

**Office of the
Government Chief Information Officer**

Appendices to Practice Guide to Project Management

for IT Projects under an Outsourced Environment

[S19a]

Version 2.1

March 2011

COPYRIGHT NOTICE

© 2011 by the Government of the Hong Kong Special Administrative Region

Unless otherwise indicated, the copyright in the works contained in this publication is owned by the Government of the Hong Kong Special Administrative Region. You may generally copy and distribute these materials in any format or medium provided the following conditions are met –

- (a) the particular item has not been specifically indicated to be excluded and is therefore not to be copied or distributed;
- (b) the copying is not done for the purpose of creating copies for sale;
- (c) the materials must be reproduced accurately and must not be used in a misleading context; and
- (d) the copies shall be accompanied by the words “copied/distributed with the permission of the Government of the Hong Kong Special Administrative Region. All rights reserved.”

If you wish to make copies for purposes other than that permitted above, you should seek permission by contacting the Office of the Government Chief Information Officer.

TABLE OF CONTENTS

Appendix A	Roles & Responsibilities of Members in Project Organisation	3
A.1	Project Owner	3
A.2	Project Steering Committee (PSC)	4
A.3	Internal Project Manager (Internal PM)	7
A.4	Contractor Project Manager (Contractor PM)	9
A.5	Project Assurance Team (PAT)	10
A.6	Project Team Member	11
A.7	Project Administrator	12
Appendix B	Competencies of Members in Project Organisation	13
B.1	Project Owner	13
B.2	Project Executive (Senior User and Senior Technical)	14
B.3	Internal / Contractor Project Manager	16
B.4	Project Assurance Team (PAT)	18
B.5	Project Team Member	19
B.6	Project Administrator	19
Appendix C	RACI Model of Members in Project Organisation	20
C.1	Initiate	21
C.2	Plan	22
C.3	Execute	23
C.4	Close	24
Appendix D	Templates	25
D.1	Project Management Plan	26
D.1.1	Project Organisation	32
D.1.2	Work Plan	44
D.1.3	Financial Management Plan	48
D.1.4	Communications Management Plan	51
D.1.5	Risk Management Plan	58
D.1.6	Quality Management Plan	65
D.1.7	Issue Management Plan	78
D.1.8	Change Request Management Plan	84
D.2	Change Request Form	89
D.3	Highlight Report	92
D.4	Lesson Learnt	94
D.5	Risk Register	95
D.6	Issue Log	96

D.7	Change Request Log	97
D.8	Asset Inventory	98
Appendix E	Instructions / Tools	99
E.1	Work Breakdown Structure (WBS)	99
E.2	Project Schedule Diagram	104
E.2.1	Gantt Chart.....	104
E.2.2	Activity Sequencing	104
E.2.3	Critical Path Methodology.....	106
E.3	Stakeholder Analysis	107
E.4	Risk Assessment Tool	109

APPENDICES

Appendix A Roles & Responsibilities of Members in Project Organisation

Roles and responsibilities within the Project Organisation should be understood and communicated among members to align expectations as well as foster mutual understanding with the ultimate goal of ensuring project success. Typical roles and responsibilities are outlined below but tailoring is recommended to suit the needs of individual projects.

A.1 Project Owner

The Project Owner is the ultimate decision maker for the project who is supported by the advisory of the Project Steering Committee (PSC) to ensure that the business benefits can be realised. The Project Owner takes holistic ownership of the project by defining overall project strategic direction to ensure it conforms to the overall IT strategy of the B/D.

- Champion project by gathering support of senior levels of management
- Appoint PSC and Internal PM to ensure business and technology interests are both represented
- Identify replacements in a timely manner in the event of staff turnover to minimise impact to the project
- Oversee the development of the business case and ensure that the project is aligned with the Government and B/D's vision and strategies
- Endorse funding application and the project budget with the assistance from B/D users and/or the Internal PM, as appropriate
- Provide input to project objectives and scope, especially during project initiation phase
- Monitor and control the progress of the project at a strategic level e.g., by reviewing the viability of the business case regularly
- Provide high-level advisory over the course of the project through periodic management meetings
- Hold the PSC accountable for realising the business benefits as outlined in the business case, as well as the quality and integrity of the project's deliverables

and outcomes

- Endorse progress update reports, Post Implementation Departmental Return (PIDR) and project closure

A.2 Project Steering Committee (PSC)

The PSC is accountable to the Project Owner for the progress and performance of the project. The committee comprises the Executive, Senior User and Senior Technical roles.

Overall, the PSC has the following responsibilities:

- Appoint members of the Project Assurance Team (PAT)
- Commit project resources
- Endorse project management plan during the plan phase, advising the management components including risk & issue tolerance levels and approving authorities
- Endorse project deliverables that meet all project acceptance criteria as endorsed by PAT at each project phase
- Respond to requests for advice from the Internal PM
- Review project performance, provide overall direction to the project, and address areas of improvement on regular basis
- Ensure that risks, including business risks, are being tracked and managed
- Ensure business benefits will be realised as planned
- Endorse Contract Performance Evaluation report (CPER) to ensure proper feedback to contractor's performance in the project is made
- Recommend future action on the project if any project tolerance is exceeded, and escalate to the Project Owner or the OGCI0 where appropriate

The Executive has the following responsibilities:

General

- Chair PSC meetings
- Determine authority to be delegated in respect of approval of change requests, risk responses and issue resolutions
- Monitor project financials
- Brief Project Owner about project progress

Business related

- Ensure the business case is aligned with the overall Government and B/D's vision and strategies
- Validate and monitor business case against project progress or project changes such as schedule variation and external influences
- Endorse the project evaluation report and evaluation result of business benefits realised upon project completion

Communications related

- Approve the sending of the notification of project closure to the Project Owner or the OGCIIO.
- Manage user and contractor's expectations on the project, resolve critical expectation variations
- Inform the PSC, the Project Owner or the OGCIIO of any changes caused by external events, such as policy change

The Senior User has the following responsibilities:

General

- Ensure the user resources required for the project are made available
- Delegate user project assurance activities to PAT and Internal PM, as appropriate
- Provide users' quality expectations and define acceptance criteria for the project
- Prioritise high impact change requests (e.g. to the specification or acceptance criteria), contribute user opinions on PSC decisions on whether to implement such changes
- Prioritise and approve users request of follow-up recommendations after project closure
- Review and evaluate business benefits realised at different phases of the project
- Maintain business performance stability from transition until project roll-out

Deliverable related

- Ensure the desired project outcome has sufficiently considered end users' point-of-view, and details are unambiguous
- Ensure the desired outcome of the project is correctly and completely specified through quality acceptance criteria agreed with the contractor. Keep in mind that project success is also measured by on-time and on-budget project delivery
- Make sure that progress towards the outcome remains consistent with the

specified requirements

- Endorse project deliverables (except for project management related deliverables) according to pre-defined acceptance criteria

Communications related

- Appoint appropriate PAT and end user representatives in all phases, ensure the user representation is sufficient and objective
- Represent the interest of those who will use the project's deliverables
- Brief and advise Project Owner on critical matters concerning the project.
- Resolve conflicts between user requirements and project priorities
- Ensure user liaison is functioning effectively

The Senior Technical has the following responsibilities:

General

- Ensure that the internal technical resources for the project are made available, according to the work plan
- Delegate technical project assurance activities to PAT, Internal PM or external quality assurance parties, as appropriate
- Make decisions on escalated issues, with particular focus on ensuring the technical integrity of the resolution
- Prioritise high impact change requests related to technical aspects of the project and contribute technical experts' opinions on PSC decisions on whether to implement such changes
- Review and provide advice on high impact risks related to technical aspects, allow resources if required.

Deliverable related

- Accountable for the quality of the deliverables and responsible for the technical integrity of the project
- Represent Government's IT interests, such that contractor's effort conforms to Government specific requirements, existing IT environment and technical standards
- Advice and approve technical related aspects, such as the proposed design and methods, project approach, technical strategy, quality assurance methods

Communications related

- Resolve contractor requirements and priority conflicts
- Arbitrate on, and resolve, any contractor resource or priority conflicts

- Communicate with Contractor Director or Contractor PM on important project information that may have impact on the contractor

A.3 Internal Project Manager (Internal PM)

The Internal PM is the lead person (B/D or ITMU resource) accountable for project planning and delivery. As the person responsible for meeting the project objectives and ensuring project success, the Internal PM is expected to provide oversight and input to project management aspects such as project work plan, budget, quality, risks, and issues, as well as management of contractor performance through working closely with the contractor PM.

Overall project management

- Ensure the project produces the required deliverables within time, budget, quality, scope, risk as well as results that achieve the benefits defined in the business case
- Prepare the following project management deliverables, obtain feedback from the PAT and get the PSC's endorsement:
 - Project management plan (comprises project organisation plan, work plan, quality management, risk management, issue management, communications management, financial management and change request management)
 - Highlight reports
 - Project progress update (PU) and quarterly performance evaluation report (QPER)
 - Post-implementation departmental return (PIDR)
- Monitor, control, and update as appropriate the various components of the Project Management Plan throughout the project lifecycle
- Review and oversee maintenance of the following records regularly; delegate updates of the following records to the Project Administrator where appropriate:
 - Risk register
 - Issue log
 - Change request log
 - Project library
- Monitor work performance information e.g., KPI to identify whether project has deviated from plans; also ensure that the metrics are provided accurately and timely
- Notify the PSC of any deviations from the Project Management Plan
- Seek PSC's advice and support on important matters related to project

planning, execution and control.

Organisation related

- Plan project resources required and confirm availability from the PSC
- Determine required skill sets and competency of internal project resources
- Ensure roles and responsibilities of project team are communicated and understood
- Observe project team performance and take actions where necessary to ensure level of involvement is adequate, according to project work plan
- Take responsibilities for the use and availability of resources (e.g., Project Team Members); initiate corrective action in a timely manner, where necessary

Work plan related

- Develop, update, and maintain the work plan from funding application stage through project completion
- Continuously monitor the project progress against schedule baseline and adjust activities, if necessary, in order to meet planned project timelines

Scope management related

- Coordinate gathering and validation of scope definition and business requirements ensuring that appropriate stakeholders are involved
- Control requirements requests, in an objective manner, to ensure that all user requests align with the overall project objectives, while project is still delivered within the planned timeline and budget
- Agree detailed acceptance criteria with Contractor project manager

Change management related

- Ensure that all change requests are processed according to established change request management procedures

Procurement management related

- Develop contractor selection criteria and tender requirements specification document as part of the tendering process, if applicable
- Participate in tender evaluation, if applicable
- Review and provide input to contractor's project plan (or Project Initiation Document (PID)) to ensure it aligns with the overall project management plan
- Perform oversight and management of the contractor resources, by closely liaising with the Contractor project manager
- Conduct regular, periodic meetings/discussions with the Contractor project

manager to remain cognizant about project progress

- Ensure deliverable checkpoints take place by working closely with the contractors to ensure that deliverables meet expected quality
- Escalate contractor related disputes, as necessary, to the PSC

Communications management related

- Execute, monitor and control communications activities in accordance with the communications management procedures

Financial management related

- Monitor and control project budget to identify any budget-actual variance
- Monitor contractor payments

A.4 Contractor Project Manager (Contractor PM)

The Contractor PM is the lead person (contractor resource) who is responsible and accountable for coordinating contractor resources. The Contractor PM works closely with the Internal PM and also manages the project management aspects such as project resources, timeline, budget, risks, and issues, specifically within the activities being carried out by outsourced staff

- Responsible lead of the contractor resources
- Accountable for all project activities completed by the contractor resources, to ensure that performance of activities leads to production of deliverables that meets expectation and acceptance criteria
- Coordinate staffing arrangements of contractor resources to ensure they meet project timing and skill requirements
- Proactively communicate project progress by briefing Internal PM through e.g., status reporting, deliverable checkpoints, meetings, discussions, etc. to ensure contractor's deliverables are on track and meet expectations
- Complete the project plan (or PID) once onboard the project
- Maintain set of project management documentation for the outsourced activities such as project risk and issue management, work plan, quality, scope and change management, contract management, and budget management; work with the Internal PM to ensure they align with the overall project management plan
- Escalate project risks and issues to Internal PM for resolution; as well as escalating risks and issues, as required, to Contractor Director
- Coordinate independent quality assurance team to conduct quality reviews to

ensure quality of project deliverables meets expectations

- Work closely with Internal PM to ensure contractor resources are performing according to expectations

A.5 Project Assurance Team (PAT)

The PAT looks after the quality assurance work on behalf of the PSC from the business, user and technical perspectives. They are individuals who have knowledge or expertise in the specific subject matter area that is part of the project scope. The PAT consists of three roles, namely the Business Assurance Coordinator (BAC), the User Assurance Coordinator (UAC) and the Technical Assurance Coordinator (TAC), that is a balanced representation of the business, user and technical interests

Overall, the PAT has the following responsibilities:

- Assure the project on behalf of the PSC
- Take into account the primary stakeholder interests, including business and technical
- Ensure user needs and expectations are met and managed
- Ensure risks are controlled
- Ensure alignment of project objectives with B/D's strategy
- Ensure continual viability of the project
- Ensure the project produces what the business case requires
- Ensure quality assurance standards and quality control procedures are followed
- Ensure stakeholder participation in quality control activities
- Ensure that quality control follow-up actions are dealt with in a timely manner
- Advise on the components of the project management plan; execute, monitor and control management activities according to the plan
- Advise on the development of the tender document, where necessary

The BAC has the following responsibilities:

- Monitor progress and costs against the project's business case
- Co-ordinate quality control activities
- Attend checkpoint/progress review meetings
- Contribute to the project evaluation review

The UAC has the following responsibilities:

- Monitor and report to the Senior User user-related problems that arise during the project
- Ensure that the user requirements are properly specified, and are well understood and agreed by the contractor
- Ensure that the work plan has included all project deliverables required by the users
- Ensure that the acceptance criteria of project deliverables are properly specified and are understood and agreed by the contractor
- Ensure quality control activities and quality control follow up actions are conducted
- Attend checkpoint/progress review meetings, where necessary
- Ensure that the impact of change requests is understood and accepted by users
- Contribute to the project evaluation review

The TAC has the following responsibilities:

- Select the appropriate technical strategy and methods for the project
- Ensure government and departmental technical standards are followed
- Ensure that the acceptance criteria of project deliverables are properly specified and are understood and agreed by the contractor
- Ensure quality control activities and quality control follow up actions are conducted
- Attend checkpoint/progress review meetings, where necessary
- Advise on the technical impact of change requests
- Contribute to the project evaluation review

A.6 Project Team Member

Project Team Members are resources from B/Ds or ITMUs assigned to assist the Internal PM to manage and control the project or to work with the Contractor to provide inputs or to participate in the review process. Some team members may also be team leaders providing task leadership

- Understand the project objectives, scope, benefits, and timeline as well as the

roles and responsibilities in the project

- Report to the Internal PM or team leaders
- Deliver their tasks according to the project schedule
- Assist Internal PM in monitoring and controlling the project to deliver results or provide inputs to the Contractor (e.g. user requirements, acceptance criteria) and participate in review process
- Escalate project risks and issues to team leader or Internal PM

A.7 Project Administrator

Project Administrator is an optional role who provides administrative role support to the Internal PM. This role is recommended for large projects to document and maintain project's administrative tasks such as monitoring of issues, risks, change requests, logistics, budget, procurement, and project library in large-sized projects.

