objectives |  |  |  |  |  |  |
| E3.1.3 | Analyse the costs, risks and benefits of investment options |  |  |  |  |  |  |
| E3.1.4 | Select and justify the most appropriate investment options |  |  |  |  |  |  |
| E3.1.5 | Evaluate detailed investment plans |  |  |  |  |  |  |
| **Unit 3.2** | **Apply whole life costing principles** |  |  |  |  |  |  |
| E3.2.1 | Identify how costs of AM activities and asset values should be determined |  |  |  |  |  |  |
| E3.2.2 | Identify and evaluate appropriate whole life costing models |  |  |  |  |  |  |
| E3.2.3 | Specify costs for all key stages of the AM lifecycle |  |  |  |  |  |  |
| E3.2.4 | Develop business cases using unit cost data |  |  |  |  |  |  |
| E3.2.5 | Ensure appropriate tools to support effective decision making are available |  |  |  |  |  |  |
| E3.2.6 | Define the process for tracking, analysing and verifying unit cost data |  |  |  |  |  |  |
| E3.2.7 | Update whole life cost calculations when unit costs change |  |  |  |  |  |  |
| E3.2.8 | Identify improvement actions through periodic unit cost reviews |  |  |  |  |  |  |
| **Unit 3.3** | **Produce business case for creation and/or acquisition of assets** |  |  |  |  |  |  |
| E3.3.1 | Analyse business needs for the creation and/or acquisition of assets based on AM plan requirements |  |  |  |  |  |  |
| E3.3.2 | Specify appropriate performance indicators for whole life assessment of asset creation and/or acquisition. |  |  |  |  |  |  |
| E3.3.3 | Assess the costs, risks and benefits of alternative options for asset creation and/or acquisition |  |  |  |  |  |  |
| E3.3.4 | Prioritise investment projects on the basis of their anticipated total business impact |  |  |  |  |  |  |
| E3.3.5 | Prepare business cases which evaluate the costs, benefits and risks of proposed solutions |  |  |  |  |  |  |
| E3.3.6 | Identify risks in the commissioning process and assess their impact on current operations and AM activities. |  |  |  |  |  |  |
| E3.3.7 | Review and influence procurement policy to achieve optimum asset life-cycle performance. |  |  |  |  |  |  |
| **Unit 3.4** | **Plan for contingencies** |  |  |  |  |  |  |
| E3.4.1 | Identify asset related risks |  |  |  |  |  |  |
| E3.4.2 | Identify potential disruptions to critical AM activities |  |  |  |  |  |  |
| E3.4.3 | Plan the most appropriate responses to incidents and emergencies |  |  |  |  |  |  |
| E3.4.4 | Ensure suitable resources are available to respond as planned to incidents and emergencies |  |  |  |  |  |  |
| **Unit 3.5** | **Develop and communicate AM plan(s)** |  |  |  |  |  |  |
| E3.5.1 | Specify the range, volume and quality of AM activities and projects needed to achieve the AM strategy |  |  |  |  |  |  |
| E3.5.2 | Define objectives and performance indicators for all AM activities and projects which align with the AM strategy |  |  |  |  |  |  |
| E3.5.3 | Define, monitor and review the effectiveness of planning and communication processes |  |  |  |  |  |  |
| E3.5.4 | Define and justify asset group strategies and specific asset policies |  |  |  |  |  |  |
| E3.5.5 | Develop an AM plan which describes how asset management activities and projects will be resourced, managed and evaluated |  |  |  |  |  |  |
| E3.5.6 | Define resources and services required to deliver the AM plan(s) |  |  |  |  |  |  |

| **Role 4** | **IMPLEMENTING ASSET MANAGEMENT PLANS** | **Performed** | | | **Required** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 4.1** | **Create and acquire assets** |  |  |  |  |  |  |
| E4.1.1 | Develop design specifications to achieve optimum customer, business and life-cycle requirements. |  |  |  |  |  |  |
| E4.2.1 | Develop specifications for acquisition and installation of assets, including requirements for necessary resources. |  |  |  |  |  |  |
