



JKR Competency Standards
for
Project Management

Registered Project Manager

JABATAN KERJA RAYA MALAYSIA

November 2010

Version 1.0



JKR Competency Standards for Project Management Registered Project Manager

Version 1.0 November 2010

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First Edition 2010

Printed by Percetakan Nasional Malaysia Berhad

ISBN 978-967-5957-01-7

**DOCUMENT CONTROL****Document Information**

Document Title	JKR Competency Standards for Project Management - Registered Project Manager
Authorising Authority	Senior Director Cawangan Pengurusan Projek Kompleks (PROKOM) JKR Malaysia

Version Control

Version No.	Date	Nature of Change
Version 1.0	November 2010	Initial Issue

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ACKNOWLEDGEMENTS

This standard was developed in 2006/2007 by Jabatan Kerja Raya Malaysia (JKR) in collaboration with a team of Australian consultants under the JKR's Project Managed Change Programme. The standard was developed and contextualised to JKR's project environment using the Australian Institute of Project Management (AIPM) Project Management Competency Standards and the Australian Qualifications Framework (AQF) Project Management Standards as references.

We are grateful to AIPM for the references and the following consultants for their guidance: Dr. David Dombkins (past President of AIPM), Mr. Murray Gough, and the staff of SMEC (M) Sdn. Bhd. who have contributed to the development of this standard.

We wish to recognise and further thank our current and former colleagues in Cawangan Pengurusan Projek Kompleks (PROKOM) for their untiring efforts and beliefs, the many staffs of JKR Malaysia for their contribution and Y. Bhg. Dato' Sri Prof. Ir. Dr. Judin Abdul Karim, Director General of JKR Malaysia for his support.

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ACRONYMS AND ABBREVIATIONS

ACDA	As Completed Detail Abstract
ATDA	As Tendered Detail Abstract
C-Plan	Construction Plan
DOSH	Department of Occupational, Safety and Health
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EOT	Extension of Time
H&S	Health and Safety
HR	Human Resource
HRM	Human Resource Management
IT	Information Technology
NCR	Non Compliance Report
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Act
PDA	Preliminary Detail Abstract
P.D.	Project Director
PM	Project Management
PMIS	Project Management Information System
PMP	Project Management Plan
Q-Plan	Quality Plan
RAM	Responsibility Assignment Matrix
SKALA	Sistem Kontrak, Selia dan Lapor (Sistem Pemantauan Projek JKR Secara Elektronik)
S.O.	Superintending Officer
WBS	Work Breakdown Structure



Registered Project Manager (RPM)

The function of a REGISTERED PROJECT MANAGER is to work collaboratively with other Project Managers and key stakeholders either individually or within a programme of projects, to ensure that the full scope of projects are known and understood before work gets underway, that plans for their management are clearly developed and agreed to by all key stakeholders and team members, and that each project achieves its original or re-negotiated objectives.

The application of the skills and knowledge in order to be deemed competent at this function will:

"... most likely be under broad guidance. The work of others may be supervised or teams guided and responsibility for the planning and management of the work of others may be involved.

Competency at this level involves the self-directed application of knowledge with substantial depth in some areas and a range of technical and other skills to tasks, roles and functions in both varied and highly specific contexts.

Competencies are normally used independently and both routinely and non-routinely. Judgement is required in planning and selecting appropriate equipment, services, techniques and work organisation for self and others."



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TITLE: Registered Project Manager
UNIT 1: Plan and Manage Scope
ELEMENT 1.1: Establish Project Authorisation

PERFORMANCE CRITERIA

- 1.1.1 Authorisation for projects are confirmed with higher project authority/ies and used as the basis for all planning and resource allocation activities.
- 1.1.2 Proposals are clearly laid out, are concise, complete, and insufficient detail to enable informed decisions to be made about the viability of projects or to provide workable feedback.
- 1.1.3 Others are encouraged to provide feedback on proposals and recommendations for improvement are given careful consideration before rejection or incorporation.
- 1.1.4 The scope of authority and level of responsibility are established prior to commencing detailed project planning.
- 1.1.5 Approval to commence projects is confirmed with the appropriate higher authority/ies and commitment is gained from them to the release of resources as and when required.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Others: Client or client's representatives; higher project authority within own organisation, project team leader/s.

Project authorisation: Legal authorisation, planning and/or decision making and/or management of project is within own area and level of authority, contractual obligation, work order, written authorisation, terms of reference, scope definition developed by third party.

Project approval: Go/No Go decision from higher project authority, client, or delegated authority such as health and safety representatives.

Project resources: Time, finances, human, physical.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the organisational processes leading to project authorisation, start-up and designation of Registered Project Manager should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Performance reviews, project scope documentation including plans, schedules, statements, directives, guidelines and instructions.

JKR Specific – PM Tools as Evidence

- Appointment Letter
- Client Project Brief

TITLE: Registered Project Manager

UNIT 1: Plan and Manage Scope

ELEMENT 1.2: Define Project Scope

PERFORMANCE CRITERIA

- 1.2.1 The background, key stakeholders and overall objective of projects are clearly established or, where doubt exists, clarified with appropriate others.
- 1.2.2 Sub-objectives, deliverables, limitations and principal work activities are identified and confirmed with higher project authority/ies before detailed project planning is commenced.
- 1.2.3 Measurable outcomes are established and agreed as the criteria for evaluating the performance of projects over their life cycle.
- 1.2.4 Plans for managing the scope of projects are established and agreed with appropriate others prior to commencement.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Key stakeholders: Individuals or organisations that will have an impact on, or be impacted by, the project and the processes followed to achieve its overall objective.

Appropriate others: Higher project authority, client, senior management, end-user, project sponsor/s, experts in elements of the projects, other Project Managers.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the organisational processes leading to project authorisation, start-up and designation of Registered Project Manager, and methods to define products and activities should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Performance reviews, project scope documentation, including plans, schedules, statements, directives, guidelines and instructions, records of control of scope changes.

JKR Specific – PM Tools as Evidence

- Minutes of Meeting
- Project Management Plan (PMP) Scope Definition



TITLE: Registered Project Manager

UNIT 1: Plan and Manage Scope

ELEMENT 1.3: Implement Scope Controls

PERFORMANCE CRITERIA

- 1.3.1 Procedures and processes for reviewing, revising and redefining project scope are logical, clear, and in line with the overall objective of the project and the environment/ systems within which it is to be run.
- 1.3.2 Requests or decisions to make changes to project scope are recorded using agreed change management format and procedures, evaluated for their impact on the primary objective of the project, and where appropriate implemented in a timely and resource-effective manner.
- 1.3.3 Project progress, outcomes and quality are regularly reviewed and evaluated against scope definitions.
- 1.3.4 Where variations are identified these are analysed for their impact on the primary objective of project/s and changes are made, where required, in line with established change management processes.
- 1.3.5 Scope management procedures are assessed at predetermined intervals, and at the conclusion of the project, for their ability to maintain support to current and future projects and the achievement of their objective/s.
- 1.3.6 Issues arising out of assessments of the way in which project scope is managed are assessed for their importance to future projects, are documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Appropriate others: Higher project authority, client, senior management, end-user, project sponsor, experts in elements of the project, other Project Managers.

Reviews: Informal and end-of-project reports.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the methods of assessing project progress and the outcome of activities should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Performance reviews, schedule/s of scope management review, records of where and how scope changes are carried out, records of scope lessons learned and recommendations made.