- Report to the Internal PM
- Offload the administrative work of the Internal PM
- Assist in the monitoring of issues, risks, change requests, logistics, budget and procurement as well as maintenance of the project library
- Assist with the compilation of documents such as project management plan, highlight reports, PIDR etc.
- Maintain the following records:
 - Risk register
 - Issue log
 - Change request log
 - Project library
 - Any other registers / logs delegated by the Internal PM
- Administer the coordination of logistics such as meeting rooms, facilities, inventories

Appendix B Competencies of Members in Project Organisation

It will be beneficial if members in the Project Organisation possess knowledge and competencies commensurate with the project requirements. The following describes typical competency requirements for each project role (excluding contractor director and contractor team members). They should be tailored to suit specific requirements of individual projects. The competency requirements serve as a guideline for the selection of appropriate resources for each project. Depending on the scale, complexity and criticality of each project, the Project Owner and Internal Project Manager should determine the level of competencies required according to the following principles:

Awareness - Applies the competency to the simplest situations; Requires close and extensive guidance

Basic - Applies the competency to somewhat difficult situations; Requires frequent guidance

Intermediate - Applies the competency to difficult situations; Requires occasional guidance

Advanced - Applies the competency to considerably difficult situations; Generally requires little or no guidance

Expert - Applies the competency to exceptional difficult situations; Serves as a key resource and advises other team members

Leading Edge - Applies the competency to an environment of change requiring exceptional levels of conceptual thinking; Requires a command of scientific and business principles, theories and knowledge as well as leadership, with an impact on industries and economical, scientific or business principles

B.1 Project Owner

Professional competency	Definition
Leadership	<ul style="list-style-type: none">Leads the project organisation by providing clarity, energy, and decisiveness
Influence	<ul style="list-style-type: none">Possesses the ability to win support, gain cooperation and overcome objections and barriers

Professional competency	Definition
	<ul style="list-style-type: none"> • Is able to drive an opinion, even if unpleasant, and impress its importance
Stakeholder management	<ul style="list-style-type: none"> • Ensures all activities of the business return value to all those who are involved • Understands business, technology, and contractor interests
Delegation	<ul style="list-style-type: none"> • Is able to entrust projects, tasks and authority to others
Strategic thinking	<ul style="list-style-type: none"> • Understands the impact of the wider political, social and economic issues on the internal environment • Develops a vision that sets the future direction and successes of the business and acts decisively and with purpose applying a strategic approach
Strategic decision making	<ul style="list-style-type: none"> • Obtains information and identifies key issues and relationships relevant to achieving a long-range goal or vision • Commits to a course of action to accomplish a long-range goal or vision after evaluating alternatives based on logical assumptions, facts, available resources, constraints, and organisational values
Business acumen	<ul style="list-style-type: none"> • Understands key business drivers and external environment context • Employs data-driven approach to evaluate business issues • Is knowledgeable in current and possible future policies, practices, trends, and information affecting the Government organisation
Change management	<ul style="list-style-type: none"> • Understands and supports in the implementation of change in the work environment • Is flexible and adaptable to new opportunities and situations and has the commitment and ability to implement change
Conflict resolution	<ul style="list-style-type: none"> • Identifies differences between individuals and groups and facilitates active discussion to achieve resolution
Organisational awareness	<ul style="list-style-type: none"> • Understands Government and B/D policies & procedures very well • Understands the organisational culture
Public policy awareness	<ul style="list-style-type: none"> • Understands existing and future public policy drivers

B.2 Project Executive (Senior User and Senior Technical)

Professional competency	Definition
-------------------------	------------

Professional competency	Definition
Influence	<ul style="list-style-type: none"> • Is able to win support, gain cooperation and overcome objections and barriers • Is able to drive an opinion, even if unpleasant, and impress its importance
Stakeholder management	<ul style="list-style-type: none"> • Ensures all activities of the business return value to all those who are involved • Understands business, technology, and contractor interests
Delegation	<ul style="list-style-type: none"> • Is able to entrust projects, tasks and authority to others
Change management	<ul style="list-style-type: none"> • Understands, supports and assists in the implementation of change in the work environment • Is flexible and adaptable to new opportunities and situations and has the commitment and ability to implement change
Strategic thinking	<ul style="list-style-type: none"> • Understands the impact of the wider political, social and economic issues on the internal environment • Develops a vision that sets the future direction and successes of the business and acts decisively and with purpose applying a strategic approach
Strategic decision making	<ul style="list-style-type: none"> • Obtains information and identifies key issues and relationships relevant to achieving a long-range goal or vision • Commits to a course of action to accomplish a long-range goal or vision after evaluating alternatives based on logical assumptions, facts, available resources, constraints, and organisational values
Business acumen <i>(for Senior User)</i>	<ul style="list-style-type: none"> • Understands key business drivers and external environment context • Employs data-driven approach to evaluate business issues • Is knowledgeable in current and possible future policies, practices, trends, and information affecting the Government organisation
Broker of expert skills	<ul style="list-style-type: none"> • Uses resources and networks effectively and efficiently to obtain information / staff that provides the project with a strategic edge
Negotiation	<ul style="list-style-type: none"> • Effectively explores alternatives and positions to reach outcomes that gain all parties' support and acceptance
Conflict resolution	<ul style="list-style-type: none"> • Identifies differences between individuals and groups and facilitates active discussion to achieve resolution
Technical proficiency <i>(for Senior Technical)</i>	<ul style="list-style-type: none"> • Possesses knowledge / expertise in project's technology solutions
Organisational awareness	<ul style="list-style-type: none"> • Understands Government and B/D policies & procedures very well

Professional competency	Definition
	<ul style="list-style-type: none"> • Understands the organisational culture
Public policy awareness	<ul style="list-style-type: none"> • Understands existing and future public policy drivers

B.3 Internal / Contractor Project Manager

Professional competency	Definition
Project management	<ul style="list-style-type: none"> • Organises and monitors discreet tasks with specific projects to meet budget, time, and quality specifications • Is able to foresee duration and difficulty of tasks and projects • Is able to balance project management aspects and ability to prioritise
Leadership	<ul style="list-style-type: none"> • Leads the project organisation by providing clarity, energy, and decisiveness
Managing work	<ul style="list-style-type: none"> • Effectively manages one’s time and resources to ensure that work is completed efficiently
Teamwork	<ul style="list-style-type: none"> • Understands team dynamics and uses a flexible interpersonal style to contribute to the effective functioning of teams and to the completion of team goals
Result oriented	<ul style="list-style-type: none"> • Drives, focuses and commits to add value and gets things done and demonstrates a compulsion for completeness by working to a structured plan
Problem solving	<ul style="list-style-type: none"> • Systematically secures relevant information, relates and compares data from different sources as well as identifies key issues
Informative	<ul style="list-style-type: none"> • Provides timely information to e.g., PSC so that they can make accurate decisions
Continuous improvement focus	<ul style="list-style-type: none"> • Is willing to improve existing processes and procedures, adjust and review work, projects and responses in changing conditions and requirements • Is able to find better ways of doing things in terms of effectiveness and/or efficiency
Interpersonal skills	<ul style="list-style-type: none"> • Considers and responds appropriately to the needs, feelings and capabilities of different situations
Communication skills	<ul style="list-style-type: none"> • Delivers direction and information in a manner in which all understand (e.g., PSC, Team Members) • Maintains effective verbal and non-verbal interaction with others. Demonstrates effective listening skills when

Professional competency	Definition
	communication and is able to influence others' perceptions
Facilitation skills	<ul style="list-style-type: none"> • Exhibits behaviours and techniques that enhance the quality of group processes
Contract management	<ul style="list-style-type: none"> • Creates clearly defined performance parameters that are agreed upon by all parties involved • Ensures that strong organisational structure and processes that are put in place to manage and track relationships, contracts, and service-level agreements (SLAs) with all contractors
Stakeholder management	<ul style="list-style-type: none"> • Ensures all activities of the business return value to all those who are involved • Understands business, technology, and contractor interests
Change management	<ul style="list-style-type: none"> • Understands, supports and assists in the implementation of change in the work environment • Is flexible and adaptable to new opportunities and situations and has the commitment and ability to implement change
Financial management	<ul style="list-style-type: none"> • Develops business cases and conducts ROI analysis to support decision making • Applies understanding of financials to effectively control budgets
Planning	<ul style="list-style-type: none"> • Establishes a course of action for others to accomplish specific goals, projects and processes and allocation of appropriate resources
Attention to detail	<ul style="list-style-type: none"> • Completes and maintains accuracy of even the small aspects of assigned tasks
Coaching	<ul style="list-style-type: none"> • Provides timely guidance and feedback to help others strengthen specific knowledge/skill areas needed to accomplish a task or solve a problem
Negotiation	<ul style="list-style-type: none"> • Effectively explores alternatives and positions to reach outcomes that gain all parties' support and acceptance
Conflict Resolution	<ul style="list-style-type: none"> • Identifies differences between individuals and groups and facilitates active discussion to achieve resolution
Independence	<ul style="list-style-type: none"> • Plans and works effectively with minimal supervision or direction and makes active attempts to influence events to achieve goals, self-starter rather than excepting passively
Technical proficiency	<ul style="list-style-type: none"> • Possesses knowledge in project's technology solutions
Organisational awareness	<ul style="list-style-type: none"> • Understands Government and B/D policies & procedures • Understands the organisational culture
Public policy awareness	<ul style="list-style-type: none"> • Understands of public policy drivers

Professional competency	Definition
Project Management Certification	<ul style="list-style-type: none"> • Attains project management certification in widely accepted methodologies such as PMP and PRINCE
Contractor Management	(for Internal PM only) <ul style="list-style-type: none"> • Possesses knowledge and experience in managing outsourced IT projects and work with IT contractors

B.4 Project Assurance Team (PAT)

Professional competency	Definition
Broker of expert skills	<ul style="list-style-type: none"> • Uses resources and networks effectively and efficiently to obtain information / staff that provides the project with a strategic edge
Technical proficiency	<ul style="list-style-type: none"> • Possesses knowledge / expertise in subject matter of the business and/or technology areas • Adequately represents technology stakeholder interests
Business acumen	<ul style="list-style-type: none"> • Understands key business drivers and external environment context • Employs data-driven approach to evaluate business issues • Is knowledgeable in current and possible future policies, practices, trends, and information affecting the Government organisation • Adequately represents business stakeholder interests
Professional credibility	<ul style="list-style-type: none"> • Is a trusted source of advice and counsel for others
Communication	<ul style="list-style-type: none"> • Provides the necessary information on time, so that people can do their job • Is able to present own ideas and document/describe activities
Change management	<ul style="list-style-type: none"> • Understands, supports and assists in the implementation of change in the work environment • Is flexible and adaptable to new opportunities and situations and has the commitment and ability to implement change

B.5 Project Team Member

Professional competency	Definition
Communication	<ul style="list-style-type: none"> • Maintains effective verbal and non-verbal interaction with others. Demonstrates effective listening skills when communication and is able to influence others' perceptions • Provides the necessary information on time, so that people can do their job • Is able to present own ideas and document/describe activities
Attention to detail	<ul style="list-style-type: none"> • Completes and maintains accuracy of even the smallest aspects of assigned tasks
Teamwork	<ul style="list-style-type: none"> • Consistently participates in and maintains a team environment by openly sharing information, exchanging ideas, and/or jointly solving problems
Managing work	<ul style="list-style-type: none"> • Effectively manages one's time and resources to ensure that work is completed efficiently

B.6 Project Administrator

Professional competency	Definition
Project management	<ul style="list-style-type: none"> • Monitors discreet tasks with specific projects to meet budget, time, and quality specifications • Knowledge of project management tools and templates
Attention to detail	<ul style="list-style-type: none"> • Completes and maintains accuracy of even the smallest aspects of assigned tasks
Teamwork	<ul style="list-style-type: none"> • Consistently participates in and maintains a team environment by openly sharing information, exchanging ideas, and/or jointly solving problems
Managing work	<ul style="list-style-type: none"> • Effectively manages one's time and resources to ensure that work is completed efficiently
Independence	<ul style="list-style-type: none"> • Plans and works effectively with minimal supervision or direction and makes active attempts to influence events to achieve goals, self-starter rather than accepting passively

Appendix C RACI Model of Members in Project Organisation

The following illustrates the RACI model by project roles and key activities. Definitions of RACI are listed below:

- **Responsible** ("R") – Has the duty and obligation to complete the activity
- **Accountable** ("A") – Has the authority as the ultimate decision maker
- **Consult** ("C") – Has the expertise, experience, and interests who must be given the opportunity to influence decisions prior to finalisation by the "accountable" or "responsible" party
- **Informed** ("I") – Keeps up-to-date about the activity progress, usually upon completion of the activity

Note: Responsibilities marked in parenthesis indicate a particular role's potential involvement in the cases where approval is escalated and required by senior levels project organisation members, e.g. a high impact risk that require review and approval of the PSC.

C.1 Initiate

	Phase: Initiate	Project Owner	PSC	Internal PM	Contractor PM	PAT	Project Team Members	Project Administrator	Other Functions	Other Stakeholders
	Appoint Members of the PSC, PAT Chairperson and the Internal PM	AR		I						
	Determine Other Project Roles and Responsibilities	A		R		C				
	Identify External Stakeholder	AC		R		C				
	Conduct Preliminary Stakeholder Analysis	AC		R						C
	Determine Stakeholder Communications Needs	AC		R						C
	Review Project Scope	AC		R						C
	Develop High-Level Project Schedule	AC		R		C				C
	Estimate Project Budget	AC		R						
	Assess Project Risks	AC		R		C				C
	Confirm Approval to Proceed	(A)	A	R						
	Establish a Project Library			AR						

C.2 Plan

	Phase: Plan	Project Owner	PSC	Internal PM	Contractor PM	PAT	Project Team Members	Project Administrator	Other Functions	Other Stakeholders
	On Board Project Team Members	AR	IR	C		I		I		
	Review the Business Case	C	A	R		C		R		C
	Review Outputs of the Initiate Phase	(A)	A	R		C				
	Refine Project Scope	(A)C	AC	R		C		R		C
	Refine Project Schedule	C	C	AR		C		R	C	C
	Refine Project Budget	C	C	AR		C				
	Refine Communications Requirements	C	(A)C	AR		C		R	C	C
	Update Existing Risks and Register New Risks	C	AC	R		C		R		C
	Develop Risk Response Strategies	(A)	AC	R		C		R		C
	Define Change Control Process	C	AC	R		C		R		C
	Define Risk Management Process	C	AC	R		C		R		C
	Define Issue Management and Escalation Process	C	AC	R		C		R		
	Define Communications Management Process	C	AC	R		C		R	C	C
	Define Quality Management Process	C	AC	R		C		R		C
	Prepare for Organisational Change	(A)	AC	R		C				C
	Establish Time and Cost Baseline	(A)	AC	R		C				
	Determine Procurement Requirements	(A)	AC	R		C		R	C	C
	Prepare for Acceptance		C	AR		C		R		
	Obtain Formal Approval	(A)	A	R		C		R		

C.3 Execute

	Phase: Execute	Project Owner	PSC	Internal PM	Contractor PM	PAT	Project Team Members	Project Administrator	Other Functions	Other Stakeholders
	Develop Quotation or Tender Document	C	AC	R		C	C	R	C	C
	Select, Negotiate and Award Contract	AC	C	R		C	R	R	C	
	Review PMP	C	C	AR		C				C
	Align Expectation with the Contractor			AR	C			RI		
	Conduct Kick off Meeting	I	A	R	I	I	I	R	I	I
	Review Business Case	AC	C	R		C		R		C
	Manage Project Scope	(A)	(A)	R	C	A	C	R	C	C
	Manage Project Schedule		I	AR	C	I	C	R	C	C
	Implement Quality Control			AR	I	I	R	R		(R)
	Manage Project Budget	(A)	(A)	R		A		R		
	Manage Project Changes	(A)	(A)	R		A	C	R		C
	Manage Deliverable Acceptance	(A)	(A)	R	RI	A	C	R		
	Manage Issues		C	AR	CRI	C	C	R		
	Manage Communications among Stakeholders		C	AR		C		R		C
	Manage Organisational Change	I	C	AR		C		R	C	C
	Manage Project Library			AR		I	I	R		
	Monitor and Control Risks		C	AR	CRI	C	C	R		
	Manage Transition	I	I	AR	C	C		R		CI
	Monitor Contractor's Performance			AR	C	C		R		
	Administer Contractual Matters		A	R	I	C		R		

	Conduct PSC Meeting to Gain Project Acceptance		A	R	I	C		R		
	Gain Approval to Proceed	(A)	A	R		C		R		

C.4 Close

	Phase: Close	Project Owner	PSC	Internal PM	Contractor PM	PAT	Project Team Members	Project Administrator	Other Functions	Other Stakeholders
	Decommission Resources	I	I	AR	I	I	I	R	I	I
	Document Lessons Learnt		I	AR	C	C	C	R	C	C
	Close out Contract	(A)	A	R	C	C				
	Archive Project Information		I	AR	C	I	C	R		
	Complete Post Implementation Departmental Return	(A)	A	R		C			I	
	Close-out Project	A	I	R		I	I	R		I

Appendix D Templates

Templates include essential sections to be included in the plans as well as offers instructions and sample language which are distinguished by colour, brackets, and italics as shown below:

- *Essential sections of the plan have been developed and written in **black**. These sections can be modified and additional sections be included to suit specific project needs.*
- *Instructions for using this template are written in dark blue italic text enclosed in pointed brackets <Notes to B/Ds: ...>.*
- *Sample language is written in **dark red** and may be used, or modified, for completing the plan. All **dark red** text should be replaced with project-specific information and the font changed to black.*

D.1 Project Management Plan

Project Management Plan

Project Identification

Project Name: _____ Date: _____
Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Project Management Plan have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Project Management Plan which was/were updated. A revised plan may affect multiple components including project boundary, assumptions and constraints etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Project Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1 Purpose

The purpose of the Project Management Plan (PMP) is to describe the overall management approach for work to be performed for the **<Project Name>** Project throughout the project life cycle.