| E4.3.1 | Ensure assets are acquired or created according to specifications and budgetary and timetable constraints. |  |  |  |  |  |  |
| E4.4.1 | Ensure correct installation of assets, in accordance with specifications, |  |  |  |  |  |  |
| E4.5.1 | Undertake commissioning of assets as appropriate and, where required, transfer control of assets to others. |  |  |  |  |  |  |
| **Unit 4.2** | **Control operations** |  |  |  |  |  |  |
| E4.2.1 | Develop risk-based implementation plans and objectives in line with operations, maintenance and/or refurbishment strategies |  |  |  |  |  |  |
| E4.2.2 | Review and update existing operations strategy |  |  |  |  |  |  |
| E4.2.3 | Develop operations work and resource plans |  |  |  |  |  |  |
| E4.2.4 | Develop and evaluate work management processes |  |  |  |  |  |  |
| E4.2.5 | Manage the delivery of workplans including managing changes and the impact of unplanned work |  |  |  |  |  |  |
| E4.2.6 | Manage change relating to assets and systems |  |  |  |  |  |  |
| **Unit 4.3** | **Maintain assets** |  |  |  |  |  |  |
| E4.3.1 | Review and update existing maintenance and/or refurbishment strategies |  |  |  |  |  |  |
| E4.3.2 | Develop risk-based maintenance and/or refurbishment workplans |  |  |  |  |  |  |
| E4.3.3 | Specify spares management and inventory requirements |  |  |  |  |  |  |
| E4.3.4 | Plan the distribution of spares and supplies |  |  |  |  |  |  |
| E4.3.5 | Identify and appraise appropriate condition assessment techniques |  |  |  |  |  |  |
| E4.3.6 | Assess asset condition and performance and modify maintenance plans and regimes as required |  |  |  |  |  |  |
| E4.3.7 | Evaluate options for extending the life of assets |  |  |  |  |  |  |
| **Unit 4.4** | **Optimise and rationalise assets** |  |  |  |  |  |  |
| E4.4.1 | Review asset performance and capacity against current requirements to identify potential for rationalisation |  |  |  |  |  |  |
| E4.4.2 | Evaluate asset rationalisation within a cost–risk optimisation framework |  |  |  |  |  |  |
| E4.4.3 | Ensure rationalisation projects are fully defined and assessed including their impact on other potential projects |  |  |  |  |  |  |
| E4.4.4 | Ensure rationalisation projects are implemented and are subject to detailed post-investment appraisal |  |  |  |  |  |  |
| E4.4.5 | Ensure spares management supports the AM strategy and plan(s) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Unit 4.5** | **Renew or dispose of assets** |  |  |  |  |  |  |
| E4.5.1 | Select and justify the optimal strategy for renewal or disposal based on AM strategy |  |  |  |  |  |  |
| E4.5.2 | Identify and plan life-extending, decommissioning, disposal and risk control actions |  |  |  |  |  |  |
| E4.5.3 | Manage the implementation of life-extending, decommissioning, disposal and risk control actions |  |  |  |  |  |  |
| E4.5.4 | Evaluate the effectiveness of life-extending, decommissioning, disposal and risk control actions |  |  |  |  |  |  |
| E4.5.5 | Ensure assets are disposed of responsibly and in accordance with environmental and related requirements and relevant legislation and regulations |  |  |  |  |  |  |

| **Role 5** | **ASSET MANAGEMENT CAPABILITY DEVELOPMENT** | **Performed** | | | **Required** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 5.1** | **Develop and deploy AM people and teams** |  |  |  |  |  |  |
| E5.1.1 | Identify workload volumes required to meet AM strategy, AM objectives and AM plans |  |  |  |  |  |  |
| E5.1.2 | Specify competence requirements for AM work activities |  |  |  |  |  |  |
| E5.1.3 | Ensure asset management staff receive relevant necessary training and development |  |  |  |  |  |  |
| E5.1.4 | Assign appropriately competent people and teams to AM work activities |  |  |  |  |  |  |