JKR Specific – PM Tools as Evidence

- Change Register
- Concept Design Brief
- Design Review Checklist
- Minute of Technical Meeting
- Minutes of Pre-Construction Meeting
- Preliminary Design Drawing Register
- Project Brief Guideline
- Technical Design Brief

TITLE: Registered Project Manager

UNIT 2: Plan and Manage Time

ELEMENT 2.1: Determine Project Schedule

PERFORMANCE CRITERIA

- 2.2.1 Schedules include all tasks and activities necessary to achieve the primary objective of projects.
- 2.2.2 Tasks and activities are sequenced correctly and accurately and dependencies identified.
- 2.2.3 Assessments of the duration, effort and resources required for each task and activity are executed using accepted estimation techniques.
- 2.2.4 Where doubt exists as to the accuracy of estimate/s, the degree of accuracy of the estimate/s and the reason for the doubt are recorded and plans made for future updating and correction.
- 2.2.5 Where software tools are used to develop and manage project schedules these are employed correctly, are updated to ensure conformity with all users, and are regularly assessed for their continued ability to maintain support to the project and the achievement of its objective.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Appropriate others: Higher project authority, client, senior management, end-user, project sponsor/s, experts in the relevant field, other Project Managers.

Software users: Project team members, organisational IT policy managers and teams.

Other project schedules: Other projects, schedules of project team members, supplier delivery schedules.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the development of project schedules, and any appropriate time management methodologies, their capabilities, limitations, application and outcomes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Project work breakdown structure; and
- Key activity schedules and/or project schedule.

JKR Specific – PM Tools as Evidence

- Contractor's Work Program
- Work Programme Schedule (Ms Project)

TITLE: Registered Project Manager
UNIT 2: Plan and Manage Time
ELEMENT 2.2: Implement Project Schedule

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

- | | |
|---|---|
| <p>2.2.1 Progress is regularly reviewed and checked against the schedule, and where variations between planned and actual progress are identified, these are analysed for their impact on the project's overall objective and its ability to achieve upcoming milestones.</p> <p>2.2.2 Estimates of duration are regularly reviewed and updated.</p> <p>2.2.3 Others are notified when changes are made to schedules in accordance with agreed change management processes.</p> <p>2.2.4 Other aspects of the project plan affected by changes to estimates are amended to reflect the new timeframes.</p> <p>2.2.5 Variations between planned and actual progress that have an impact that is outside of acceptable tolerances are identified.</p> <p>2.2.6 Schedule changes are based on sound reasoning and close analysis of their impact on current and future activities.</p> | <p>Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.</p> |
|---|---|

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the use of the schedule as a control mechanism should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Regular schedule reports to stakeholders and higher authority;
- Evidence of application of monitoring, review and reporting mechanisms;
- Evidence of assessment and analysis of actual progress against planned progress; and
- Records of recommendations for and corrective actions taken against variances in the project schedule.

JKR Specific – PM Tools as Evidence

- Construction Plan (C-Plan)
- Extension of Time (EOT) Register
- Response Letter to EOT Claim

TITLE: Registered Project Manager
UNIT 2: Plan and Manage Time
ELEMENT 2.3: Assess Time Management Outcomes

PERFORMANCE CRITERIA

- 2.3.1 Schedules are regularly checked to ensure that planned work has been completed and any outstanding tasks or activities have been rescheduled.
- 2.3.2 Time management procedures are reviewed and assessed at predetermined intervals for their ability to maintain support to current and future projects and the achievement of their objective/s.
- 2.3.3 Issues arising are documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Reviews: Informal and end-of-project reports.

Predetermined intervals: Milestones, check points, at the conclusion of project.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the use of the schedule as a control mechanism should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of recommendations for and corrective actions taken against variances in the project schedule; and
- Records of lessons learned and recommendations made.

JKR Specific – PM Tools as Evidence

- Progress Report

TITLE: Registered Project Manager

UNIT 3: Plan and Manage Costs

ELEMENT 3.1: Determine Project Costs

PERFORMANCE CRITERIA

- 3.1.1 The cost of employing resources or conducting individual tasks and activities are analysed for their impact on the project and organisation and, where uncertainty exists, checked or confirmed with others.
- 3.1.2 Costs estimates are made using methods appropriate and acceptable to the organisation and project.
- 3.1.3 Where doubt exists as to the accuracy and/or acceptability of estimates, and/or to the degree of tolerance allowable for the project, advice and guidance is sought from appropriate others.
- 3.1.4 The degree of accuracy for estimates is checked against organisational and industry standards and project requirements, and where estimates are found to be outside of acceptable tolerances these are noted for future updating and correction.
- 3.1.5 Negotiations with others regarding costs and/or budgets are fair and conducted professionally and in a manner likely to enhance positive working relationships throughout the project life cycle.
- 3.1.6 Budgets and cost management plans are checked against other projects and where overlaps and conflicts over financial resources occur these are brought to the attention of appropriate others in sufficient time to allow negotiations over their usage to be conducted and mutually agreeable outcomes achieved.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Costs: Financial, organisational, reputation and standing within the community, physical and societal.

Appropriate others: Higher project authority, client/s, financial experts, project team members, contractors/suppliers.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the development of project budgets and expenditure forecasts, and appropriate cost management methodologies, their capabilities, limitations, application and outcomes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Cost estimates and breakdown structures;
- Cost management plans and strategies;
- Project budgets and expenditure forecasts; and
- Financial transition plans.

JKR Specific – PM Tools as Evidence

- As Tendered Detail Abstract (ATDA)
- Budget Estimation
- Preliminary Detail Abstract (PDA)

TITLE: Registered Project Manager
UNIT 3: Plan and Manage Costs
ELEMENT 3.2: Monitor and Control Project Costs

PERFORMANCE CRITERIA

- 3.2.1 Where funds have been allocated to a project the relevant processes for acquiring, managing and acquitting them are determined and incorporated into budget and cost management plans.
- 3.2.2 Plans for managing and controlling expenditure against budget are in accordance with organisational guidelines and acceptable to all key stakeholders.
- 3.2.3 Regular reviews of actual costs against planned expenditure are carried out and variations outside of agreed parameters are noted for analysis and appropriate action.
- 3.2.4 Where costs are found to be outside of agreed tolerances the source or cause is identified, analysed and where necessary corrective action is carried out or reported, if required, to appropriate others for their action and/or guidance.
- 3.2.5 Changes to budgets and/or method/s for controlling costs are carried out in accordance with organisational policies and processes and communicated as necessary and in a timely manner to everyone concerned with or affected by the changes.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Cost management plan: Includes financial management procedures and processes appropriate to the project and/or organisation within which it is managed and run.

Appropriate others: Higher project authority, client, organisational financial controller/s.

Appropriate action: Variation to budget, changes to work being carried out, changes to resource allocation.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the appropriate cost management methodologies, their capabilities, limitations, application and outcomes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Cost management plans and strategies;
- Cost breakdown structures;
- Project budgets and expenditure forecasts; and
- Financial transition plans.

JKR Specific – PM Tools as Evidence

- Contract Variation Register
- Letter of Confirmation of Fund
- Response Letter to Claim

TITLE: Registered Project Manager

UNIT 3: Plan and Manage Costs

ELEMENT 3.3: Conduct Financial Completion Activities

PERFORMANCE CRITERIA

- 3.3.1 Budget and cost management plans are regularly checked and amended or updated as necessary to meet emerging project requirements.
- 3.3.2 Failures to follow planned financial procedures are identified and analysed for their impact on project progress, corrected where possible, and reported to higher project authority/ies as appropriate.
- 3.3.3 Outstanding financial matters are identified and plans made for their finalisation.
- 3.3.4 Organisational and legal procedures are followed when signifying the completion of financial matters relevant to the project.
- 3.3.5 Procedures and system/s for managing budgets and costs are reviewed at regular intervals, and at the conclusion of the project, and evaluated for their ability to maintain support to current and future projects and the achievement of their objective/s.
- 3.3.6 Issues concerning the way in which budget and project costs are managed are assessed for their importance to future projects and documented in sufficient detail to enable future analyses for lessons learned.
- 3.3.7 Recommendations for future improvement to cost management processes are documented and passed to others for addition to the organisation's project management body of knowledge.

RANGE OF VARIABLES

Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Organisational and legal procedures: internal/ external audit, sign-off on contractual requirements, client acceptance of deliverables, finalisation of bills and future payments, surplus funds reimbursement and sign-off.