It provides an overview of the project's motivation, objectives, success criteria, major deliverables, assumptions and constraints. It identifies the management structure and highlights activities, processes and/or procedures to be followed by all project stakeholders in the management of the project as defined in individual component management plan.

2 Project Background

<Notes to B/Ds:

Describe any information/events leading up to the need for the project. Include other relevant information such as why the project is important to the organisation, its mission, the capabilities the project will provide to the organisation, related projects that could have led or led by this project, the parties that have been involved for preparing the funding application and how they have been involved, the current status of the project etc. Provide any background or history that is important to understanding the project.>

3 Business Case

3.1 Business Objectives and Needs

<Notes to B/Ds:

State the business objectives and needs (opportunities or problems), drivers for change as well as business outcomes based on which the decision to make the IT investment is made. Where a business case will generate multiple IT projects separately managed, the information (particularly business needs and outcomes) relevant to the IT project concerned should be highlighted. The information should be consistent with the business case developed during the RAE, the funding application as well as the departmental IT Strategic Plan of the B/D as appropriate.>

3.2 Anticipated Benefits

<Notes to B/Ds:

*List key benefits resulting directly from the project, including both tangible and intangible benefits and include quantifiable performance measures as far as possible. To identify anticipated benefits, consider the benefits that would be missed if the project is **not** to be done.>*

It is anticipated that the project will bring about the tangible and intangible benefits listed in sections 3.2.1 and 3.2.2 below.

3.2.1 Tangible Benefits

- (a) ...
- (b) ...
- (c) ...

3.2.2 Intangible Benefits (with quantifiable performance measures)

- (a) ...
- (b) ...
- (c) ...

3.3 Anticipated Costs

<Notes to B/Ds: Provide the estimated project cost with breakdowns, where appropriate, aligning with the funding application.>

The project will incur a non-recurrent capital expenditure of HK\$xxxM with breakdown as follows:

Non-recurrent Expenditure	Cost
(a) Contract Staff	HK\$
(b) Hardware	HK\$
(c) Software	HK\$
(d) Implementation Services	HK\$
...	
...	

4 Project Overview

4.1 Project Objectives

<Notes to B/Ds:

State how the expected outcome of the project will benefit the B/D and help it achieve its business needs (meet the opportunities or fix the problems). Where applicable, briefly describe the business cost and benefits and provide a one-to-one mapping of the business need to project objective.>

The objectives of the project are to:

- ...
- ...
- ...

4.2 Project Boundary

<Notes to B/Ds:

1. List and define items that are in scope and they shall be aligned with your project objectives that would help to achieve the business need.
2. List and define items that are not in scope or not align with the project objectives to avoid any misunderstanding that may cause project delays. The definition of out-of-scope items is to facilitate scope and change management. Parties/individuals authorised to make change requests (in accordance with the change request management) should be informed of these out-of-scope items. Where applicable, these items should be included in the tender document if it helps potential tenderers to make a more accurate estimate of the tender price.>

The scope of the project is to:

- ...
- ...
- ...

The scope of the project does not include:

- ...
- ...
- ...

4.3 Critical Success Factors

<Notes to B/Ds:

List the project **Critical Success Factors** (outcomes that must be achieved) in order for the project to be considered as success. These factors are not the specific criteria that will be used to measure project success or failure, but instead are the things the project requires in order to be successful (i.e., dependencies) and they should correlate with the project objectives. One example is senior management commitment. >

The following are the critical success factors:

- ...
- ...
- ...

4.4 Assumptions and Constraints

<Notes to B/Ds:

Project assumptions and constraints relating to scope, budget, timeline and quality should be identified. When preparing assumptions and constraints, factors such as integration needs and benefits, scale of project and alignment with project objectives should be taken into consideration based on the risk assessment. These assumptions and constraints should be analysed and validated periodically as the project moves forward. Typical assumptions and constraints include fixed cost for the project and mandated schedules due to external factors such as legislation.

- Assumptions are factors that, for planning purposes, are considered to be true, real or

certain.

- *Assumptions affect all dimensions of project planning and are part of the progressive elaboration of the project.*
- *Assumptions generally involve a degree of risk.*
- *Constraints are restrictions that could affect the performance of the project.*
- *Constraints limit resources, schedule, or scope, and could affect the quality of the project/deliverable.*

>

The following assumptions and constraints underlie the PMP for the project. Changes to these factors can affect the cost, schedule, scope or quality of the work performed.

Assumptions

- (a) ...
- (b) ...
- (c) ...

Constraints

- (a) ...
- (b) ...
- (c) ...

4.5 Major Deliverables

<Notes to B/Ds:

List major deliverables which, when produced and accepted, indicate project completion. Typically, these deliverables require endorsement by the PSC.>

The following identifies the major deliverables for the project:

- Project Management Plan
- Tender document
- Tender Report
- System Analysis and Design Report
- Privacy Impact Assessment Report
- Security Risk Assessment Report
- Privacy Compliance Audit Report
- **<System Name>**
- ...

5 Project Plan Summary

Documents	Latest Revision #	Latest Revision Date
Project Organisation		
Work Plan		
Financial Management Plan		
Communications Management Plan		
Risk Management Plan		
Quality Management Plan		
Issue Management Plan		
Change Request Management Plan		

<Notes to B/Ds:

The above represents the various plans that are essential to project management. These plans, though form part of the Project Management Plan, are separately maintained.

Once the changes to any of the plans have been approved, the latest revision number and date should be captured in the table to facilitate identification of the latest versions of the plans. To avoid omission of any of the plans, it is advisable that a full list is maintained. In the event that a particular plan is not applicable to the project concerned, indicate "N/A".

***Latest Revision #** is the revision number of the prevailing plan assigned by the Project Manager.*

***Latest Revision Date** is the date that the current revision of the plan was approved.>*

D.1.1 Project Organisation

Project Organisation

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Project Organisation have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Project Organisation which was/were updated. A revised plan may affect multiple components including new project roles, replacement of project team members, new responsibilities etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Project Organisation document is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

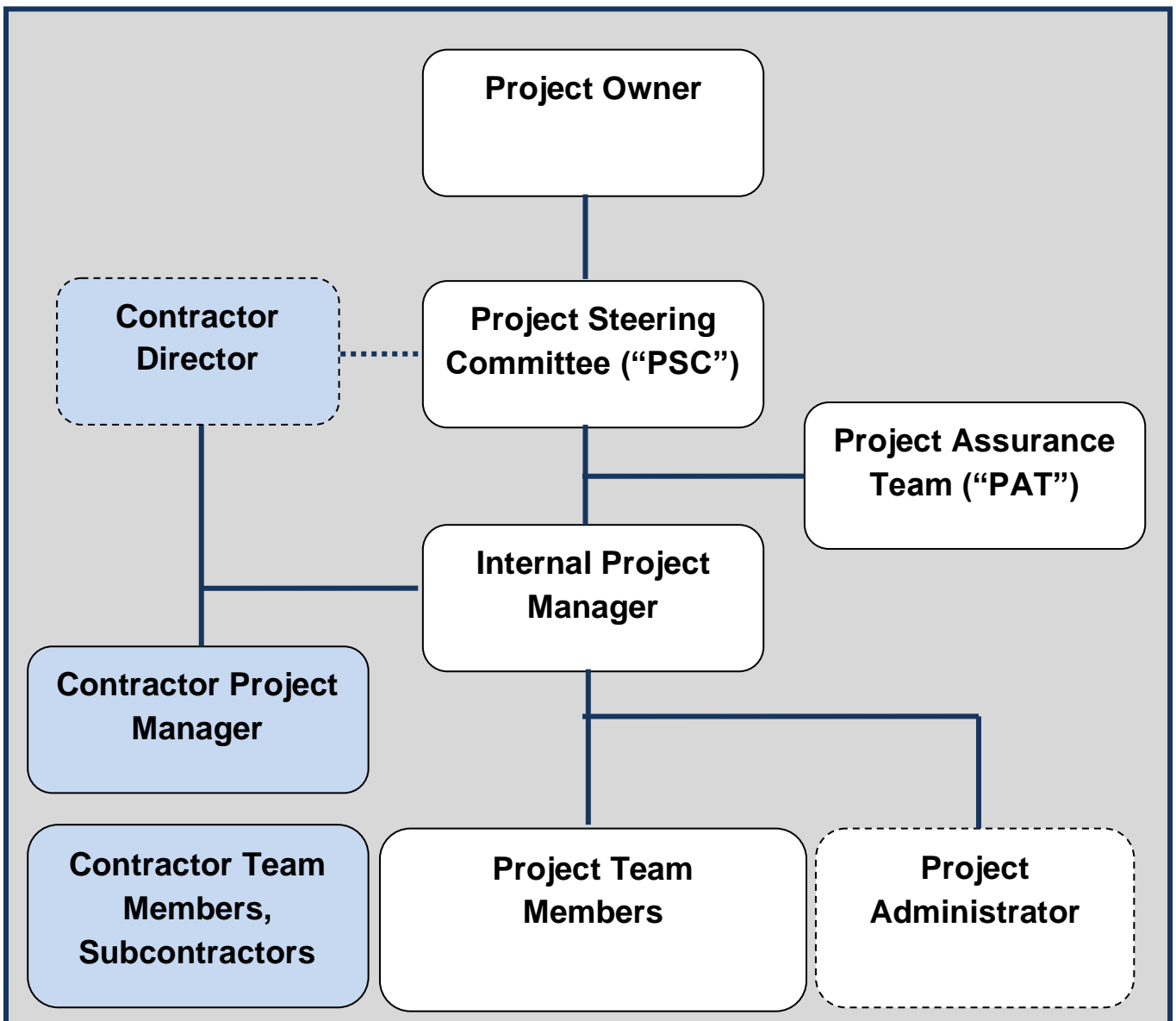
1 Purpose

<Notes to B/Ds:

Identify the internal structure and define roles and responsibilities for the project. It should be noted that the project organisation listed in this PMP template represents the major project roles only. B/Ds can include other project roles to suit their project needs. >

This project is a joint effort of the <B/D Name> and contractor organisations, under the direction of the Project Owner and the Project Steering Committee (PSC). The Project Organisation provides further details on all the project roles and the individuals/parties that will fill these roles, along with the specific responsibilities those project roles will have.

2 Organisation Structure



3 Members of the Project Organisation

<Notes to B/Ds:

Identify individuals/parties assigned to each member of the project organisation depicted at section 2 above.>

The members of the project organisation are as follows:

Role	Name / Title	Bureau / Department
Project Owner		
Project Owner		
PSC		
Executive (Chairperson)		
Senior User		
Senior Technical		
PAT		
Business Assurance Coordinator (BAC)		
User Assurance Coordinator (UAC)		
Technical Assurance Coordinator (TAC)		
Internal Project Manager		
Internal PM		
Project Team		
Team Lead		
Members		
...		
...		
...		

4 Commission/Decommission Plan

<Notes to B/Ds:

Enter the date each individual (appointed to project roles) planned to get on-board the project. Include additional information, such as planned vacation leave, under the Remarks column.

To help members of the project organisation, in particular the project team members, to orient themselves towards project goals and contribute themselves to quickly deliver results, a briefing package containing, for instance, project background, objectives, the project organisation, their roles and responsibilities in the project and other relevant information should be provided before work is started. This briefing package should be maintained in the project library for access by the members.

As for the decommissioning of resources, enter the date each individual is decommissioned from the project. Include additional information, such as assets that need to be returned, under the Remarks column.

It is important to ensure that all project activities are executed and accepted before rolling-off staff. It is also important to ensure that project knowledge is transferred to the next responsible party before roll-off takes place.>

Project Member	On-board Date	Decommission Date	Remarks

5 Roles and Responsibilities

<Notes to B/Ds:

Tailor responsibilities of individual roles to suit project needs.>

5.1 Project Owner

The Project Owner is the ultimate decision maker for the project who is supported by the advisory of the Project Steering Committee (PSC) to ensure that the business benefits can be realised. The Project Owner takes holistic ownership of the project by defining overall project strategic direction to ensure it conforms to the overall IT strategy of the B/D.

The Project Owner has the following responsibilities:

- Champion project by gathering support of senior levels of management
- Appoint PSC and Internal PM to ensure business and technology interests are both represented
- Identify replacements in a timely manner in the event of staff turnover to minimise

impact to the project

- Oversee the development of the business case and ensure that the project is aligned with the Government and B/D's vision and strategies
- Endorse funding application and the project budget with the assistance from B/D users and/or the Internal PM, as appropriate
- Provide input to project objectives and scope, especially during project initiation phase
- Monitor and control the progress of the project at a strategic level e.g., by reviewing the viability of the business case regularly
- Provide high-level advisory over the course of the project through periodic management meetings
- Hold the PSC accountable for realising the business benefits as outlined in the business case, as well as the quality and integrity of the project's deliverables and outcomes
- Endorse progress update reports, Post Implementation Departmental Return (PIDR) and project closure

5.2 Project Steering Committee (PSC)

The PSC is accountable to the Project Owner for the progress and performance of the project. The committee comprises the Executive, Senior User and Senior Technical roles.