| E5.1.5 | Direct and coordinate the activities of AM teams |  |  |  |  |  |  |
| E5.1.6 | Develop and support the AM performance of colleagues |  |  |  |  |  |  |
| E5.1.7 | Challenge resource constraints and justify increases |  |  |  |  |  |  |
| **Unit 5.2** | **Develop and deploy suppliers** |  |  |  |  |  |  |
| E5.2.1 | Identify the criticality of products and services to the AM strategy, AM objectives and plan(s) |  |  |  |  |  |  |
| E5.2.2 | Define which products and services should be supplied |  |  |  |  |  |  |
| E5.2.3 | Identify and manage suppliers to support the achievement of AM strategy, AM objectives and plan(s) |  |  |  |  |  |  |
| E5.2.4 | Specify requirements for supplied products and services |  |  |  |  |  |  |
| E5.2.5 | Identify and specify appropriate forms of contract, terms and conditions for achieving the AM strategy, AM objectives and plan(s) |  |  |  |  |  |  |
| E5.2.6 | Develop and improve the capabilities of suppliers as required |  |  |  |  |  |  |
| **Unit 5.3** | **Design and manage organisational change** |  |  |  |  |  |  |
| E5.3.1 | Determine the effectiveness of current organisational structures in supporting AM strategy, AM objectives and plan(s) |  |  |  |  |  |  |
| E5.3.2 | Identify changes needed to individual roles and responsibilities to ensure effective support for the AM strategy, objectives and plan(s) |  |  |  |  |  |  |
| E5.3.3 | Identify changes needed to asset management teams to ensure effective support for the AM strategy, objectives and plan(s) |  |  |  |  |  |  |
| E5.3.4 | Implement changes to organisational structure, teams and individual roles and responsibilities to ensure effective support for the AM strategy, objectives and plan(s) |  |  |  |  |  |  |
| **Unit 5.4** | **Shape the AM culture** |  |  |  |  |  |  |
| E5.4.1 | Promote the goals and benefits of AM |  |  |  |  |  |  |
| E5.4.2 | Define the organisational culture needed to achieve AM strategy, AM objectives and plan(s) |  |  |  |  |  |  |
| E5.4.3 | Plan and implement changes to organisational culture as required |  |  |  |  |  |  |
| E5.4.4 | Monitor the effectiveness of the organisational culture in supporting the achievement of AM strategy, AM objectives and plan(s) |  |  |  |  |  |  |

| **Role 6** | **RISK MANAGEMENT AND PERFORMANCE IMPROVEMENT** | **Performed** | | | **Required** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 6.1** | **Assess and manage risks** |  |  |  |  |  |  |
| E6.1.1 | Define and manage risk management processes and procedures |  |  |  |  |  |  |
| E6.1.2 | Identify and assess risks arising from AM activities |  |  |  |  |  |  |
| E6.1.3 | Specify measures and methods for controlling identified risks |  |  |  |  |  |  |
| E6.1.4 | Identify improvements needed to working practices and procedures |  |  |  |  |  |  |
| E6.1.5 | Monitor the progress and impact of improvement actions |  |  |  |  |  |  |
| E6.1.6 | Integrate AM related risk management with organisational risk management systems |  |  |  |  |  |  |
| **Unit 6.2** | **Assure the quality of AM processes** |  |  |  |  |  |  |
| E6.2.1 | Assure the quality of AM products or processes |  |  |  |  |  |  |
| E6.2.2 | Identify the reasons for quality assurance problems |  |  |  |  |  |  |
| E6.2.3 | Plan and implement improvements to the quality of AM processes |  |  |  |  |  |  |
| E6.2.4 | Evaluate the effectiveness of process improvements |  |  |  |  |  |  |
| **Unit 6.3** | **Monitor and review progress and performance** |  |  |  |  |  |  |
| E6.3.1 | Assess asset condition and performance against AM strategy and objectives |  |  |  |  |  |  |
| E6.3.2 | Assess the performance of AM activities against AM strategy and objectives |  |  |  |  |  |  |
| E6.3.3 | Identify and implement corrective actions |  |  |  |  |  |  |
| E6.3.4 | Analyse the progress, impact and effectiveness of corrective actions |  |  |  |  |  |  |