Reviews: Informal and end-of-project reports.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the organisation's procedures pertaining to the use of the budgets and expenditure forecasts as control mechanisms should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Financial transition plans;
- Records of project finalisation activities and disposal of project assets;
- Project finalisation reports; and
- Records of cost management lessons learned.

JKR Specific – PM Tools as Evidence

- Approved Statement of Final Account
- As Completed Detail Abstract (ACDA)
- SKALA Report

TITLE: Registered Project Manager
UNIT 4: Plan and Manage Quality
ELEMENT 4.1: Determine Quality Requirements

PERFORMANCE CRITERIA

- 4.1.1 Customer input is actively sought when developing criteria by which aspects of the project relevant to the customer's requirements are being developed.
- 4.1.2 Key performance indicators, milestones and deliverables are identified and, where uncertainty exists, checked with appropriate others.
- 4.1.3 Plans for their achievement of the key performance indicators, milestones and deliverables are clearly laid out.
- 4.1.4 Quality criteria against which the progress and outcomes of the project are to be measured and evaluated are analysed for their impact on the project team's current and emerging capability, the cost of undertaking the project, and the time necessary to achieve the overall project objective.
- 4.1.5 Where the quality criteria are not within the project team's capability, and/or are unachievable within the limitations of time and financial resources, discussions are carried out with the customer that are positive, intended to maintain and enhance working relationships, and result in mutually agreeable targets and being negotiated.
- 4.1.6 Agreed criteria are clearly laid out in the form of a plan for the management of quality throughout the project life cycle and communicated to stakeholders as the baseline against which the performance of the project will be measured and the achievement of quality and overall project objectives are to be assessed.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Customer: Individual or group for whom service, activity or task is being carried out or product developed.

Quality criteria: The outcomes achieved throughout the project life cycle, the processes followed in achieving them, and the performance of the people involved in the project.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the principles of quality management and their application, the use of quality management systems and standards, and appropriate quality management methodologies; their capabilities, limitations, applicability and contribution to project outcomes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Lists of quality objectives, standards, levels and measurement criteria; and
- Examples of Quality Management System and Quality Management Plans.

JKR Specific – PM Tools as Evidence

- Final Inspection Checklist
- Joint Inspection Checklist
- Quality Plan (Q-Plan)

TITLE: Registered Project Manager
UNIT 4: Unit Plan and Manage Quality
ELEMENT 4.2: Implement Quality Management

PERFORMANCE CRITERIA

- 4.2.1 Quality management issues relevant to other elements of the plan are integrated across the project management plan and adjustments are made as required to accommodate them.
- 4.2.2 The quality management plan is regularly checked to ensure that the processes designed to identify, meet and enhance quality throughout the project life cycle are being adhered to.
- 4.2.3 Progress is regularly monitored to ensure that quality plans are still achievable within the limitations of the project team's current capability and time/cost constraints.
- 4.2.4 Variations between planned and actual quality are analysed for their impact on the project ability to achieve upcoming milestones and its overall objective.
- 4.2.5 Where variations between planned and actual quality will have an impact on the project that is outside of acceptable tolerances, the range of options that are available to the project team are analysed and their impact on current and future activities identified and recorded.
- 4.2.6 Changes to the project Quality Management Plan, where made, are carried out in accordance with the change management processes agreed as part of the project plan.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.
- **Adjustments to other elements of the project plan:** Revision to existing plans and subsequent flow-on changes, major and minor changes to scope definition, adjustments to work processes and outputs, renegotiation of contracts with suppliers and/or sub-contractors.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the causes of quality failures and their impact on project management plans should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of inspections, recommended rectification actions and quality outcomes;
- Application of quality control, quality assurance and continuous improvement processes; and
- Records of quality reviews.

JKR Specific – PM Tools as Evidence

- Defect List
- Joint Inspection Report
- Review Checklist of Contractor Maintenance Plan



TITLE: Registered Project Manager
UNIT 4: Plan and Manage Quality
ELEMENT 4.3: Implement Project Quality Improvements

PERFORMANCE CRITERIA

- 4.3.1 Regular reviews are conducted of the plan for the management of quality throughout the project life cycle, and any improvements to the processes whereby the plan is developed, implemented and finalised are noted for further action.
- 4.3.2 Others are actively encouraged to regularly assess elements of the project for which they have responsibility and to put forward recommendations on areas where improvements can be made to the processes and the outcomes being achieved.
- 4.3.3 Where appropriate, Communities of Practice through which improvements to quality can be identified and implemented are actively encouraged and supported.
- 4.3.4 The procedures and system/s for managing quality and the overall achievement of quality criteria throughout the project life cycle are assessed at predetermined intervals, and at the conclusion of the project, for their ability to maintain support to current and future projects and the achievement of their objective/s.
- 4.3.5 Issues arising out of an assessment of the way in which the quality is managed are assessed for their importance to future projects, are documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Communities of Practice: Part- and full-time team members, experts and others from other areas of the organisation capable of contributing to the outcomes.

Reviews: Informal and end-of-project reports.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues relevant to quality finalisation should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of inspections, recommended rectification actions and quality outcomes;
- Application of quality control, quality assurance and continuous improvement processes;
- Records of quality reviews; and
- Lists of lessons learned and recommended improvements.

JKR Specific – PM Tools as Evidence

- Contractor Performance Feedback Report
- Quality Report

TITLE: Registered Project Manager

UNIT 4: Plan and Manage Quality

ELEMENT 4.4: JKR Specific – Environmental Quality Plan for a Project

PERFORMANCE CRITERIA

- 4.4.1 Director of Environmental Branch is requested to appoint an environmental officer from his branch to be a project team member.
- 4.4.2 The environmental officer is provided with project details to enable him to ascertain the scope for the environmental mitigation plan. For projects which require Environmental Management Plan (EMP) only, the scope for the EMP and the estimated budget for the EMP will be obtained from the environmental officer. EMP will be included as one element of the budget in the preliminary detail abstract (PDA).
- 4.4.3 For projects that require an Environmental Impact Assessment (EIA) study, an EIA consultant is to be appointed. The appointment of the consultant is requested from the Environmental Branch.
- 4.4.4 The Environmental Branch is assigned to administer the EIA report and to obtain due approval from the Department of Environment. The approved scope for the Environmental Management Plan is incorporated into the procurement document.
- 4.4.5 The budget is reviewed to ensure a sufficient amount of fund is allocated in the PDA for the implementation of the EMP. The scope for the EMP is included in the bill of quantities or schedule of prices in the procurement document.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Communities of Practice: Part- or full-time team members, experts or consultants who contribute to the project outcomes.

Reviews: Formal review of EIA and EMP reports by Environmental Branch.



EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues relevant to quality management should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Project EMP documentation and responsibility assignment;
- Register of NCR and Close out report;
- Records of EMP review; and
- Audit reports and records on the corrective actions taken.

JKR Specific – PM Tools as Evidence

- Environmental Management Plan (EMP)
- Appointment Letter of Environmental Officer



TITLE: Registered Project Manager

UNIT 4: Plan and Manage Quality

ELEMENT 4.5: JKR Specific – Implementation of Environmental Management Plan

PERFORMANCE CRITERIA

- 4.5.1 JKR Environmental Management System (EMS) document and the final version of EMP document are made available to the project site office.
- 4.5.2 Responsibility to enforce, monitor and review of EMP are assigned to project team member/s.
- 4.5.3 Adherent to the EMP is monitored through register of non-compliance reports (NCR). Contractor/s shall be made to take action on all NCR within specified time frame and close out report is registered. For major NCR, contractor/s shall be made to take immediate action to rectify the non-compliance to avoid negative impact to the project.
- 4.5.4 Any part of the EMP which is found not to be effective is reviewed by the environmental consultant of the project or is referred to the Environmental Branch for review. The relevant part of the EMP document is updated whenever there is review and the EMP is reregistered as the current version to be used.
- 4.5.5 Comments or observations made by Environmental Branch as the result of auditing on the project are registered and appropriate actions are taken.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Communities of Practice: Part- or full-time team members, experts or consultants of contributing to the outcomes.