Overall, the PSC has the following responsibilities:

- Appoint members of the Project Assurance Team (PAT)
- Commit project resources
- Endorse project management plan during the plan phase, advising the management components including risk & issue tolerance levels and approving authorities
- Endorse project deliverables that meet all project acceptance criteria as endorsed by PAT at each project phase
- Respond to requests for advice from the Internal PM
- Review project performance, provide overall direction to the project, and address areas of improvement on regular basis
- Ensure that risks, including business risks, are being tracked and managed
- Ensure business benefits will be realised as planned
- Endorse Contract Performance Evaluation report (CPER) to ensure proper feedback to contractor's performance in the project is made
- Recommend future action on the project if any project tolerance is exceeded, and escalate to the Project Owner or the OGCIO where appropriate

The Executive has the following responsibilities:

General

- Chair PSC meetings
- Determine authority to be delegated in respect of approval of change requests, risk responses and issue resolutions

- Monitor project financials
- Brief Project Owner about project progress

Business related

- Ensure the business case is aligned with the overall Government and B/D's vision and strategies
- Validate and monitor business case against project progress or project changes such as schedule variation and external influences
- Endorse the project evaluation report and evaluation result of business benefits realised upon project completion

Communications related

- Approve the sending of the notification of project closure to the Project Owner or the OGCIO.
- Manage user and contractor's expectations on the project, resolve critical expectation variations
- Inform the PSC, the Project Owner or the OGCIO of any changes caused by external events, such as policy change

The Senior User has the following responsibilities:

General

- Ensure the user resources required for the project are made available
- Delegate user project assurance activities to PAT and Internal PM, as appropriate
- Provide users' quality expectations and define acceptance criteria for the project
- Prioritise high impact change requests (e.g. to the specification or acceptance criteria), contribute user opinions on PSC decisions on whether to implement such changes
- Prioritise and approve users request of follow-up recommendations after project closure
- Review and evaluate business benefits realised at different phases of the project
- Maintain business performance stability from transition until project roll-out

Deliverable related

- Ensure the desired project outcome has sufficiently considered end users' point-of-view, and details are unambiguous
- Ensure the desired outcome of the project is correctly and completely specified through quality acceptance criteria agreed with the contractor. Keep in mind that project success is also measured by on-time and on-budget project delivery
- Make sure that progress towards the outcome remains consistent with the specified requirements
- Endorse project deliverables (except for project management related deliverables) according to pre-defined acceptance criteria

Communications related

- Appoint appropriate PAT and end user representatives in all phases, ensure the user representation is sufficient and objective

- Represent the interest of those who will use the project's deliverables
- Brief and advise Project Owner on critical matters concerning the project.
- Resolve conflicts between user requirements and project priorities
- Ensure user liaison is functioning effectively

The Senior Technical has the following responsibilities:

General

- Ensure that the internal technical resources for the project are made available, according to the work plan
- Delegate technical project assurance activities to PAT, Internal PM or external quality assurance parties, as appropriate
- Make decisions on escalated issues, with particular focus on ensuring the technical integrity of the resolution
- Prioritise high impact change requests related to technical aspects of the project and contribute technical experts' opinions on PSC decisions on whether to implement such changes
- Review and provide advice on high impact risks related to technical aspects, allow resources if required.

Deliverable related

- Accountable for the quality of the deliverables and responsible for the technical integrity of the project
- Represent Government's IT interests, such that contractor's effort conforms to Government specific requirements, existing IT environment and technical standards
- Advice and approve technical related aspects, such as the proposed design and methods, project approach, technical strategy, quality assurance methods

Communications related

- Resolve contractor requirements and priority conflicts
- Arbitrate on, and resolve, any contractor resource or priority conflicts
- Communicate with Contractor Director or Contractor PM on important project information that may have impact on the contractor

5.3 Internal Project Manager (Internal PM)

The Internal PM is the lead person (B/D or ITMU resource) accountable for project planning and delivery. As the person responsible for meeting the project objectives and ensuring project success, the Internal PM is expected to provide oversight and input to project management aspects such as project work plan, budget, quality, risks, and issues, as well as management of contractor performance through working closely with the contractor PM.

The Internal PM has the following responsibilities:

Overall project management

- Ensure the project produces the required deliverables within time, budget, quality, scope, risk as well as results that achieve the benefits defined in the business case
- Prepare the following project management deliverables, obtain feedback from the PAT and get the PSC's endorsement:
 - Project management plan (comprises project organisation plan, work plan, quality management, risk management, issue management, communications management, financial management and change request management)
 - Highlight reports
 - Project progress update (PU) and quarterly performance evaluation report (QPER)
 - Post-implementation departmental return (PIDR)
- Monitor, control, and update as appropriate the various components of the Project Management Plan throughout the project lifecycle
- Review and oversee maintenance of the following records regularly; delegate updates of the following records to the Project Administrator where appropriate:
 - Risk register
 - Issue log
 - Change request log
 - Project library
- Monitor work performance information e.g., KPI to identify whether project has deviated from plans; also ensure that the metrics are provided accurately and timely
- Notify the PSC of any deviations from the Project Management Plan
- Seek PSC's advice and support on important matters related to project planning, execution and control.

Organisation related

- Plan project resources required and confirm availability from the PSC
- Determine required skill sets and competency of internal project resources
- Ensure roles and responsibilities of project team are communicated and understood
- Observe project team performance and take actions where necessary to ensure level of involvement is adequate, according to project work plan
- Take responsibilities for the use and availability of resources (e.g., Project Team Members); initiate corrective action in a timely manner, where necessary

Work plan related

- Develop, update, and maintain the work plan from funding application stage through project completion
- Continuously monitor the project progress against schedule baseline and adjust activities, if necessary, in order to meet planned project timelines

Scope management related

- Coordinate gathering and validation of scope definition and business requirements ensuring that appropriate stakeholders are involved
- Control requirements requests, in an objective manner, to ensure that all user requests

align with the overall project objectives, while project is still delivered within the planned timeline and budget

- Agree detailed acceptance criteria with Contractor project manager

Change management related

- Ensure that all change requests are processed according to established change request management procedures

Procurement management related

- Develop contractor selection criteria and tender requirements specification document as part of the tendering process, if applicable
- Participate in tender evaluation, if applicable
- Review and provide input to contractor's project plan (or Project Initiation Document (PID)) to ensure it aligns with the overall project management plan
- Perform oversight and management of the contractor resources, by closely liaising with the Contractor project manager
- Conduct regular, periodic meetings/discussions with the Contractor project manager to remain cognizant about project progress
- Ensure deliverable checkpoints take place by working closely with the contractors to ensure that deliverables meet expected quality
- Escalate contractor related disputes, as necessary, to the PSC

Communications management related

- Execute, monitor and control communications activities in accordance with the communications management procedures

Financial management related

- Monitor and control project budget to identify any budget-actual variance
- Monitor contractor payments

5.4 Contractor Project Manager (Contractor PM)

The Contractor PM is the lead person (contractor resource) who is responsible and accountable for coordinating contractor resources. The Contractor PM works closely with the Internal PM and also manages the project management aspects such as project resources, timeline, budget, risks, and issues, specifically within the activities being carried out by outsourced staff.

The Contractor PM has the following responsibilities:

- Responsible lead of the contractor resources
- Accountable for all project activities completed by the contractor resources, to ensure that performance of activities leads to production of deliverables that meets expectation and acceptance criteria
- Coordinate staffing arrangements of contractor resources to ensure they meet project timing and skill requirements

- Proactively communicate project progress by briefing Internal PM through e.g., status reporting, deliverable checkpoints, meetings, discussions, etc. to ensure contractor's deliverables are on track and meet expectations
- Complete the project plan (or PID) once onboard the project
- Maintain set of project management documentation for the outsourced activities such as project risk and issue management, work plan, quality, scope and change management, contract management, and budget management; work with the Internal PM to ensure they align with the overall project management plan
- Escalate project risks and issues to Internal PM for resolution; as well as escalating risks and issues, as required, to Contractor Director
- Coordinate independent quality assurance team to conduct quality reviews to ensure quality of project deliverables meets expectations
- Work closely with Internal PM to ensure contractor resources are performing according to expectations

5.5 Project Assurance Team (PAT)

The PAT looks after the quality assurance work on behalf of the PSC from the business, user and technical perspectives. They are individuals who have knowledge or expertise in the specific subject matter area that is part of the project scope. The PAT consists of three roles, namely the Business Assurance Coordinator (BAC), the User Assurance Coordinator (UAC) and the Technical Assurance Coordinator (TAC), that is a balanced representation of the business, user and technical interests.

Overall, the PAT has the following responsibilities:

- Assure the project on behalf of the PSC
- Take into account the primary stakeholder interests, including business and technical
- Ensure user needs and expectations are met and managed
- Ensure risks are controlled
- Ensure alignment of project objectives with B/D's strategy
- Ensure continual viability of the project
- Ensure the project produces what the business case requires
- Ensure quality assurance standards and quality control procedures are followed
- Ensure stakeholder participation in quality control activities
- Ensure that quality control follow-up actions are dealt with in a timely manner
- Advise on the components of the project management plan; execute, monitor and control management activities in according to the plan
- Advise on the development of the tender document, where necessary

The BAC has the following responsibilities:

- Monitor progress and costs against the project's business case
- Co-ordinate quality control activities

- Attend checkpoint/progress review meetings
- Contribute to the project evaluation review

The UAC has the following responsibilities:

- Monitor and report to the Senior User user-related problems that arise during the project
- Ensure that the user requirements are properly specified, and are well understood and agreed by the contractor
- Ensure that the work plan has included all project deliverables required by the users
- Ensure that the acceptance criteria of project deliverables are properly specified and are understood and agreed by the contractor
- Ensure quality control activities and quality control follow ups are conducted
- Attend checkpoint/progress review meetings, where necessary
- Ensure that the impact of change requests is understood and accepted by users
- Contribute to the project evaluation review

The TAC has the following responsibilities:

- Select the appropriate technical strategy and methods for the project
- Ensure government and departmental technical standards are followed
- Ensure that the acceptance criteria of project deliverables are properly specified and are understood and agreed by the contractor
- Ensure quality control activities and quality control follow ups are conducted
- Attend checkpoint/progress review meetings, where necessary
- Advise on the technical impact of change requests
- Contribute to the project evaluation review

5.6 Project Team Member

Project Team Members are resources from B/Ds or ITMUs assigned to assist the Internal PM to manage and control the project or to work with the Contractor to provide inputs or to participate in the review process. Some team members may also be team leaders providing task leadership.

Project Team Member has the following responsibilities:

- Understand the project objectives, scope, benefits, and timeline as well as the roles and responsibilities in the project
- Report to the Internal PM or team leaders
- Deliver their tasks according to the project schedule
- Assist Internal PM in monitoring and controlling the project to deliver results or provide inputs to the Contractor (e.g. user requirements, acceptance criteria) and participate in

review process

- Escalate project risks and issues to team leader or Internal PM

5.7 Project Administrator

Project Administrator is an optional role who provides administrative role support to the Internal PM. This role is recommended for large projects to document and maintain project's administrative tasks such as monitoring of issues, risks, change requests, logistics, budget, procurement, and project library in large-sized projects.

The Project Administrator has the following responsibilities:

- Report to the Internal PM
- Offload the administrative work of the Internal PM
- Assist in the monitoring of issues, risks, change requests, logistics, budget and procurement as well as maintenance of the project library
- Assist with the compilation of documents such as project management plan, highlight reports, PIDR etc.
- Maintain the following records:
 - Risk register
 - Issue log
 - Change request log
 - Project library
 - Any other registers / logs delegated by the Internal PM
- Administer the coordination of logistics such as meeting rooms, facilities, inventories

D.1.2 Work Plan

Work Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Work Plan have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Work Plan which was/were updated. A revised plan may affect multiple components including overall management approach, project milestones etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Work Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1 Purpose

<Notes to B/Ds:

Describe the overall approach in accomplishing the project objectives. For example, if the project is managed by phases/stages, describe the tasks/outcomes in each phase/stage. Identify the project schedule, the critical path and appropriate schedule milestones to assess the scope and quality of project deliverables and of project achievement status.>

The Work Plan describes the various work activities to be performed in the project and where applicable, the methods, tools and techniques to be applied. It identifies the scheduling relationships among the work activities that derive the critical path in the schedule. It identifies the significant points or events in the project (such as the phases, stages, decision gates, and approval of a deliverable). It specifies schedule milestones to assess the scope and quality of project deliverables and of project achievement status.

It also documents the project needs that can best be met by procuring products and/or services outside the project organisation. It identifies the type of procurement strategies that will be used, outlines the scope of products and/or services to be procured (including an estimate of the costs) and highlights any particular procurement terms and conditions that need to be fulfilled.

2 Plan Description

<Notes to B/Ds:

Provide a summary of the overall approach in accomplishing the project objectives highlighting key features of project planning such as tasks to be performed or outcomes expected.>

The project is to be managed under the following x stages:

Stage	Description	Start Date	End Date
1	Project Planning		
2	Tendering		
3	SA&D and Implementation		
4	Training		
...	...		

In stage 1 (Project Planning), the Internal PM develops the project management plan (PMP) based on the business case which is reviewed and re-validated. A decision on whether to proceed to the next stage is made, upon which the PMP is endorsed.

In stage 2 (Tendering), the current environment is studied, problem areas and/or improvement opportunities are defined, user and tender requirements are gathered. The information so collected will be used for compiling the tender document. The tender document will be submitted for clearance by the DoJ, GLD and IPD. Tender will be issued upon clearance and evaluation commences when tender proposals are collected from the GLD. Conclusion and approval of tender evaluation results signifies the end of this stage.

In stage 2 (SA&D and Implementation), ...

3 Project Schedule

<Notes to B/Ds:

In accordance with the overall approach described in section 2 above, define the overall project schedule and the work activities (including timing of the activities) required to produce the project’s major deliverables as described in section 4.5 of the Project Management Plan.>

The activities to be conducted under each stage are detailed as follows. The project schedule in the form of a Gantt Chart with critical path identified is depicted at section 5 below

Stage/Activity		Planned Start Date	Planned End Date
Stage 1 – Project Planning			
1.1	Form PSC		
1.2	Prepare PMP		
1.3	Endorse PMP		
Stage 2 – Tendering			
2.1	Study current environment, identify problem areas/improvement opportunities and gather user and tender requirements		
2.2	Draft tender marking scheme and evaluation plan		
2.3	Review tender marking scheme and evaluation plan by PAT		
2.4	Review tender marking scheme and evaluation plan by PSC		
2.5	Review of tender marking scheme by GLD		
2.6	Draft tender document		
2.7	Review tender document by PAT		
2.8	Review tender document by PSC		
2.9	Seek clearance of tender document by DoJ		
2.10	Seek clearance of tender document by IPD		
2.11	Seek clearance of tender document by GLD		
2.12	Finalise tender document		
2.13	Invite tender		
2.14	Arrange tender briefing		
2.15	Evaluate tenders		
2.16	Conduct tender negotiation		
	Award contract		
Stage 3 – SA&D and Implementation			
3.1	...		
3.2	...		

4 Project Milestones

<Notes to B/Ds:

Specify major progress milestones that tracking against these milestones will indicate whether significant deviations from the planned objectives are taking place.>

Milestone		Deliverables	Target Completion Date
1	Endorsement of PMP	Endorsed PMP by PSC	
2	Acceptance of tender marking scheme	Reviewed tender marking scheme by GLD	
3	Conclusion of tendering exercise	Contract awarded	
4	Endorsement of SA&D report	Endorsed SA&D report by PSC	
5	...		
6	...		

5 Schedule

<Notes to B/Ds:

Provide a copy of the project schedule with critical path highlighted.>

6 Procurement

<Notes to B/Ds:

1. This section is required when only part of the project work is to be outsourced or multiple acquisitions are involved. Repeat section 6.1 if there are multiple acquisitions.
2. For those B/Ds that have procurement management plan in place, the plan can be integrated with this PMP or pointer established to point to the plan.>

6.1 Scope

<Notes to B/Ds:

Describe the scope of work to be outsourced. Describe also special tender requirements or constraints.>

D.1.3 Financial Management Plan

Financial Management Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Financial Management Plan have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Financial Management Plan which was/were updated. A revised plan may affect either project budget or cost baseline. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Financial Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1. Purpose

The Financial Management Plan documents the budget set aside for each type of expenses (expenses category) and how much is budgeted for each period (month, quarter, year etc.). It also records payment details for each type of expenses.

<Notes to B/Ds:

The Purpose section is optional and is recommended only when the recipients of the Financial Management Plan are new to the practice.>

2. Project Budget

<Notes to B/Ds:

Include a breakdown, by year, of the anticipated costs stated in section 3.3 in the Project Management Plan. However, if B/Ds have their own financial management standard, a pointer can be established here to point to the financial information.>

Below is a summary of approved budget by year. A cost baseline, with breakdown by quarter, will be established when contract is awarded. A cost baseline template can be found in section 3 below.