| E6.3.5 | Identify lessons learned and adjust AM strategy, policies and procedures accordingly |  |  |  |  |  |  |
| **Unit 6.4** | **Review and audit compliance with legal, regulatory, ethical and social requirements** |  |  |  |  |  |  |
| E6.4.1 | Identify and monitor relevant legal, regulatory, ethical and social requirements |  |  |  |  |  |  |
| E6.4.2 | Develop effective policies and procedures to ensure requirements are met |  |  |  |  |  |  |
| E6.4.3 | Assess how policies and procedures are put into practice and provide support |  |  |  |  |  |  |
| E6.4.4 | Audit compliance with relevant legislation and standards |  |  |  |  |  |  |
| E6.4.5 | Identify and correct any failures to meet requirements |  |  |  |  |  |  |
| E6.4.6 | Identify reasons why requirements are not met and adjust policies and procedures accordingly |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Unit 6.5** | **Learn from incidents** |  |  |  |  |  |  |
| E6.5.1 | Investigate root cause of asset or system failures or incidents |  |  |  |  |  |  |
| E6.5.2 | Influence investigation of incidents |  |  |  |  |  |  |
| E6.5.3 | Make effective use of 'lessons learned' information from incidents |  |  |  |  |  |  |

| **Role 7** | **ASSET KNOWLEDGE MANAGEMENT** | **Performed** | | | **Required** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Never | occasionally | Often | Never | occasionally | Often |
| **Unit 7.1** | **Define asset information requirements** |  |  |  |  |  |  |
| E7.1.1 | Define asset information strategy |  |  |  |  |  |  |
| E7.1.2 | Specify asset definition standards to provide a common definition of asset attributes |  |  |  |  |  |  |
| E7.1.3 | Define asset condition standards and measures and specify how these should be used in condition assessment |  |  |  |  |  |  |
| E7.1.4 | Specify standard definitions of asset defects and failures |  |  |  |  |  |  |
| E7.1.5 | Specify asset performance management standards |  |  |  |  |  |  |
| E7.1.6 | Specify standards which contain common definitions for capturing the utilisation of assets |  |  |  |  |  |  |
| E7.1.7 | Specify functionality and service life requirements for all types of key asset |  |  |  |  |  |  |
| E7.1.8 | Verify that asset knowledge standards are consistent with AM strategy and plan(s) |  |  |  |  |  |  |
| **Unit 7.2** | **Specify, select and integrate AM information systems** |  |  |  |  |  |  |
| E7.2.1 | Specify and validate functional and technical requirements of Information Systems needed to support and integrate AM processes. |  |  |  |  |  |  |
| E7.2.2 | Identify human factor implications of functional, technical and business requirements |  |  |  |  |  |  |
| E7.2.3 | Define and plan the integration of information systems and tools |  |  |  |  |  |  |
| E7.2.4 | Demonstrate appropriate use of information systems in supporting the delivery of AM strategy and plan(s) |  |  |  |  |  |  |
| E7.2.5 | Ensure AM information systems produce relevant usable data in a cost effective manner |  |  |  |  |  |  |
| E7.2.6 | Monitor the implementation of information systems and tools |  |  |  |  |  |  |
| **Unit 7.3** | **Make appropriate AM information available for decision making** |  |  |  |  |  |  |
| E7.3.1 | Develop criteria and effective and relevant and processes for AM data collection |  |  |  |  |  |  |
| E7.3.2 | Plan and manage the collection, maintenance and updating, storage and dissemination of AM information |  |  |  |  |  |  |
| E7.3.3 | Process and analyse AM data to provide effective business information as required |  |  |  |  |  |  |
| E7.3.4 | Prepare reports as required and recognise anomalies in reported data |  |  |  |  |  |  |
| E7.3.5 | Provide AM data and information needed to transfer assets to operational use |  |  |  |  |  |  |