Reviews: Formal review of EIA and EMP reports by environment consultant or Environmental Branch.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues relevant to quality finalisation should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Project EMP document and responsibility assignment;
- Register of NCR and the close out reports;
- Records of EMP review; and
- Audit reports and records on the corrective actions taken.

JKR Specific – PM Tools as Evidence

- EMS Procedure

TITLE: Registered Project Manager
UNIT 5: Plan and Manage Human Resources
ELEMENT 5.1: Implement HRM Planning Activities

PERFORMANCE CRITERIA

- 5.1.1 Individual tasks and activities are analysed and the need to allocate human resources and any relevant skills, knowledge, qualifications and/or licenses that may be required to achieve the desired outcome/s are noted for further action.
- 5.1.2 Roles and responsibilities throughout the project life cycle, including the means whereby assessment of performance or appraisal against them will be carried out, are determined, clearly laid out, and communicated to prospective project team members as soon as they are finalised.
- 5.1.3 Roles and responsibilities are communicated in sufficient time for team members to achieve, where necessary, levels of skills and knowledge, or to gain the appropriate qualifications and/or licenses prior to project implementation.
- 5.1.4 Negotiations for the release of prospective project team members as and when they are required are carried out with relevant organisational personnel in a professional manner and in a way that is likely to maintain and enhance positive working relationships throughout the project life cycle.
- 5.1.5 A plan for the management of human resources throughout the project life cycle is prepared, is agreed to by prospective project team members and relevant organisational personnel, and is incorporated into the overall plan for the management of the project.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Relevant organisational personnel: Managers of sections or branches within which desired team members work, personnel branch, other Project Managers.

Negotiations: Formal, informal, across or within organisational boundaries.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the how skills and knowledge are defined; and
- Any established organisational policies, standards and methods relevant to HRM should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Details of team and individual responsibilities, levels of authority and performance assessment criteria; and
- Current and future requirements for competency within the project team.

JKR Specific – PM Tools as Evidence

- Responsibility Assignment Matrix

TITLE: Registered Project Manager
UNIT 5: Plan and Manage Human Resources
ELEMENT 5.2: Implement Staff Training and Development

PERFORMANCE CRITERIA

- 5.2.1 The current level of skills and knowledge of project team members is identified and any gaps between existing competence and that required to undertake tasks or achieve objectives for which they are responsible are noted for further action.
- 5.2.2 Plans are made with relevant people for the design and implementation of strategies that enable gaps in individual and group skills and knowledge to be dealt with.
- 5.2.3 Individual performance when undertaking tasks associated with the project is measured against agreed criteria and appropriate action is initiated to overcome current or potential shortfalls in performance.
- 5.2.4 Opportunities are provided for team members to enhance their current competence and develop new skills and knowledge in line with the needs of the project and individual career development.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Relevant people: Internal or external trainers, HR manager/s.

Appropriate action: Performance review, counselling and/or discipline, additional or advanced training, removal from project team, job and/or system analysis to identify barriers to performance.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the methods for identifying training needs and competencies, and staff training and development methods should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Work Breakdown Schedules in which resources (particularly human resources) are allocated;
- Job descriptions including measures of performance;
- Team and individual responsibilities, levels of authority and performance assessment criteria;
- Responsibility assignment matrix;
- HRM plans and procedures;
- Staffing levels, matrixes and competencies related to task developed by the candidate; and
- Job descriptions including measures of performance.

JKR Specific – PM Tools as Evidence

- Training Program

TITLE: Registered Project Manager
UNIT 5: Plan and Manage Human Resources
ELEMENT 5.3: Guide The Project Team

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

- 5.3.1 Overall team performance is regularly monitored against the agreed performance criteria and where areas for improvement are identified actions are taken to improve individual, group and overall project effectiveness.
- 5.3.2 Internal and external influences on individual and team performance and morale are monitored and action is taken as appropriate to alleviate any pressures these might be having on project achievements.
- 5.3.3 A positive and cooperative working environment is created and maintained through the inclusion, in a plan for the management of human resources throughout the project life cycle, of sound interpersonal communications and group decision-making processes, and supportive counseling and conflict resolution strategies.
- 5.3.4 Current and impending issues arising out of conflicts within and between projects, and their impact on the project and the way it is being run, are identified and plans implemented to minimize the effect negative or disruptive conflicts have on the achievement of the overall objectives of the project.
- 5.3.5 HRM management issues and recommended improvements are identified, documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the use of motivation, the application of interpersonal skills, and the assessment of interpersonal strengths and weaknesses, should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Staffing levels and competencies related to task;
- Job descriptions including measures of performance;
- Records of meetings and minutes;
- Team and individual responsibilities, levels of authority and performance assessment criteria;
- Responsibility assignment matrix; and
- Records of internal and external influences on HRM performance.

JKR Specific – PM Tools as Evidence

- Minutes of Site Meeting

TITLE: Registered Project Manager
UNIT 5: Plan and Manage Human Resources
ELEMENT 5.4: Identify Opportunity for Improvement in HR Planning and Management

PERFORMANCE CRITERIA

- 5.4.1 Regular reviews are conducted of the plan for the management of human resources throughout the project life cycle, and any improvements to the processes whereby the plan is developed, implemented and finalised are noted for further action.
- 5.4.2 Others are actively encouraged to regularly assess the way in which the plan for the management of human resources throughout the project affects those aspects of the project for which they have responsibility and to put forward recommendations on areas where improvements can be made to the processes and the outcomes being achieved.
- 5.4.3 The procedures and system/s for the management of human resources throughout the project life cycle are assessed at predetermined intervals, and at the conclusion of the project, for their ability to maintain support to current and future projects and the achievement of their objective/s.
- 5.4.4 Issues arising out of an assessment of the way in which human resources is/are managed are assessed for their importance to future projects, are documented and passed on, along with appropriate recommendations, for distribution to others and their inclusion within the organisation's project management body of knowledge.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Reviews: Informal and end-of-project reports.

Human resource management: Recruitment of/ creation of project team, leadership, performance management, training and development.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues relevant to quality finalisation should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of inspections, recommended rectification actions and quality outcomes;
- Records of interviews, performance appraisals, project finalisation;
- Records of performance reviews; and
- Evidence of lessons learned and recommended improvements.

JKR Specific – PM Tools as Evidence

- Project Completion Report

TITLE: Registered Project Manager
UNIT 5: Plan and Manage Human Resources
ELEMENT 5.5: JKR Specific - Establish and Implement Health and Safety Plan

PERFORMANCE CRITERIA

- 5.5.1 Plan and incorporate health and safety elements throughout the life cycle of the project in the PMP.
- 5.5.2 Incorporate health and safety practices/ criteria in the Procurement document consistent with all statutory, regulatory requirements.
- 5.5.3 Health and safety plans are established consistent with OSH Act and Regulations being enforced by DOSH, DOSH Guidelines and safety guidelines.
- 5.5.4 Provide staff involved in the project with the ability to access current information on health and safety policy, plans and procedures by providing briefings, updates and pre implementation information reviews.
- 5.5.5 Implement and monitor the health and safety plan through checklist, meetings, non compliance reports, accident reports and near miss report and in accordance with statutory regulation.
- 5.5.6 Safety issues are analysed and remedies are taken. One safety and Health plan is reviewed and remedied when issues arise from the shortcoming of the plan.
- 5.5.7 Lessons learnt are recorded. Where necessary recommendations are submitted to review items on Health and Safety in the Project Management Methodology Matrix.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Reviews: Plan reviews.

Human resource management: Recruitment of a Health & Safety officer as required by OSHA and its organisation structure. This officer provides briefing and/or training to project staff on safety management and procedures especially for the implementation.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues relevant to quality finalisation should be assessed using written or oral questions.