Expenses Category	Total (HKD)	yyyy-yy (HKD)	yyyy-yy (HKD)	yyyy-yy (HKD)
(a) Contract Staff				
(b) Hardware				
(c) Software				
(d) Implementation Services				
(e) ...				
(f) ...				

3. Cost Baseline

Expenses Category	Total (HKD)	mm.yyyy (HKD)	mm.yyyy (HKD)	mm.yyyy (HKD)	mm.yyyy (HKD)	mm.yyyy (HKD)
(a) Contract Staff						
(b) Hardware						
(c) Software						
(d) Implementation Services						
(e) ...						
(f) ...						

<Notes to B/Ds:

Enter the estimated spending per month per expenses category. The same expenses categorisation (with detailed breakdown if necessary) as in section 2 “Project Budget” should be adopted to facilitate monitoring of project expenses. Include sub-totals and totals, as appropriate. Payment details should be captured once payment is made and total payments checked against the cost baseline for expense monitoring purpose. >

D.1.4 Communications Management Plan

Communications Management Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Communications Management Plan have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Communications Management Plan which was/were updated. A revised plan may affect multiple components including stakeholder register, contact list etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Communications Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1 Purpose

<Notes to B/Ds:

- 1. Identify project stakeholders and their communication needs through a detailed stakeholder analysis.*
- 2. Define communication means to address stakeholder communication needs which includes formal communication means such as regular reports, meetings, reviews etc. or one-off surveys.*
- 3. For each communication means defined, specify responsible party (i.e. who initiates), frequencies, stakeholders involved, delivery vehicle (e.g. email, meeting) etc.*
- 4. Record contact details for each stakeholder/stakeholder group.>*

Communications management planning identifies the activities and communication means to ensure that project information is acquired, used or produced in relation to stakeholders' information needs or delivery of the project's deliverables.

It documents the results of stakeholder analysis that identify the role of individual stakeholder (or group of stakeholders) in the project, their expectations or concerns over the project, their influence to or impact by the project and their commitment to the project as well.

2 Stakeholder Register

Stakeholder Group	Project Role	Expectations / Concerns	Influence Rating	Impact Rating	Commitment Level	Remarks
Project Owner	Project Owner	<p>Expectations: An integrated system that can meet the project objectives and achieve the anticipated benefits.</p> <p>Concerns:</p> <ul style="list-style-type: none"> Quality and integrity of the project's deliverables and outcomes. Meet public expectations and address concerns of major stakeholders. ... 	H	H	<p>Current Level: Ownership</p> <p>Initiate (Target): Ownership</p> <p>Plan (Target): Ownership</p> <p>Execute (Target): Ownership</p> <p>Close (Target): Ownership</p>	
PSC	....	....	....	....	....	....
Public	Applicants	<p>Expectations: Simplified application processing, better customer service and timely disbursement of assistance.</p> <p>Concerns:</p> <ul style="list-style-type: none"> Eligibility of financial assistance may be 	L	M	<p>Current Level: Aware</p> <p>Initiate (Target): Aware</p> <p>Plan (Target): Aware</p> <p>Execute (Target): Understand</p>	

		affected.			Close (Target):	
		• ...			Adoption	
...						

<Notes to B/Ds:

Enter the following information per stakeholder or stakeholder group identified:

Stakeholder Group is an individual or a group of individuals who are involved in or being affected by the project. For example, the Project Owner, the PSC, NGOs, the Public, other B/Ds, user groups.

Project Role is the role that a stakeholder group plays in the project. For example, the Project Owner, the PSC, legal advisor, tender assessment panel.

Expectations describes the needs of the stakeholder group

Concerns describes the concerns or objections expected from the stakeholder group

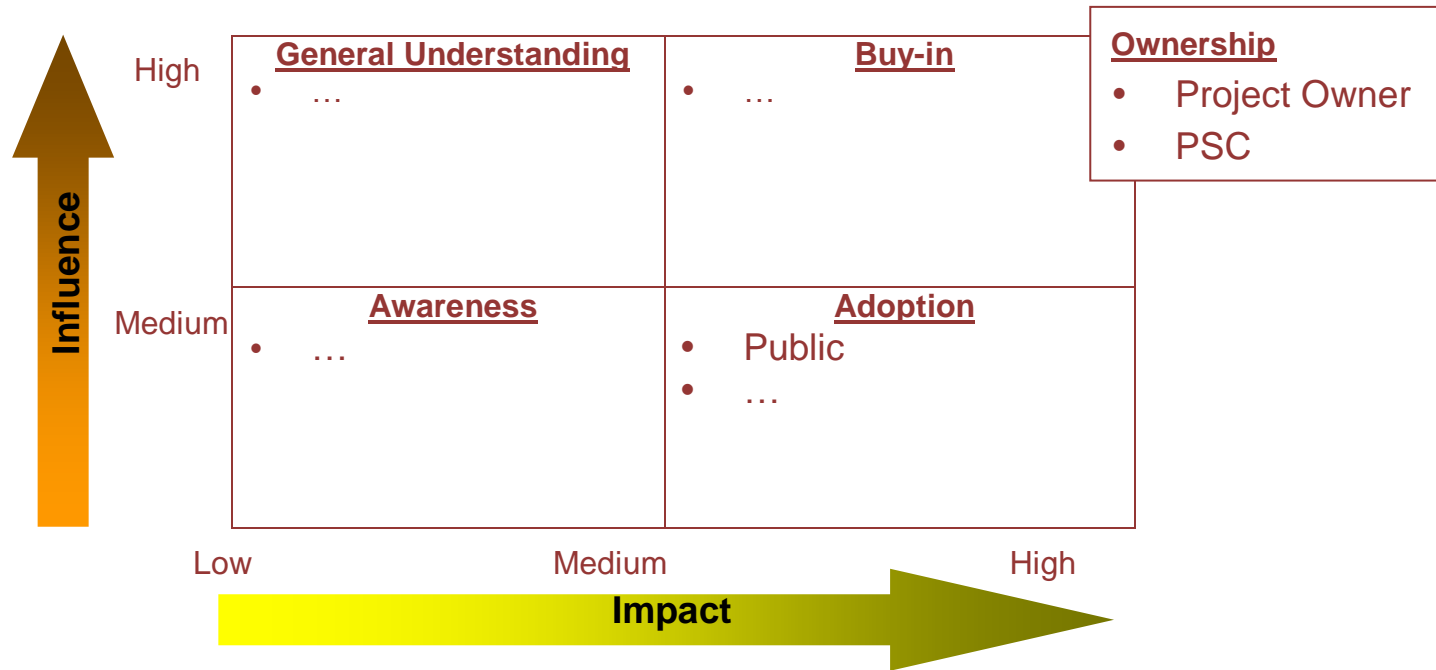
Influence Rating rates the degree of influence that the stakeholder group has on the direction of the project and it is categorised as High, Medium or Low.

Impact Rating rates the degree of the project's impact to the stakeholder group and it is categorised as High, Medium or Low.

Commitment Level rates the level of involvement (commitment) of the stakeholder group at different project phases. The commitment levels include: (Please refer to the section 3 below to define the Commitment Level based on the Influence and Impact rating level.)

- **Awareness** – stakeholders are aware of the scope and objectives of the project
- **General Understanding** – stakeholders understand impacts (e.g. anticipated benefits, project schedule and the changes in the future state) to the organisation and their functional areas
- **Adoption** – stakeholders are participating in project activities (e.g. providing general inputs to user representatives) and are acquiring the skills necessary for the change
- **Buy-in** – stakeholders are willing to work with and implement changes brought by the project and are ready to acquire the skills to adapt to that change. They may have the responsibility to provide part of the requirements and testing in the project because they should be the one who will use the output of the project intensively
- **Ownership** – stakeholders make the decision and change their own. They have high influence to ensure the project is successful and the high impact from the project. In general, Project Owner and PSC are highly committed to the project
- **Remarks** – provides additional information useful in handling communications needs of the stakeholder group.>

3 Commitment Level of Stakeholder Groups



<Notes to B/Ds:

Put the Stakeholder Groups identified in stakeholder register according to their level of commitment to the project. This matrix can also be used in determining the commitment level of each Stakeholder Group based on its degree of influence to the project and the degree of the project's impact to it. >

4 Communication Means

Communication Means	Responsible By	Frequency	Stakeholder Group Involved	Objectives	Information Need	Delivery Vehicle
PSC Meeting	Internal PM	Before end of stage and on need basis	PSC PAT Contractor PM	Present project status. Gather PSC comments. Seek approval on risk mitigation plans, project changes, issue resolutions and resources allocation.	Project highlight report, new/updated risks, open/new issues and changes.	Face-to-face meeting
...						

<Notes to B/Ds:

Enter the means to communicate with the stakeholders:

Communication Means is the activity by which communication takes place.

Responsible By is the person (or party) that is responsible for taking forward or organising the communication activity.

Frequency describes (i) how often the activity takes place or (ii) the period that the activity takes place.

Stakeholder Group Involved indicates the stakeholder groups that need to be involved or participate in the activity.

Objectives describes the purpose of the activity.

Information Need describes the type of information used and generated by the activity. For example, meeting minutes, project highlight report.

Delivery Vehicle describes how each type of information is to be delivered to the stakeholders. For example, face-to-face meeting, video conferencing, phone, email, formal documentation.>

5 Contact List

Stakeholder Group	Project Role	Post	Name	Phone	Email	Remarks
PSC	Executive	...	...	...
PSC	Senior User	...	...	...

<Notes to B/Ds:

Enter the following information per stakeholder group or contact person of a stakeholder group:

Stakeholder Group is an individual or a group of individuals who are involved in or being affected by the project. Internal Project Manager should ensure that all stakeholder groups listed in the Stakeholder Register are included in this Contact List.

Project Role is the role that a stakeholder group or an individual of the stakeholder group plays in the project. For example, individuals belonging to the “PSC” stakeholder group can take up the role of Executive, Senior User and Senior Technical.

Post, Name, Phone, Email documents the personal and contact information for a stakeholder group or an individual of the stakeholder group.

Remarks provides additional information useful in handling communications needs of the stakeholder group or an individual of the stakeholder group.>

D.1.5 Risk Management Plan

Risk Management Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Risk Management Plan have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Risk Management Plan which was/were updated. A revised plan may affect multiple components including tolerance levels, risk response strategies etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Risk Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1. Purpose

<Notes to B/Ds:

1. Define the risk tolerance level in terms of likelihood of occurrence and magnitude of impact to the project's cost, schedule, scope & quality and the corresponding risk strategy (i.e. avoidance, mitigation, transfer and acceptance).
2. Define the risk response strategy in accordance with the risk rating.
3. Define roles and responsibilities involved in risk response planning.
4. Describe the risk management process.
5. Describe the procedure for reviewing the statuses of the risks and the progress of the response plans. >

Risk management planning describes how risks will be managed on the project. It identifies the involvement of members of the project organisation or other stakeholders in carrying out risk management activities including identification, assessment and response planning as well as approval, implementation and monitoring of risk responses.

It defines the risk tolerance level for the project in terms of likelihood of occurrence and magnitude of impact (to the project's cost, schedule, scope and quality) which form the basis for determining the criticality of a risk (i.e. high/medium/low risk) to the project. Then, for each risk rating derived, the corresponding risk response strategy (i.e. avoidance, mitigation, transfer and acceptance) is formulated. Finally, the procedures for reviewing the statuses of the risks and the progress of the response plans are described.

2. Risk Tolerance Levels and Risk Rating

<Notes to B/Ds:

1. The following tolerance levels and risk rating definition are examples only. B/Ds should tailor the tolerance levels to suit their project needs so that risk criticality and priority can be defined appropriately drawing the attention of the level of authority as intended.
2. The tables of tolerance levels and risk rating are to be included in the Risk Assessment Tool for use throughout the project life cycle. The Risk Assessment Tool should be updated as well for any changes made to these tables subsequently.>

The tolerance level for likelihood of risk occurrence is defined using the following five-point scale:

Scale		Probability
5	Almost Certain	96% to 100%
4	Highly Likely	66% to 95%
3	Likely	36% - 65%
2	Unlikely	6% to 35%
1	Very Unlikely	0% to 5%

The tolerance level for magnitude of impact to cost, schedule, scope and quality is defined using the following five-point scale:

Project Impact	Very Low	Low	Medium	High	Very High
	1	2	3	4	5
Scope	Scope	Minor areas	Major areas	Scope	Final

	change barely noticeable.	of scope impacted (not affecting the usability of the final product).	of scope impacted but overall objectives are aligned; or Workarounds available; or PSC may accept the scope change.	changes unacceptable to the PSC or B/D; or threatens achievement of business benefits; or major impact to project success.	product does not align with project objectives; or has major usability issues; or is effectively unusable; or no alternative exists.
Schedule	Insignificant schedule slippage.	Schedule slippage <5%; cause minor impact to current project activity but no delay of critical path.	Overall schedule slippage 5 – 10%; cause impact to critical path but the cumulative slippage is within schedule tolerance.	Overall schedule slippage 11 – 20%; cause significant impact to critical path and the cumulative slippage may exceed schedule tolerance.	Overall schedule slippage >20%; cause major impact to critical path and the cumulative slippage may exceed schedule tolerance; or delay of major milestone.
Cost	Insignificant /no cost impact.	Cost change <5% and the cumulative change in cost is within the allocated contingency .	Cost change 5 – 10% and the cumulative change in cost is within the allocated contingency .	Cost change 11 - 20% and the cumulative change in cost may exceed the allocated contingency .	Cost change >20% and the cumulative change in cost may exceed the allocated contingency .
Quality	Quality degradation barely noticeable.	Quality acceptance criteria can largely be met with minor quality deviations.	Quality deviations in a degree that is acceptable to the PSC.	Quality acceptance criteria are not met.	Final product does not align with project objectives; or has major usability issues; or is effectively unusable.