Supporting evidence may take the form of:

- The Health and Safety Plan which includes policy statements by JKR, responsibility assignment matrix for H&S, work method statements and checklist;
- Staff recruitment records, briefing reports, training records;
- Minutes of meeting, non conformance reports and remedial action reports, accident reports, police reports, near miss reports; and
- H&S Plan review reports and lessons learned.

JKR Specific – PM Tools as Evidence

- OSH Procedure



TITLE: Registered Project Manager

UNIT 6: Plan and Manage Communications

ELEMENT 6.1: Implement Communications Planning Processes

PERFORMANCE CRITERIA

- 6.1.1 The needs of all key stakeholders for information throughout the project life cycle are analysed and the type of information they need, and their preferred method/s for receiving it, are noted for inclusion in a plan for the management of project communications.
- 6.1.2 A plan for the management of communications throughout the project life cycle is developed and checked with team members and stakeholders for accuracy and the ability to meet their communication and information needs.
- 6.1.3 Project communications plans are checked against past projects and project plans and, where aspects of them are found or suspected to be unable to support the passage and receipt of timely, clear and unambiguous information to and/or from each team member and stakeholder, these are improved or alternate methods put in place.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility, conducted routinely or as changing circumstances dictate.

Information: Regular and ongoing, routine, complex, priority.

Project communications plan: Formal and ad hoc.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the principles of communications management and their application to the candidate's project/s, their capabilities, limitations, applicability and contribution to project outcomes, should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Communications management plans;
- Project Management Information Systems (if applicable) structure and procedures;
- Progress reports;
- Records of collection, validation, storage, retrieval, analysis and/or dissemination of information;
- Records of meetings;
- Post-validation process modifications;
- Communications networks; and
- Records of communications problems and solutions.

JKR Specific – PM Tools as Evidence

- Communication Matrix
- Network Diagram



TITLE: Registered Project Manager
UNIT 6: Plan and Manage Communications
ELEMENT 6.2: Plan and Manage Information Management

PERFORMANCE CRITERIA

- 6.2.1 Developed and integrated within the overall plan for the management of the project is a plan for the management of communications throughout the project life cycle and for the recording and reporting of actual communications processes and outcomes against those that are planned.
- 6.2.2 The communications management plan is regularly reviewed and checked against the expectations and continued needs of team members and stakeholders.
- 6.2.3 Where variations are found between the planned communications strategy and actual or emerging information needs, these are analysed and their impact on current and future activities identified and recorded for future action.
- 6.2.4 Others are actively encouraged to provide timely and ongoing feedback on the quality of the communications management plan and for the outcomes being achieved through its implementation.
- 6.2.5 Where the quality and accuracy of the passage and/or content of information is found to be less than optimal, changes to the communications management plan and/or the way in which information is passed and/or received are carried out in accordance with agreed change management processes.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Expectations and continued needs: Quality of information, timeliness, method of passage/receipt.



EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the maintenance of project management information systems and communications networks should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Communications management plans;
- PMIS structure and procedures;
- Progress reports including records of collection, validation, storage, retrieval, analysis and/or dissemination of information;
- Records of meetings;
- Post-validation process modifications; and
- Records of communications problems and solutions.

JKR Specific – PM Tools as Evidence

- Contact List
- Contact Tracking

TITLE: Registered Project Manager
UNIT 6: Plan and Manage Communications
ELEMENT 6.3: Implement Project Reporting Processes

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

- 6.3.1 The appropriate method/s for disseminating information about the project is/are discussed with key stakeholders and team members and agreed prior to inclusion into the plan for the management of communications throughout the project life cycle.
- 6.3.2 The method/s used to gain, compile and/or disseminate information about the project is/are appropriate to the resource limitations of the project, the nature of the project, and accepted practices and customs of the organisation within which, or for whom, the project is being run.
- 6.3.3 The generation, gathering, storage, retrieval, analysis and dissemination of information by team members and/or stakeholders is managed within the framework of the communications management plan in order to ensure timely and effective decision making throughout the project life cycle.
- 6.3.4 Interrelationships with, and/or between, key stakeholders and/or team members are constantly monitored and conflict arising within, or lack of understanding arising because of, such relationships are handled with sensitivity and maturity and in line with the needs of the project.

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Method/s for disseminating or gathering information: Reports, meetings, informal discussions.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of interpersonal relationships and the development, use and implementation of networks should be assessed using written or oral questions.

Supporting evidence may take the form of:

- PMIS structure and procedures;
- Progress reports;
- Records of collection, validation, storage, retrieval, analysis and/or dissemination of information;
- Records of meetings;
- Post-validation process modifications;
- Communications networks; and
- Records of communications problems and solutions.

JKR Specific – PM Tools as Evidence

- Handover and Maintenance Plan
- Handover Schedule

TITLE: Registered Project Manager
UNIT 6: Plan and Manage Communications
ELEMENT 6.4: Assess Communications Management Outcomes

PERFORMANCE CRITERIA

- 6.4.1 Regular reviews are conducted of the plan for the management of communications throughout the project life cycle, and any improvements to the processes whereby the plan is developed, implemented and finalised are noted for further action.
- 6.4.2 Others are actively encouraged to regularly assess the way in which the plan for the management of communications throughout the project affects those aspects of the project for which they have responsibility and to put forward recommendations on areas where improvements can be made to the processes and the outcomes being achieved.
- 6.4.3 The procedures and system/s for the management of communications throughout the project life cycle are assessed at predetermined intervals, and at the conclusion of the project, for their ability to maintain support to current and future projects and the achievement of their objective/s.
- 6.4.4 Issues arising out of an assessment of the way in which communications is/are managed are assessed for their importance to future projects, are documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Reviews: Informal and end-of-project reports.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the methods of encouraging and gaining feedback should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Communications management plans;
- Progress reports;
- Records of collection, validation, storage, retrieval, analysis and/or dissemination of information;
- Records of meetings;
- Post-validation process modifications;
- Communications networks; and
- Records of communications problems and solutions.

JKR Specific – PM Tools as Evidence

- Client Letter of Confirmation
- Client Feedback Report
- Client Letter of Approval

TITLE: Registered Project Manager
UNIT 6: Plan and Manage Communications
ELEMENT 6.5: JKR Specific – Dispute Management : Avoid from Letting Issues Develop into Disputes

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

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| <p>6.5.1 Check for any lessons learned out of a dispute from previous similar projects. The root causes of the disputes are identified.</p> <p>6.5.2 To avoid the recurrence of a dispute from similar causes, necessary amendments are to be made to the relevant documents or procedures. The amended document shall be registered as the reviewed version to be used for the project.</p> <p>6.5.3 Proactive initiatives are taken at the early stage of contract formation and execution by providing opportunities to all important parties to clarify any ambiguities in contracts which may give rise to dispute. Issues arising at this stage should be resolved.</p> <p>6.5.4 Provide a channel for early notification of issues and all parties are informed about the channel. All issues raised are recorded in issue record log.</p> <p>6.5.5 Issues are defined and analyse objectively through facts gathering, identifying parties involved, focussing on the issues and separating people from the issues. The timeline for issues to be resolved are defined. Issue resolution task is added to the work plan to track progress of issue resolution efforts.</p> <p>6.5.6 Through brainstorming a list of resolutions is developed and prioritised with consideration on the impact to project. Issues are resolved through consultation with all relevant stakeholders. Issue resolutions are documented and communicated to relevant parties.</p> <p>6.5.7 Unresolved issues are escalated to the program level immediately. Rules for issue escalation are clearly understood to ensure speedy means of resolving issues.</p> | <ul style="list-style-type: none">• Activities may be carried out by a candidate or by others within the team for whom the candidate has responsibility. |
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EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding about issue management and processes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Documents and procedures reviewed based on the recommendation of lessons learned from completed similar projects;
- Records on the clarification of ambiguities in the contract documents and/or drawings and agreement reached;
- Procedures for early notification of issues and records of informing the procedures to all relevant parties;
- Record of issues;
- Record of analysis on issues, issue resolution, issue escalation rules; and
- Record of agreement and decisions on the issues including meeting minutes and emails etc.

JKR Specific – PM Tools as Evidence

- Issues Management Plan

TITLE: Registered Project Manager
UNIT 6: Plan and Manage Communications
ELEMENT 6.6: JKR Specific – Dispute Management : Administer Dispute

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

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|--|--|
| <p>6.6.1 Provide a channel for the early notification of dispute and define dispute resolution procedures according to the conditions of contract.</p> <p>6.6.2 Disputes are defined objectively by focussing on the subject of disagreement and separating people from it. The nature of disputes are identified such as technical, contractual, political, cultural etc. to enable objective analysis on the subject of disagreement.</p> <p>6.6.3 The impact of a dispute on the project objectives, deliverables, time schedule, budget, quality, resources and other important outcomes are determined to formulate the best proposals to resolve the dispute. The level of project funder and project sponsor tolerance on the impact of the dispute are taken into consideration.</p> <p>6.6.4 Refer the dispute in writing to the Superintending Officer (S.O)/ Project Director (P.D) of the contract for negotiation by providing the S.O/P.D with the analysis and proposed resolutions.</p> <p>6.6.5 S.O/P.D decisions are delivered to the other party in writing.</p> <p>6.6.6 Unresolved disputes are administered by implementing dispute resolution procedures.</p> | <ul style="list-style-type: none">• Activities may be carried out by a candidate or by others within the team for whom the candidate has responsibility. |
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EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues arising out of poor risk management processes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Procedures for early notification of dispute and records of informing the procedures to all relevant parties;
- Record of analysis on disputes;
- S.O decisions on disputes to the other parties; and
- Records on arbitration process.

JKR Specific – PM Tools as Evidence

- Dispute Procedure

TITLE: Registered Project Manager
UNIT 7: Plan and Manage Risk
ELEMENT 7.1: Determine Project Risk Events

PERFORMANCE CRITERIA

- 7.1.1 Events that may have an impact on the candidate's ability to achieve the project objective are identified and their actual impact established and documented for further action.
- 7.1.2 Factors that indicate that a risk event has occurred, or is going to occur, are analysed for their impact on the project and the candidate's ability to achieve the project objective, and documented for further action.
- 7.1.3 The likelihood of a risk event occurring, or that a risk factor will have an impact on the project and the candidate's ability to achieve the project objective, are assessed using techniques and measurements appropriate to the project and the organisation within which, or for whom, the project is being run.
- 7.1.4 The options open to the candidate for dealing with risk are clear, unambiguous, detail clear lines of responsibility and authority, and are supported by higher project authorities.
- 7.1.5 Plans for the management of risk throughout project life cycles are clear, based on accurate information and detailed analysis, are within the candidate's level of authority and responsibility, and are agreed with key stakeholders and project team members as the guidelines for dealing with risk and its impact.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Higher project authority: Senior management, client.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of uncertainty and the means of measurement, and the risk management methodologies applicable to the candidate's organisation should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Risk Management Plan/s;
- Records of identification and prioritisation of risk events;
- Reports of variance and recommendations for action; and
- Details of conduct of risk reappraisal.

JKR Specific – PM Tools as Evidence

- Risk Analysis

TITLE: Registered Project Manager
UNIT 7: Plan and Manage Risk
ELEMENT 7.2: Monitor and Control Project Risk

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

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| <p>7.2.1 A plan for the management of risk throughout the project life cycle is integrated within the overall plan for the management of the project.</p> <p>7.2.2 Clear and accurate information regarding the status of existing risk events or factors, and emerging events or factors, is actively sought on an ongoing basis.</p> <p>7.2.3 The risk management plan is regularly updated to reflect changes to current risks or to incorporate the analysis of new risk events or factors and any plan/s for their management.</p> <p>7.2.4 Regular reviews are conducted throughout the project life cycle of the Risk Management Plan and areas in which improvements can be made to the processes whereby the plan is developed, implemented and finalised are noted for further action.</p> | <ul style="list-style-type: none">• Activities may be carried out by candidate or by others within the team for whom candidate has responsibility. |
|--|--|

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the appropriate risk management methodologies for monitoring risk, their capabilities, limitations, applicability and outcomes, should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Application of lessons learned from previous project(s) in planning new project;
- Reports of variance and recommendations for action;
- Details of conduct of risk reappraisal;
- Risk recommendations made;
- Minutes of meetings; and
- Version updates of Risk Management Plans.

JKR Specific – PM Tools as Evidence

- JKR Project Acceptance Review Checklist
- Risk Register

TITLE: Registered Project Manager

UNIT 7: Plan and Manage Risk

ELEMENT 7.3: Assess Risk Management Outcomes

PERFORMANCE CRITERIA

RANGE OF VARIABLES

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| <p>7.3.1 Others are actively encouraged to regularly assess the risk management plan as a whole, and the way in which risks are being identified, analysed and managed, and how these affect those aspects of the project for which they have responsibility and to put forward recommendations on areas where improvements can be made to the processes and the outcomes being achieved.</p> <p>7.3.2 The procedures and system/s for the management of risk/s throughout the project life cycle are assessed at predetermined intervals, and at the conclusion of the project, for their ability to maintain support to current and future projects and the achievement of their objective/s.</p> <p>7.3.3 Issues arising out of an assessment of the way in which risk/s is/are managed are assessed for their importance to future projects, are documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.</p> | <ul style="list-style-type: none">• Activities may be carried out by candidate or by others within the team for whom candidate has responsibility. |
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EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the issues arising out of poor risk management processes should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of identification and prioritisation of risk events;
- Project finalisation reports;
- Reports of variance and recommendations for action;
- Details of conduct of risk reappraisal; and
- Risk management lessons learned.

JKR Specific – PM Tools as Evidence

- Minute of Phase Review Meeting
- Risk Management Plan

TITLE: Registered Project Manager
UNIT 8: Plan and Manage Procurement
ELEMENT 8.1: Determine Procurement Requirements

PERFORMANCE CRITERIA

- 8.1.1 Individual tasks and activities are analysed and the need to allocate, purchase or otherwise procure physical or other resources to achieve the desired outcome/s are noted for further action.
- 8.1.2 Other tasks, activities and project plans are analysed for areas in which the same or similar resources are required and for opportunities to minimise expenditure.
- 8.1.3 The types of resources required, when and where they are required, and the most efficient and cost-effective method for procuring them are detailed in a single plan for the management of procurement throughout the project life cycle.
- 8.1.4 Plans for the procurement of resources throughout the project life cycle are clear, contain all information necessary to ensure achievement of project deliverables and outcomes, and are agreed where necessary with key stakeholders prior to implementation.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Physical or other resources: Internal (other team members) and external (sub-contractors).

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the following should be assessed using written or oral questions: The principles of contracts and contractual legal requirements from the project management perspective, and the organisation's procurement management processes and procedures.

Supporting evidence may take the form of:

- Work breakdown schedules and resource assignment matrices;
- Product specifications; and
- Procurement management plans.

JKR Specific – PM Tools as Evidence

- Need Statement
- Procurement Scope Document

TITLE: Registered Project Manager
UNIT 8: Plan and Manage Procurement
ELEMENT 8.2: Establish Agreed Procurement Processes

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

- 8.2.1 Plans for the management of procurement activities throughout the project life cycle are agreed between the key stakeholders, contractors and/or suppliers, and are implemented and maintained in such a way as to enhance and ensure ongoing clarity of understanding and positive working relationships.
- 8.2.2 Individuals and organisations capable of meeting procurement requirements are identified and invited to submit proposals for the supply of goods and/or services in line with project needs.
- 8.2.3 Invitations to submit proposals are disseminated in line with project requirements, are clear and unambiguous, and contain sufficient information to enable prospective suppliers to present their proposals in the most favourable light.
- 8.2.4 The processes and criteria through which the appropriate supplier will be selected are established as part of the procurement management plan and communicated in a timely and efficient manner to those who need to know it.
- 8.2.5 Invitations to suppliers of goods and/or services are ethical, legally sound, and in a manner and format that establishes the framework for positive and mutually supportive working relationships.