The risk rating of high, medium or low is determined via the following risk assessment matrix derived based on the tolerance levels defined above:

Probability	Impact				
	Very High (5)	High (4)	Medium (3)	Low (2)	Very Low (1)
Almost Certain (5)	High	High	Medium	Medium	Low
Highly Likely (4)	High	Medium	Medium	Medium	Low
Likely (3)	Medium	Medium	Medium	Low	Low
Unlikely (2)	Medium	Low	Low	Low	Low
Very Unlikely (1)	Low	Low	Low	Low	Low

3. Risk Response Strategies

<Notes to B/Ds:

1. The following risk response strategies are examples only. B/Ds should tailor the risk response strategies to suit their project needs so that the correct response strategies are applied to the project's risks.
2. The risk response selection matrix is to be included in the Risk Assessment Tool for use throughout the project life cycle. The Risk Assessment Tool should be updated as well for any changes made to the matrix subsequently.>

The following risk response selection matrix highlights the response (avoidance, mitigation, transfer and accept) to be adopted per risk rating:

Probability	Impact				
	Very High (5)	High (4)	Medium (3)	Low (2)	Very Low (1)
Almost Certain (5)	Mitigate/Avoid	Mitigate/Avoid	Mitigate/Transfer	Accept/Mitigate	Accept
Highly Likely (4)	Mitigate/Avoid	Mitigate/Avoid	Mitigate/Transfer	Accept/Mitigate	Accept
Likely (3)	Mitigate/Transfer	Mitigate/Transfer	Mitigate/Transfer	Accept/Mitigate	Accept
Unlikely (2)	Mitigate/Transfer	Mitigate/Transfer	Accept/Mitigate	Accept	Accept
Very Unlikely (1)	Mitigate/Transfer	Mitigate/Transfer	Accept/Mitigate	Accept	Accept

4. Response Planning Roles and Responsibilities

<Notes to B/Ds:

Describe the risk reporting arrangement and the escalation hierarchy for each risk rating defined. The escalation arrangement should align with the risk management process flow, which is outlined in section 5. Risk escalation is a critical process to ensure that the risk response plan is passed to a relevant authority for approval and assistance/advice. Project Team or Internal PM should carry out escalation by following the arrangement set out in the **risk response planning roles and responsibilities** matrix defined below.>

The following matrix identifies the roles and responsibilities involved in the process of response planning:

Risk Rating	Role			
	Internal PM	PAT	PSC	Project Owner
High	IP	AA	AP	AP if cost/schedule may exceed tolerance
Medium	IP	AA/AP	--	--
Low	IP/AP	--	--	--

Legend:

IP – initial planning

AA – assist/advice

AP - approve

<Notes to B/Ds:

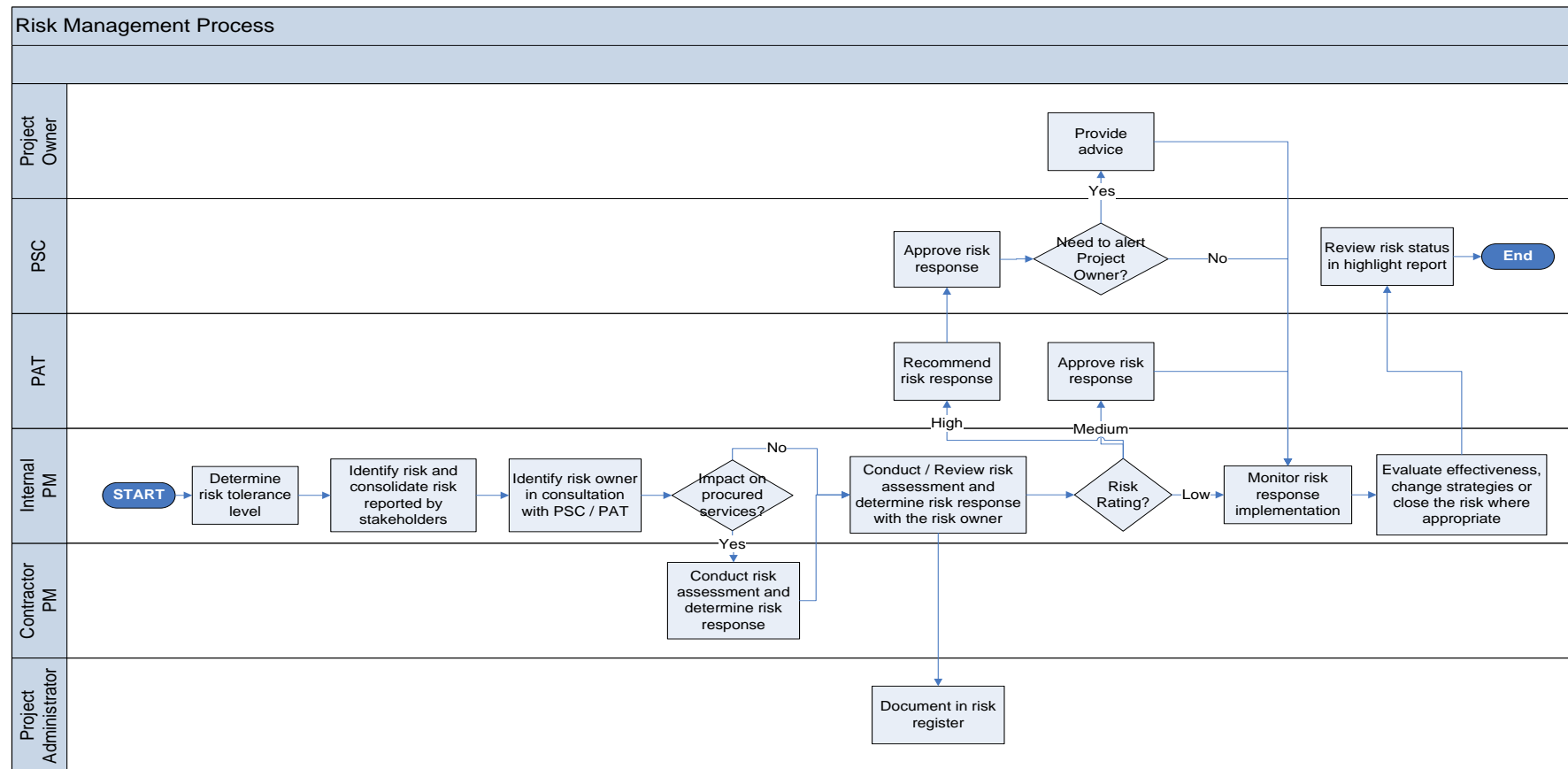
Similar to the development of the risk response selection matrix above, the roles and responsibilities should be determined as early as the Initiate phase or at the beginning of the Plan phase. The Internal Project Manager, the PSC and/or the PAT work out the escalation arrangement.

Risk Rating signifies the level of attention and priority required to address the risk. A risk rating of High, Medium and Low is derived based on the level of impact and probability of occurrence.>

5. Risk Management Process Flow

<Notes to B/Ds:

Provide a copy of risk management process in a graphical format that describes how risks are dealt with from identification to implementation of risk response. The chart should indicate the parties involved such as Project Owner, PSC, PAT, Internal PM, Project Administrator, the OGCI0 etc.>



6. Risk Monitoring

<Notes to B/Ds:

Describe the risk monitoring arrangement for risks documented in the Risk Register. Assigned Risk Owner shall report the progress of the risk response regularly. Internal PM and Risk Owner should escalate if there are any constraints to execute the risk response. Inactive risk should be reviewed as well. Updates required should be documented in Risk Register. Risks requiring PSC's attention (e.g. active risk with high risk rating, newly identified risk) can be reported via the project highlight report.>

The Internal PM reviews the risk register at least once per month. The Internal PM consolidates the progress information of risk responses from the risk owners and reports to the PSC via the project highlight report. If there is any constraint to execute the risk response plan, the risk owner escalates to the PSC via the Internal PM on an ad-hoc basis.

D.1.6 Quality Management Plan

Quality Management Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Quality Management Plan have been approved, a new version should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Quality Management Plan which was/were updated. A revised plan may affect multiple components including quality control activities, quality assurance activities etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Quality Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1 Purpose

<Notes to B/Ds:

1. *List internal and external quality standards and procedures that the project needs to comply with or follow when developing the project deliverables. These may include government guidelines and regulations, policies, technical standards, business-related standards, QA standards, security standards, industry standards, documentation standards etc.*
2. *Define quality control activities, the purpose of which is to ensure that the project deliverables produced are meeting quality acceptance criteria as well as the internal and external standards.*
3. *Define quality assurance activities for verifying that quality control activities are being conducted as planned.*
4. *Define acceptance criteria for major project deliverables. >*

Quality management planning describes the activities required to ensure that project deliverables are meeting specifications, meeting quality standards and functioning correctly etc. (the quality control activities). It also describes activities to ensure that the quality control activities are applied properly so as to ensure the quality of the developed deliverables (the quality assurance activities).

2 Quality Standards

<Notes to B/Ds:

The following is a list of typical Government standards and guidelines. The list is not meant to be exhaustive. The list neither contains industry standards. B/Ds can update the list to remove those that are not relevant to the project and to include additional ones specific to the project.>

The following list of Government standards and guidelines is adopted in the project:

- (a) Quality Policy and Requirements
 - Quality Manual
 - Quality Planning Procedure
 - Quality Assurance Review Procedure
- (b) Software Development
 - An Introduction to RAD
 - RAD Procedures Guide
 - RAD Documentation Guide
- (c) Resource Estimation
 - An Introduction to FPA
- (d) Project Management
 - Practice Guide to Project Management for IT Projects under an Outsourced Environment
- (e) Site Preparation Guidelines
 - Data Centre Site Preparation Guideline
 - Local Area Network Site Preparation Guideline

- (f) IT Security Policy and Guidelines
 - Baseline IT Security Policy
 - IT Security Guidelines
 - Internet Gateway Security Guidelines
 - Security Risk Assessment & Audit Guidelines
 - Information Security Incident Handling Guidelines

- (g) Other Standards & Guidelines
 - Documentation Standards for Implementation Phase
 - Guidelines for Application Software Testing
 - Standards & Methods Document Style Manual
 - Guidelines on System Maintenance Cycle
 - Software Configuration Management Process Guide for Application Software

- (h) Infrastructure for E-Government
 - Central Computer Centre
 - Central Cyber Government Office
 - Government Communication Network
 - Central Internet Gateway System
 - Government Backbone Network
 - Government Directory Service
 - Interoperability Framework for E-Government
 - The HKSARG Interoperability Framework
 - Common Schemas published on the registry at www.xml.gov.hk
 - Computer-Aided-Drafting Standard for Works Projects
 - Final Report on Implementation of Data Alignment Measures for the Alignment of Planning, Lands and Public Works Data
 - Guidelines on Dissemination of Information through Government Homepages
 - LAN Addressing and Naming Standard
 - XML Schema Design and Management Guide
 - IT Security Infrastructure in Government
 - Guidelines for Security Provision in Government Office Buildings
 - e-Government Infrastructure Service
 - Unified Identity Management Framework (UIDM) for e-Government Services Delivery

3 Quality Control Activities

<Notes to B/Ds:

Describe the activities that will be conducted to measure project results, compare results against quality standards defined above and check if they are being met. Quality control activities may also include activities for uncovering errors or improving performance e.g. document review, peer review, security risk assessment, testing etc.

Quality control activities can be defined during the Execute phase when they are executed. If such activities have been planned in earlier phases, they should be checked for completeness.>

The following quality control activities will be carried out, as appropriate, when the contractor submits a project deliverable for review and/or acceptance. As for the acceptance criteria for the deliverables listed in section 4.5 in Project Management Plan,

please refer to section 5 below.

- (a) Documentation review
- (b) Prototype review
- (c) User acceptance test
- (d) ...
- (e) ...

4 Quality Assurance Activities

<Notes to B/Ds:

Describe the processes/activities to assure that quality control activities have been carried out as planned for the purpose of evaluating project performance. Such processes/activities should be executed on a regular basis. Quality assurance processes/activities may also include those for validating that the quality standards defined above are appropriate and able to be met.

Quality assurance processes/activities are defined in the Plan phase and refined in the Execute phase.>

The Internal PM, with assistance from the Project Team, will review that the quality control activities have been carried out as planned and that the project deliverables have met the acceptance criteria defined. Project team will monitor reworks for project deliverables failing to meet the acceptance criteria.

An independent reviewer will be appointed at the following checkpoints to conduct quality assurance review in accordance with the Quality Assurance Review Procedure:

- System Analysis and Design – end of the SA&D phase
- Implementation – end of physical design
- Implementation – pre-production

The quality records to be used in a Quality Assurance Review can be found in Annex A.

5 Acceptance Criteria of Major Deliverables

<Notes to B/Ds:

For each of the deliverables listed in section 4.5 “Major Deliverables” of the Project Management Plan, describe the criteria and requirements used to review the deliverable. At a minimum, the review should consider applicable contract requirement and industry standards, as well as adherence to mandated templates or formats. Pre-defined acceptance criteria, if any, should be referenced and used in the review. Other general quality requirements may be included such as completeness, clarity, fit for purpose, timeliness and consistency with other already delivered items. For guidelines on acceptance criteria, please refer to section 2.4.5 of the Practice Guide to Project Management for IT Projects under an Outsourced Environment.>

The acceptance criteria of the following major deliverables of the project can be found in Annex B:

- *Project Management Plan*

- *Tender document*
- *Tender Report*
- *System Analysis and Design Report*
- *Privacy Impact Assessment Report*
- *Security Risk Assessment Report*
- *Privacy Compliance Audit Report*
- *<System Name>*
- ...

Quality Records for Quality Assurance Review

1 Request for Review

Project		Phase	
Subject			
Originator	(Name) (Post)	Date	
Reviewer	(Name) (Post)		
List of Products for Review :			
Product	Supporting Document	Standard	
Authorised by: _____		Post: _____	

2 Review Report

Project		Phase	
Subject			
Originator	(Name) (Post)	Date	
Review Complete:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Reasons for Incomplete Review:			
Results/Comments/Recommended Actions:			
Signed: _____		Date: _____	
Project Manager's decision:			
Signed: _____		Date: _____	

Acceptance Criteria for Major Project Deliverables

Deliverable	Project Management Plan (PMP)
Purpose	To describe the overall management approach for work to be performed for the project throughout the project life cycle.
Content	<ol style="list-style-type: none"> 1. Business Case <ul style="list-style-type: none"> - Business Objectives - Anticipated Benefits (Tangible and Intangible) - Anticipated Cost 2. Project Overview <ul style="list-style-type: none"> - Project Boundary - Critical Success Factors - Assumption and Constraints - Major Deliverables 3. Project Organisation <ul style="list-style-type: none"> - Organisation Structure - Project Members 4. Work Plan <ul style="list-style-type: none"> - Project Schedule - Project Milestones 5. Project Budget 6. Communications Management <ul style="list-style-type: none"> - Stakeholders Register - Communication Means 7. Risk Management <ul style="list-style-type: none"> - Risk Tolerance Level and Risk Rating - Risk Response Strategies, Roles and Responsibilities - Risk Monitoring 8. Quality Management <ul style="list-style-type: none"> - Quality Standards - Quality Control Activities - Quality Assurance Activities - Acceptance Criteria 9. Issue Management <ul style="list-style-type: none"> - Issue Tolerance Level - Issue Management Process - Issue Monitoring 10. Change Request Management <ul style="list-style-type: none"> - Change Request Management Process - Roles and Responsibilities
Reference	<ol style="list-style-type: none"> 1. Practice Guide to Project Management for IT Projects under on Outsourced Environment
Related Documents	<ol style="list-style-type: none"> 1. Business case/Funding application
Quality Criteria	<ol style="list-style-type: none"> 1. Are all the components described in the content section

- above included? *<Notes to B/Ds: Check for completeness.>*
2. Is the information provided in the business case and project overview sections consistent with that in the funding application? *<Notes to B/Ds: Check for consistency.>*
 3. Have all the required management procedures and approving authorities (for risk, issue, quality and change request management) been defined in the PMP? Are they agreeable to the target audience? *<Notes to B/Ds: Check for completeness, fit for purpose and meeting the expectation for the intended use.>*
 4. Is the PMP clearly written and presented in an appropriate level of details that its target audience understands, in particular, their roles and responsibility in the management of the project as well as the management procedures to follow? *<Notes to B/Ds: Check for fit for purpose, level of detail and clarity.>*
 5. Is the PMP reviewed and agreed by the target audience? Have comments from target audience been incorporated into the PMP? *<Notes to B/Ds: Check for quality, validity and currency of information.>*
 6. Is the PMP endorsed before commencing project work (i.e. proceeding to the execute phase)? *<Notes to B/Ds: Check for timeliness.>*

Deliverable	System Analysis and Design Report
Purpose	To document the specification and design of the system to be accomplished and the inter-relationships of system functions based on the user requirements and current environment.
Content	<ol style="list-style-type: none"> 1. Management Summary <ul style="list-style-type: none"> - Business Objectives 2. Technical Specification <ul style="list-style-type: none"> - Current Environment Description - Business Activity Model - User Requirements - System Specifications - Selected Technical System Option 3. Appendices <ul style="list-style-type: none"> - Samples of Source Documents/Reports - Function Point Analysis (FPA) and Resources Estimation - Screens and Reports Layout - Business System Options Considered - Technical System Options Considered - others as necessary
Reference	<ol style="list-style-type: none"> 1. OGCIO Information Systems Procedures Manual [P1]. 2. OGCIO SSADM Practitioner Manual - Vol 2 Documentation Standards [S4]. 3. OGCIO Resources Estimation Guide [G19]
Related Documents	<ol style="list-style-type: none"> 1. Feasibility Study Report (FS Report) 2. Project Management Plan
Quality Criteria	<ol style="list-style-type: none"> 1. Are all the components described in the content section above included? <i><Notes to B/Ds: Check for completeness.></i> 2. Have all stakeholders been consulted? <i><Notes to B/Ds: Check for completeness and validity.></i> 3. Have all user requirements been captured? Are they within the project boundary? Are they traceable to the contract? <i><Notes to B/Ds: Check for scope and completeness.></i> 4. Are the findings and recommendations consistent with the FS Report? <i><Notes to B/Ds: Check for consistency.></i> 5. Can the recommendations meet the project objectives? <i><Notes to B/Ds: Check for fit for purpose.></i> 6. Is the report adopting the mandated template? <i><Notes to B/Ds: Check for adherence to standard.></i> 7. Is the report clearly written and presented that allows information to be communicated effectively with its target audience? Are jargons clearly explained and specified? <i><Notes to B/Ds: Check for clarity.></i>