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Invitations to submit proposals: Verbal, written.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the principles of contracts and contractual legal requirements from the project management perspective should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Procurement management plans;
- Contract documentation;
- Records of information disseminated as part of the proposal offer and selection process;
- Records of evaluation and selection of preferred contractors; and
- Records of involvement in contract negotiations.

JKR Specific – PM Tools as Evidence

- Procurement Plan
- Procurement Procedure

TITLE: Registered Project Manager
UNIT 8: Plan and Manage Procurement
ELEMENT 8.3: Conduct Procurement Process Activities

PERFORMANCE CRITERIA

- 8.3.1 Proposals are assessed for their ability to provide the appropriate goods and/or services within project limitations of quality, time and cost.
- 8.3.2 Discussions with prospective suppliers are conducted in a positive, professional and fair manner and feedback is encouraged to ensure clarity of understanding of project requirements.
- 8.3.3 Selection of the most appropriate supplier is in accordance with the agreed selection processes and in accordance with current and future legal and statutory requirements.
- 8.3.4 Agreements reached as to the most appropriate supplier are based on their ability to meet current and future project requirements in an efficient and cost-effective manner.
- 8.3.5 The terms and conditions of contracts for the supply of goods and/or services are clear, in line with established legal requirements, and agreed to by key stakeholders and prospective suppliers.
- 8.3.6 Negotiations conducted with preferred contractor to agree contract terms and conditions, establish common goals and minimise uncertainty, are positive, in line with organisational and project policies and procedures, and in such a manner as to establish a model for future working relationships.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Discussions: One-on-one, formal briefings, written, verbal.

Legal and statutory requirements: Federal as well as appropriate to the State or Territory in which the contract is signed.

Future needs: Those known and not known at the time of contract signing.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the selection of appropriate formal arrangements and the legal implications of such agreements, procurement management processes and procedures should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of information disseminated as part of the proposal offer and selection process;
- Contract documentation;
- Records of evaluation and selection of preferred contractors; and
- Records of involvement in contract negotiations.

JKR Specific – PM Tools as Evidence

- Letter of Acceptance (SKALA form)
- Letter of Intent

TITLE: Registered Project Manager
UNIT 8: Plan and Manage Procurement
ELEMENT 8.4: Implement Contract

PERFORMANCE CRITERIA

- 8.4.1 The plan for the management of procurement throughout the project life cycle is regularly reviewed and checked against actual procurement activities to ensure that immediate and future objectives are still capable of being met.
- 8.4.2 Where variations are found between the planned procurement strategy and actual or emerging procurement needs, these are analysed and their impact on current and future activities identified and recorded for future action.
- 8.4.3 Contract obligations and actual contract performance are regularly reviewed and any variations between contracted and actual performance are brought to the attention of the appropriate people in a timely and positive manner.
- 8.4.4 Difficulties in meeting contractual obligations are brought to the attention of the appropriate people in a timely manner and remedial actions negotiated and agreed within the legal framework of the contract.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Appropriate people: Higher project authority, contractor.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the legislative requirements relevant to the candidate's organisation and project should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Procurement management plans;
- Contract documentation;
- Contract reports;
- Contract change procedures and documentation; and
- Records of contract discharge procedures and documentation.

JKR Specific – PM Tools as Evidence

- Draft Contract including Partnering Arrangement
- Signed Letter of Acceptance

TITLE: Registered Project Manager
UNIT 8: Plan and Manage Procurement
ELEMENT 8.5: Manage Contract Finalisation Procedures

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

- 8.5.1 Others are actively encouraged to provide timely and ongoing feedback on the performance of the contract and/or procurement management plan and their/its continued ability to meet project objectives.
- 8.5.2 Where the performance of contract/s or the procurement management plan is found to be less than optimal, timely and appropriate changes to the contract/s and/or plan are carried out in accordance with agreed change management processes.
- 8.5.3 Contract finalisation activities designed to ensure that contract deliverable meet contractual requirements are planned early in the project life cycle, are agreed to by key stakeholders, team members and contractor/s, and are carried out at the appropriate time in accordance with the procurement management plan.
- 8.5.4 The procedures and system/s for the management of procurement and contracts throughout the project life cycle are assessed at regular intervals, and at the conclusion of the project, for their effectiveness and their ability to maintain support to current and future projects and the achievement of their objective/s.
- 8.5.5 Issues arising out of an assessment of the way in which procurements is/were managed are assessed for their importance to future projects, are documented with appropriate recommendations for future action, and passed on for addition to the organisation's project management body of knowledge.

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Others: Key stakeholders, contractor/s.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the procurement management processes and procedures should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Progress measurement and conflict resolution process records;
- Records of contract discharge procedures and documentation; and
- Records of procurement lessons learned and recommended improvements.

JKR Specific – PM Tools as Evidence

- As-built Drawing Register
- Asset Register
- Certificate of Practical Completion
- Handover Certificate

TITLE: Registered Project Manager
UNIT 9: Plan and Manage Project Integrative Processes
ELEMENT 9.1: Implement Integration of the Nine Functions of Project Management

PERFORMANCE CRITERIA

- 9.1.1 Individual aspects of the project are analysed, a plan is made for their management, and this plan is integrated into one single plan for the overall management of the project and the achievement of its primary objective.
- 9.1.2 Individual aspects of the plan for the management of the project are reviewed on a regular basis and, where they are incomplete or where elements of them are found to be incapable of supporting the achievement of the project's primary objective, changes to bring them into line with the overall project requirements are carried out in accordance with agreed change management procedures.
- 9.1.3 Where individual aspects of the plan overlap others, or have an impact on the management and control of others, the impact and/or overlaps are analysed and changes made to the project plan that ensures all aspects are capable of achieving their individual as well as the overall project objective/s.
- 9.1.4 New or potential issues are assessed for the real or potential impact they may have on all aspects of the project plan, and changes are made to accommodate them and lessen their impact where appropriate and in accordance with agreed change management processes.
- 9.1.5 Change management processes and the control mechanisms to ensure that such changes are in line with the project requirements are developed, agreed to by all key stakeholders and team members, and incorporated into the plan for the management of the project.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Individual aspects of the plan: Management plans for scope, time, cost, quality, risk, HR, communications and procurement; monitoring and control tools such as WBS, RAM, schedule, budget, etc. as appropriate to the project.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the project process, the project life cycle and the relationship between project phases, and the suitable methodologies, techniques and tools available to Registered Project Managers should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of evaluation and consultative processes to determine achievable project objectives; and
- Project plans and sub-plans covering the nine functions of project management.

JKR Specific – PM Tools as Evidence

- Phase Transfer Report (Design)

TITLE: Registered Project Manager
UNIT 9: Plan and Manage Project Integrative Processes
ELEMENT 9.2: Coordinate Internal and External Environments

PERFORMANCE CRITERIA

- 9.2.1 Individual aspects of the plan for the management of the project are checked against similar or parallel aspects of the organisation to ensure conformity with organisational processes and procedures and that the broader business and strategic goals and objectives are being met.
- 9.2.2 Links are established and maintained between individual aspects of the project and their organisational equivalent that ensure a continued alignment of project objectives with organisational objectives throughout the project life cycle.
- 9.2.3 A plan for the management of integration throughout the project life cycle is developed, agreed to by key stakeholders and team members, and incorporated into the overall plan for the management of the project.
- 9.2.4 All work carried out within the parameters and limitations of the project is monitored for progress against the plan and, where adjustments are required to bring the tempo and quality back to within acceptable tolerances, these are made quickly, efficiently, and in such a way as to retain and maintain positive working relationships.
- 9.2.5 Conflicts between the achievement of the project objectives and the accommodation of requirements of other levels of management within the organisation are handled sensitively, with tact, and in such a way as to maintain the integrity of the project and positive working relationships with others.

RANGE OF VARIABLES

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

Individual aspects of the plan: Management plans for scope, time, cost, quality, risk, HR, communications and procurement; monitoring and control tools such as WBS, RAM, schedule, budget, etc. as appropriate to the project.

Parallel aspects/organisational equivalent: Business and/or strategic plans; accounting and financial procedures; HR management and development processes; organisational approach to quality and risk; internal and external communications networks; legal guidelines.

Organisation: The company or business within which, or for whom, the project is being run.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the internal and external environment factors that may affect the project should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Plans for the management of individual aspects of the project and details of where/how integrative processes have been followed; and
- Records of issues relevant to this element and where/how they have been addressed.

JKR Specific – PM Tools as Evidence

- Phase Transfer Report (Planning)
- Phase Transfer Report (Procurement)

TITLE: Registered Project Manager
UNIT 9: Plan and Manage Project Integrative Processes
ELEMENT 9.3: Implement Project Activities Throughout Life Cycle

PERFORMANCE CRITERIA**RANGE OF VARIABLES**

- 9.3.1 Project phases, approval points and review points are incorporated into the project schedule and used to monitor and control progress of all project management functions in the achievement of the overall project objective.
- 9.3.2 The plan for the management of integration throughout the project life cycle is regularly reviewed and, where changes are required to bring it into line with current and emerging requirements, these are made in a timely manner and in accordance with established change management processes.
- 9.3.3 The procedures and system/s for the management of integration throughout the project life cycle are assessed at regular intervals, and at the conclusion of the project, for their effectiveness and their ability to maintain support to current and future projects and the achievement of their objective/s.
- 9.3.4 Issues arising out of an assessment of the way in which project integration was managed are assessed for their importance to future projects, are documented with appropriate recommendations for future action, and are passed on for addition to the organisation's project management body of knowledge.

- Activities may be carried out by candidate or by others within the team for whom candidate has responsibility.

EVIDENCE REQUIREMENTS

This element should be assessed in projects that are conducted in stable and controlled environments.

Underpinning knowledge:

- A broad knowledge and understanding of the project process, the project life cycle and the relationship between project phases should be assessed using written or oral questions.

Supporting evidence may take the form of:

- Records of measurement and reporting of progress in relation to established baselines;
- Finalisation plans; and
- Lists of integration management issues and recommended improvements.

JKR Specific – PM Tools as Evidence

- Phase Transfer Report (Construction)

Summary of PM Tools as evidence required for the certification for Project Manager

Unit	Element	Evidence from PM Tools
1. Plan and Manage Scope	1.1 Establish Project Authorisation	<ul style="list-style-type: none"> Appointment Letter Client Project Brief Minutes of Meeting
	1.2 Define Project Scope	<ul style="list-style-type: none"> Project Management Plan (PMP) Scope Definition
	1.3 Implement Scope Controls	<ul style="list-style-type: none"> Change Register Concept Design Brief Design Review Checklist Minute of Technical Meeting Minutes of Pre-Construction Meeting Preliminary Design Drawing Register Project Brief Guideline Technical Design Brief
2. Plan and Manage Time	2.1 Determine Project Schedule	<ul style="list-style-type: none"> Contractor's Work Program Work Programme Schedule (MS Project)
	2.2 Implement Project Schedule	<ul style="list-style-type: none"> Construction Plan (C-Plan) EOT Register Response Letter to EOT Claim
	2.3 Assess Time Management Outcomes	<ul style="list-style-type: none"> Progress Report
3. Plan and Manage Costs	3.1 Determine Project Costs	<ul style="list-style-type: none"> As Tendered Detail Abstract (ATDA) Budget Estimation Preliminary Detail Abstract (PDA)
	3.2 Monitor and Control Project Costs	<ul style="list-style-type: none"> Contract Variation Register Letter of Confirmation of Fund Response Letter to Claim
	3.3 Conduct Financial Completion Activities	<ul style="list-style-type: none"> Approved Statement of Final Account As Completed Detail Abstract (ACDA) SKALA Report
4. Plan and Manage Quality	4.1 Determine Quality Requirements	<ul style="list-style-type: none"> Final Inspection Checklist Joint Inspection Checklist Quality Plan (Q-Plan)
	4.2 Implement Quality Management	<ul style="list-style-type: none"> Defect List Joint Inspection Report Review Checklist of Contractor Maintenance Plan
	4.3 Implement Project Quality Improvements	<ul style="list-style-type: none"> Contractor Performance Feedback Report Quality Report
	4.4 JKR Specific – Environmental Quality Plan for a Project	<ul style="list-style-type: none"> Environmental Management Plan (EMP) Appointment Letter of Environmental Officer
	4.5 JKR Specific – Implementation of Environmental Management Plan	<ul style="list-style-type: none"> EMS Procedure

Unit	Element	Evidence from PM Tools
5. Plan and Manage Human Resources	5.1 Implement HRM Planning Activities	• Responsibility Assignment Matrix
	5.2 Implement Staff Training and Development	• Training Program
	5.3 Guide The Project Team	• Minutes of Site Meeting
	5.4 Identify Opportunities for Improvement in HR Planning and Management	• Project Completion Report
	5.5 JKR Specific - Establish and Implement Health and Safety Plan	• OSH Procedure
6. Plan and Manage Communications	6.1 Implement Communications Planning Processes	• Communication Matrix • Network Diagram
	6.2 Plan and Manage Information Management	• Contact List • Contact Tracking
	6.3 Implement Project Reporting Processes	• Handover and Maintenance Plan • Handover Schedule
	6.4 Assess Communications Management Outcomes	• Client Letter of Confirmation • Client Feedback Report • Client Letter of Approval
	6.5 JKR Specific – Dispute Management: Avoid from Letting Issues Develop into Disputes	• Issues Management Plan
	6.6 JKR Specific – Dispute Management: Administer Dispute	• Dispute Procedure
7. Plan and Manage Risk	7.1 Determine Project Risk Events	• Risk Analysis
	7.2 Monitor and Control Project Risk	• JKR Project Acceptance Review Checklist • Risk Register
	7.3 Assess Risk Management Outcomes	• Minute of Phase Review Meeting • Risk Management Plan

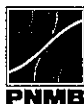
Unit	Element	Evidence from PM Tools
8. Plan and Manage Procurement	8.1 Determine Procurement Requirements	<ul style="list-style-type: none"> • Need Statement • Procurement Scope Document
	8.2 Establish Agreed Procurement Processes	<ul style="list-style-type: none"> • Procurement Plan • Procurement Procedure
	8.3 Conduct Procurement Process Activities	<ul style="list-style-type: none"> • Letter of Acceptance (SKALA form) • Letter of Intent
	8.4 Implement Contract	<ul style="list-style-type: none"> • Draft Contract including Partnering Arrangement • Signed Letter of Acceptance
	8.5 Manage Contract Finalisation Procedures	<ul style="list-style-type: none"> • As-built Drawing Register • Asset Register • Certificate of Practical Completion • Handover Certificate
9. Plan and Manage Project Integrative Processes	9.1 Implement Integration of the Nine Functions of Project Management	<ul style="list-style-type: none"> • Phase Transfer Report (Design)
	9.2 Coordinate Internal and External Environments	<ul style="list-style-type: none"> • Phase Transfer Report (Planning) • Phase Transfer Report (Procurement)
	9.3 Implement Project Activities Throughout Life Cycle	<ul style="list-style-type: none"> • Phase Transfer Report (Construction)



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PRINTED BY
PERCETAKAN NASIONAL MALAYSIA BERHAD
KUALA LUMPUR, 2010
www.printnasiona.com.my
email: cservice@printnasiona.com.my
Tel.: 03-92366895 Fax: 03-92224773

ISBN 978-967-5957-01-7



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