Deliverable	Tender Document
Purpose	To set out the tender procedures, the governing terms and conditions (for tender and contract) and the details of goods and services to be acquired.
Content	<ol style="list-style-type: none"> 1. Part I Notes for Tenderers 2. Part II Conditions of Tender 3. Part III Articles of Agreement 4. Part IV Conditions of Contract 5. Part V Contract Schedules 6. Part VI Deed of Guarantee 7. Part VII Project Specifications 8. Part VIII Offer to be Bound
Reference	<ol style="list-style-type: none"> 1. Feasibility Study Report (FS Report) 2. Stores and Procurement Regulations (SPR)
Related Documents	<ol style="list-style-type: none"> 1. Business case/Funding application 2. Project Management Plan
Quality Criteria	<ol style="list-style-type: none"> 1. Are all the components described in the content section above included? <i><Notes to B/Ds: Check for completeness.></i> 2. Have all stakeholders been consulted? <i><Notes to B/Ds: Check for completeness and validity.></i> 3. Have all user requirements been captured? Are they within the project boundary? <i><Notes to B/Ds: Check for scope and completeness.></i> 4. Are the project specifications in an appropriate level of detail and include all essential information that enables potential tenderers to propose a solution and prepare their bids? <i><Notes to B/Ds: Check for fit for purpose and level of detail.></i> 5. Have relevant authorities been consulted? <i><Notes to B/Ds: Check for adherence to quality control procedures.></i> 6. If there exists information derived from other sources (such as statistics, forecasts etc.), is the source information valid and current? <i><Notes to B/Ds: Check for quality, validity and currency of information.></i> 7. Is the document clearly written that allows information to be communicated effectively with the target audience and potential tenderers? <i><Notes to B/Ds: Check for clarity.></i>

Deliverable	Tender Report
Purpose	To document tender evaluation results and recommendation for consideration by the relevant tender board.
Content	<ol style="list-style-type: none"> 1. Type and Duration of Contract 2. Brief Description of Contract 3. Authority to Invite Tenders 4. Details of Invitation 5. Details of Tenders 6. Tender Evaluation 7. Recommendation
Reference	<ol style="list-style-type: none"> 1. Stores and Procurement Regulations (SPR)
Related Documents	<ol style="list-style-type: none"> 1. Project Management Plan 2. Tender Document 3. Tender Evaluation Results/Findings
Quality Criteria	<ol style="list-style-type: none"> 1. Are all the components described in the content section above included? <i><Notes to B/Ds: Check for completeness.></i> 2. Is the report adopting the mandated template? <i><Notes to B/Ds: Check for adherence to standard.></i> 3. Are the tender evaluation results, findings and recommendation reviewed and approved by the Tender Assessment Panel? <i><Notes to B/Ds: Check for adherence to standard and quality control procedures.></i> 4. Has the report presented complete and relevant tender evaluation results/findings that enable the relevant tender board to consider the recommendations thoroughly? <i><Notes to B/Ds: Check for consistency and fit for purpose.></i>

Deliverable	Privacy Impact Assessment Report
Purpose	To document the findings and recommendations of the privacy impact assessment.
Content	<ol style="list-style-type: none"> 1. Executive Summary 2. Approach for assessment 3. Function creep <ul style="list-style-type: none"> - Case for the use of the system - Extent of function creep - Impact of the function creep - Potential for further function creep 4. Consideration of Privacy Principle 5. Findings and Recommendations <ul style="list-style-type: none"> - Recommendations related to law - Recommendations related to governance, including transparency and accountability
Reference	<ol style="list-style-type: none"> 1. Personal Data (Privacy) Ordinance
Related Documents	<ol style="list-style-type: none"> 1. SA&D Report
Quality Criteria	<ol style="list-style-type: none"> 1. Are all the components described in the content section above included? <i><Notes to B/Ds: Check for completeness.></i> 2. Is the report clearly written and presented that allows information to be communicated effectively with its target audience? Are jargons clearly explained and specified? <i><Notes to B/Ds: Check for clarity.></i> 3. Are the findings and recommendations traceable to the functions giving rise to the problems to enable resolutions be made? <i><Notes to B/Ds: Check for clarity and validity.></i> 4. Are the findings and recommendations consistent? <i><Notes to B/Ds: Check for consistency.></i> 5. Are the recommendations sound and feasible and agreeable to the target audience? <i><Notes to B/Ds: Check for fit for purpose and validity.></i>

D.1.7 Issue Management Plan

Issue Management Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the changes to the Issue Management Plan have been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should attach the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Issue Management Plan which was/were updated. A revised plan may affect multiple components including tolerance level, approving authority etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Issue Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1. Purpose

<Notes to B/Ds:

1. Define the issue tolerance level in terms of magnitude of impact to the project's cost, schedule, scope and quality.
2. Define the reporting hierarchy for escalating issues.
3. Describe the issue management process that includes capturing, reporting, escalating, tracking and resolving issues.
4. Describe the procedure for reviewing the statuses of the issues and the progress of the issue resolutions. >

Issues arise when risks realise (i.e. probability of occurrence is 100%) or incidents occur. Issue management planning describes how issues will be managed on the project. It identifies the involvement of members of the project organisation or other stakeholders in carrying out issue management activities including identification, analysis and prioritisation of issues as well as approval, implementation and monitoring of issue resolutions.

2. Issue Tolerance Level

<Notes to B/Ds:

1. The following tolerance level is an example only. B/Ds should tailor the tolerance level to suit their project needs so that impact of an issue can be defined appropriately drawing the attention of the level of authority as intended.
2. If the magnitude of impact is the same as that of risk tolerance, the table defined in section 2 of Risk Management Plan can be referred.>

The tolerance level for magnitude of impact to cost, schedule, scope and quality is defined using the following five-point scale:

Project Impact	Very Low	Low	Medium	High	Very High
	1	2	3	4	5
Scope	Scope change barely noticeable	Minor areas of scope impacted (not affecting the usability of the final product).	Major areas of scope impacted but overall objectives are aligned; Workarounds available; PSC may accept the scope change.	Scope changes unacceptable to the PSC or B/D; or threatens achievement of business benefits; or major impact to project success.	Final product does not align with project objectives; or has major usability issues; or is effectively unusable; or no alternative exists.
Schedule	Insignificant schedule slippage	Schedule slippage <5%; cause minor impact to current	Overall schedule slippage 5 – 10%; cause impact to critical path	Overall schedule slippage 11 – 20%; cause significant impact to	Overall schedule slippage >20%; cause major impact to

		project activity but no delay of critical path.	and the cumulative slippage is within schedule tolerance.	critical path and the cumulative slippage exceeds schedule tolerance.	critical path and the cumulative slippage exceeds schedule tolerance; or delay of major milestone.
Cost	Insignificant/no cost impact.	Cost change <5% and the cumulative change in cost is within the allocated contingency.	Cost change 5 – 10% and the cumulative change in cost is within the allocated contingency.	Cost change 11 - 20% and the cumulative change in cost may exceed the allocated contingency.	Cost change >20% and the cumulative change in cost exceeds the allocated contingency.
Quality	Quality degradation barely noticeable	Quality acceptance criteria can largely be met with minor quality deviations.	Quality deviations in a degree that is acceptable to the PSC.	Quality acceptance criteria are not met	Final product does not align with project objectives; or has major usability issues; or is effectively unusable.

3. Issue Management Process

<Notes to B/Ds:

Similar to the escalation arrangement for risk management, an approving authority is defined for issue management. B/Ds can enhance the table below to include other criteria required for defining the approving authority. Such criteria may include issue priority, specific conditions requiring management attention (e.g. an issue cannot be resolved within the agreed timeframe) etc.

Priority signifies the level of attention and priority required to address the issue.

Condition indicates the special condition to be satisfied for triggering approval by the level of authority specified.

Level of impact indicates the magnitude of impact to scope, schedule, cost, quality that requires the level of authority for approval. The determination of the level of impact is the same as that of risk. Level of impact is classified into Very High, High, Medium, Low and Very Low. If deemed appropriate, quantitative measurements such as percentage, dollar amount, duration in months, weeks etc. can also be used.

Authority indicates the level of authority required to approve an issue resolution for a particular criteria. For example, Project Owner, PSC, PAT, Internal PM. >

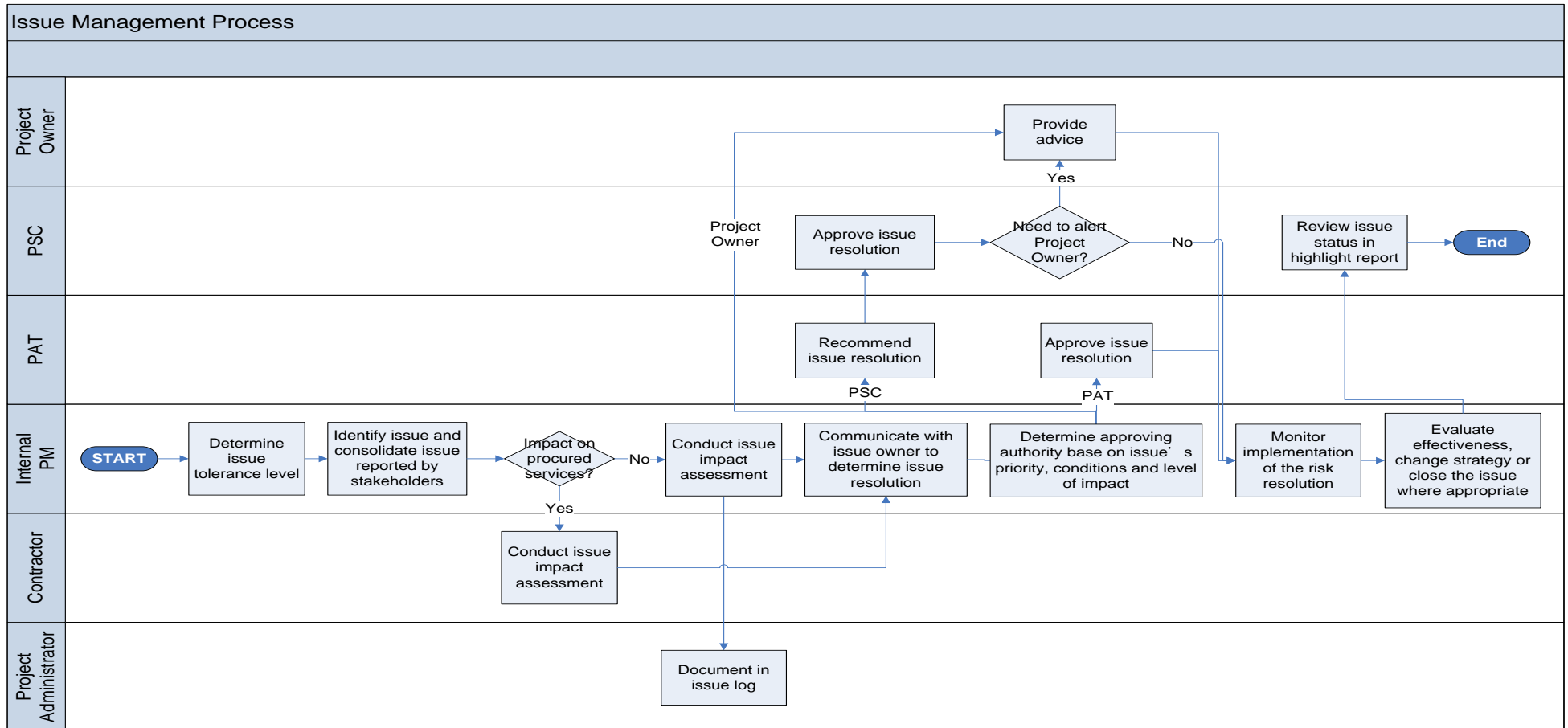
The following matrix defines the reporting hierarchy for escalating issues according to the level of impact, priority or conditions requiring management attention. The issue management process flow is depicted at section 4 below.

Priority	Condition	Level of Impact	Authority
High	Require immediate resolution	Very high	Project Owner
High/Medium	Escalation from PAT	High	PSC
Medium/Low	--	Medium, Low, Very low	PAT

4. Issue Management Process Flow

<Notes to B/Ds:

Provide a copy of issue management process in a graphical format that describes how issues are dealt with from identification to implementation of issue resolution. The chart should indicate the parties involved such as Project Owner, PSC, PAT, Internal PM, Project Administrator etc.>



5. Issue Monitoring

<Notes to B/Ds:

Describe the monitoring arrangement for issues recorded in the issue log. Internal PM should report new issues identified and progress of issue resolutions regularly e.g. via project highlight report.>

The Internal PM reviews the issue log at least once per month. The Internal PM consolidates the progress information of issue resolutions from the responsible parties and reports to the PSC via the project highlight report.

D.1.8 Change Request Management Plan

Change Request Management Plan

Project Identification

Project Name: _____ Date: _____
 Project Owner: _____ Project Manager: _____

<Notes to B/Ds:

Enter the **Project Name**, the **current Date**, the name of the **Project Owner** and the name of the assigned **Internal Project Manager**.>

Revision History

Revision #	Revision Date	Section Revised	Remarks

<Notes to B/Ds:

Once the change of Change Request Management Plan has been approved, a new revision should be created and previous revision(s) should be retained. The Project Manager should append the following revision information to the new revision being created:

Revision # refers to the number assigned by the Project Manager for the unique identification of the revised plan based on a pre-defined convention.

Revision Date refers to the date which the revised plans were approved.

Section Revised highlights component(s) of the Change Request Management Plan which was/were updated. A revised plan may affect multiple components including roles and responsibilities, approving authority etc. If the revised plan affects all components, specify "ALL".

Remarks provides additional information about the revised plan, with detailed reasons why revisions were made.>

Distribution List

Name	Role	B/D	Date

<Notes to B/Ds:

Enter the details of the person to whom the Change Request Management Plan is distributed (including his/her name, his/her role in the project and his/her B/D) as well as the date the plan is distributed.>

1. Purpose

<Notes to B/Ds:

1. Describe the roles and responsibilities involved in the process of requesting, reviewing, analysing and approving change requests.
2. Define the authority required to approve a change request according to the nature of change, magnitude of impact to the project’s cost, schedule, scope & quality and/or the tolerance level of the approving authority.
3. Define the change request management process.>

During the project life cycle, changes will occur arising from the addition of or change to the project’s requirements or project activities, the over- or under-estimation of the project’s cost and/or timeline, changes in the project assumptions, constraints or dependencies. Thus, a change request is made to adjust the project’s organisation, scope, cost, schedule, or quality estimates.

Change request management planning describes how the changes to the project will be managed. It describes the parties/individuals authorised to make a change request, the parties/individuals responsible for analysing the impact and the authority to approve the request. It also describes the steps to develop an understanding with the change requester on the reason for the change and the scope of the change as well as to agree upon its priority and expected completion date.

2. Roles and Responsibilities

<Notes to B/Ds:

A change request can originate from various sources, such as project team, contractors, stakeholders etc. Regardless of the source, each change request should follow the same process for documentation, evaluation, analysis and disposition.>

The table below documents the roles and responsibilities involved in the process of requesting, reviewing, analysing and approving change requests. Other stakeholders not shown in the table can raise their change requests via the Internal PM/PAT who will then perform an initial screening and file the request where appropriate.

Role	Responsibilities			Authorities
	Request Change	Review	Analyse	Approve

<Notes to B/Ds:

Indicate the responsibilities and authorities of each project role in the change request process:

Role is a project role on the project organisation

Responsibilities are the duties of a project role in the change request process

Request Change means the project role is authorised to make a change request

Review means the project role is responsible for reviewing a change request

Analyse means the project role is responsible for analysing the impact of a change request

Authorities indicates the authorities of a project role in the change request process. In the matrix, there exists only one type of authority and that is to approve a change request. B/Ds

can include additional authorities if deemed necessary. For example, separate authorities for approving requests involving changes to cost and changes to schedule.>

3. Change Request Management Process

<Notes to B/Ds:

Define the authority to approve a change request according to nature of change, magnitude of impact (to scope, schedule, cost and quality) and/or the tolerance of the approving authorities. >

The following matrix defines the authority required to approve a change request according to the nature of change, magnitude of impact to the project’s cost, schedule, scope & quality and/or the tolerance level of the approving authority. The change request management process flow is depicted at section 4.

Nature of Change	Impact*				Approving Authority
	Scope	Schedule	Cost	Quality	
Anticipated benefits of the business case	Any	Any	Any	Any	Project Owner
Scope	Any	Any	Any	Any	PSC
User requirement	Medium or above	Medium or above	Medium or above	Medium or above	PSC
...					

Note:

* Refer to the magnitude of impact in the table defining issue tolerance level at section 2 of the Issue Management Plan.

<Notes to B/Ds:

Nature of Change defines in general terms what is being affected by the change. For example, business case, project scope, project organisation, user requirement, etc.

Impact indicates the magnitude of impact to scope, schedule, cost, quality that requires the level of authority for approval. Where possible, use quantitative measurements such as percentage, dollar amount, duration in months, weeks etc.

Approving Authority indicates the level of authority required to approve a change request for a particular nature of change and/or magnitude of impact. For example, Project Owner, PSC, PAT, Internal PM.>

4. Change Request Management Process Flow

<Notes to B/Ds:

The Change Request Management Process defines the parties/individuals involved, their responsibilities and/or authorities in the process of requesting, reviewing, analysing and approving change requests. When defining the approving authority, the nature of change, the magnitude of impact (to scope, schedule, cost and quality) and the tolerance of the approving officer need to be considered.

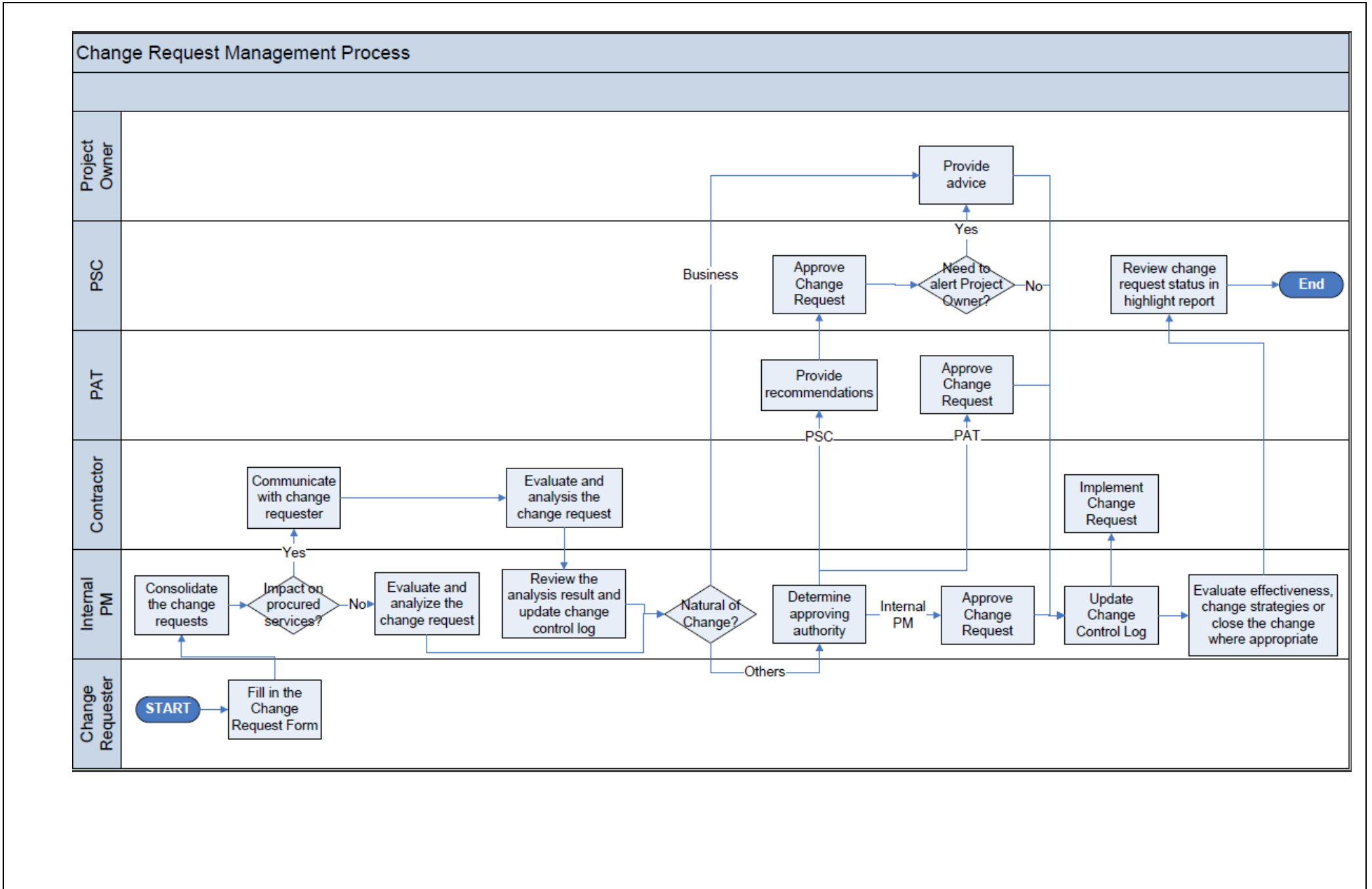
The Change Request Log and the Change Request Form are the primary tools to record and monitor changes requested that could impact the project scope, schedule, quality and cost. The Change Request Log should be updated once a change request is raised or its status changed.

When a need for change is identified, the authorised requester should complete the change request form with the help of Internal PM if necessary. The following information will need to be provided:

- Change Description – detailed description of the change and provide alternative if applicable*
- Justification for Requesting the Change – explanation of why the change is required*
- Expected Completion Date – the desired date for the change to be completed*
- Priority – urgency and the importance of the change*
- Impact if Change is not Accepted – expected impact if change is not accepted*
- Supplementary Information – additional information that helps to describe the change or to conduct the analysis*

No matter the change request is accepted or not, the details of the request need to be captured in the Change Request Log. Based on the pre-defined change request management process, the party responsible for reviewing change requests evaluates whether the request stands and if so, the party responsible for conducting impact analysis analyses the impact of the change to scope, schedule, cost and quality. A recommendation on whether to accept the request is then made for final approval by the pre-defined authority.

Provide a copy of change request management process in a graphical format that describes how changes are dealt with, in particular the approval process. The chart should indicate the parties involved such as Project Owner, PSC, PAT, Internal PM, Contractor PM etc.>



D.2 Change Request Form

Change Request Form			
PART A - Request Details <i>(To be completed by change request initiator)</i>			
Project Name		Reference No:	
Description of Change Requested:			
Justification for Requesting the Change:			
Expected Completion Date:		Priority:	<input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Medium
Impact if change is not accepted:			
Additional Information:			
Requested By:	Name:		Date:
	Signature:		Post:
			Tel. No.:
PART B - Impact Analysis <i>(To be completed by Contractor / Internal PM)</i>			
Change Request No.			
Nature of Change:	<input type="checkbox"/> Change in Business Case <input type="checkbox"/> Change in Contractor Team Members <input type="checkbox"/> Change in Internal Team Members <input type="checkbox"/> Others (Please specify)		<input type="checkbox"/> Change in Scope <input type="checkbox"/> Change in Project Milestones <input type="checkbox"/> Change in User Requirements
Impact Analysis:			
Overall analysis:			

<input type="checkbox"/> Scope:				
<input type="checkbox"/> Schedule: (<i>*Delete as appropriate</i>)				
Change in schedule caused by this change request: <input type="checkbox"/> Ahead _____ *Weeks/Months <input type="checkbox"/> Delay _____ *Weeks/Months Accumulated change in schedule as a result of ALL change requests: <input type="checkbox"/> Ahead _____ *Weeks/Months <input type="checkbox"/> Delay _____ *Weeks/Months Detailed breakdown for this change request:				
<input type="checkbox"/> Cost: (<i>*Delete as appropriate</i>)				
Change in cost caused by this change request: <input type="checkbox"/> Increase *HK\$/US* _____ <input type="checkbox"/> Decrease *HK\$/US* _____ Accumulated change in cost as a result of ALL change requests: <input type="checkbox"/> Increase *HK\$/US* _____ <input type="checkbox"/> Decrease *HK\$/US* _____ Detailed breakdown for this change request:				
<input type="checkbox"/> Quality:				
Recommendation: <input type="checkbox"/> Accept <input type="checkbox"/> Recommend to PAT <input type="checkbox"/> Reject <input type="checkbox"/> Defer				
Reason for Rejection or Deferral:				
Planned Implementation Date:		Start Date:	End Date:	
Prepared By:	Name:		Date:	
	Signature:		Designation/Post:	
Recommended by:	Name:		Date:	
	Signature:		Designation/	

			Post:	
PART C – Recommendation by Project Assurance Team (PAT)				
Recommendation:	<input type="checkbox"/> Approve	<input type="checkbox"/> Recommend to PSC	<input type="checkbox"/> Reject	
Comments and Recommendations:				
PAT Meeting References, if applicable:				
Meeting date: _____				
File Ref: _____				
PAT Chairman:		Date:		
Signature:		Post:		
PART D – Recommendation by Project Steering Committee (PSC)				
Recommendation:	<input type="checkbox"/> Approve	<input type="checkbox"/> Reject		
Comments and Recommendations:				
PSC Meeting References, if applicable:				
Meeting date: _____				
File Ref: _____				
PSC Chairman:		Date:		
Signature:		Post:		

D.3 Highlight Report

Project Highlight Report							
Project:				Reporting Period:			
Prepared by:				Date:			
Part A – Project Status							
<div style="display: flex; flex-direction: column; align-items: center; gap: 10px;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">R</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">Y</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">G</div> </div>	Overall Status ¹	Schedule	<input type="checkbox"/> Ahead	Wks	<input type="checkbox"/> On-Schedule	<input type="checkbox"/> Behind	Wks
		Cost	<input type="checkbox"/> Underspent	%	<input type="checkbox"/> On-Budget	<input type="checkbox"/> Overspent	%
	<i><Notes to B/Ds: Summarise the overall project performance. Highlight major accomplishments and failures for the attention of the Project Steering Committee. Accomplishments include activities executed, meetings conducted, deliverables produced, deliverables accepted, issues closed, changes accepted, risks closed, etc. Failures include planned activities not executed, milestone missed, deliverables rejected, etc.></i>						
Part B – Key Activities and Milestones							
Description	Plan		Re-Forecast		Actual		
	Start	End	Start	End	Start	End	% Complete
Remarks							
Part C – Outlook for Next Period							
<i><Notes to B/Ds: List planned activities and expected accomplishments for the next reporting period. Use project schedule as the basis for the forecast.></i>							
Part D – Risks							
<i><Notes to B/Ds: List new risks and risks with status updated within the reporting period. Align Risk No. with that on the RIF (Risk Register) to enable cross referencing.></i>							
Risk No.	Description	Rating	Proposed Resolutions and Mitigations			Status	

¹ Colour the project status: ● Red – milestones missed, and significant risks or issues foreseen; ● Yellow – milestones hit but significant risks or issues foreseen or milestones missed but no serious risk of delay to achieving significant later milestones; ● Green – milestones hit, no major risks or issues foreseen.

Remarks	
----------------	--

Part E – Issues
<Notes to B/Ds: List new issues and issues with status updated within the reporting period. Align Issue No. with that on the Issue Log to enable cross referencing>

Issue No.	Description	Impact	Proposed Resolutions	Status

Remarks	
----------------	--

Part F – Changes
<Notes to B/Ds: List new change requests raised within the reporting period. Align Change Request No. with that on the Change Request Log to enable cross referencing. >

Change Request No.	Description	Impact

Remarks	
----------------	--

D.4 Lesson Learnt

Lesson Learnt			
PART 1 - General Information			
Project Name:		Project Ref. No.:	
B/D:		Project Manager:	
Prepared By:		Date:	
PART 2 – Details			
Category (Multiple categories can be selected, where appropriate):	<input type="checkbox"/> Planning <input type="checkbox"/> Organisation <input type="checkbox"/> Communications Management <input type="checkbox"/> Scope Management <input type="checkbox"/> Financial Management <input type="checkbox"/> Resources Management <input type="checkbox"/> Procurement Management	<input type="checkbox"/> Risk Management <input type="checkbox"/> Issue Management <input type="checkbox"/> Quality Management <input type="checkbox"/> Change Management <input type="checkbox"/> Logistics Management <input type="checkbox"/> Stakeholder Management <input type="checkbox"/> Other (Specify):	
Project Phase (Multiple phases can be selected, where appropriate):	<input type="checkbox"/> Initiate <input type="checkbox"/> Plan <input type="checkbox"/> Control <input type="checkbox"/> Close <input type="checkbox"/> Other (Specify):	<input type="checkbox"/> Execute	
Process / Deliverable:			
Result:	<input type="checkbox"/> Success <input type="checkbox"/> Failure <input type="checkbox"/> Improvement <input type="checkbox"/> Other (Please elaborate):		
Situation:			
Resolution:			
Key Takeaways:			

D.5 Risk Register

B/D: ACPC ref.:		Project Name:				Overall project risk profile: (To be completed by ACPC Secretariat or Project Governance Team)	
						<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	
Any risk identified?		Does project have policy commitment which will draw public attention?					
<input checked="" type="checkbox"/> Yes, complete the form below <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No					
Add Risk			Last 3 Months Updated Risk				
Risk Status (Active / Inactive)	Ref. No.	Risk Category	Risk Description	Risk Analysis	Impact Description (Cost, Schedule, Scope, Quality or Others)	Risk Owner	Risk Response Plan
Active	1	Legislation Policy	Risk Description (Please provide more details of the risk here)	Level of Impact (a): 4 Probability (b): 3 Risk Rating (a x b): Medium: 15-20	Cost: Schedule: Quality: Scope:		

Risk Response Plan	Reported Date	Last Review Date	Last Update Date	Execution Start Date	Execution Completed Date	Date Risk is Transferred to Issue	Remarks
	11.Dec.2010	12.Nov.2010	12.Sep.2010	12.Nov.2010	12.Nov.2010	12.Nov.2010	

D.6 Issue Log

Project:

Serial No.	Issue #	Issue Description	Project Phases	Area of Impact	Level of Impact	Priority	Risk Ref. No.	Reported Date	Reported By
			(• Initiate • Plan • Execute • Close)	(• Cost • Schedule • Scope • Quality • Project Organisation • Others)	(• 5 - Very high • 4 - High • 3 - Medium • 2 - Low • 1 - Very low)	(• 3 - High • 2 - Medium • 1 - Low)		(DD/MM/YYYY)	
1									
2									

Resolution Description	Approved By	Responsible Party	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date	Last Update Date	Remarks
			(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	

D.7 Change Request Log

Project:

Serial No.	Change Request No.	Nature of Change	Description	Priority	Request Date	Requested By	Expected Completion Date	Accepted / Approved By
		<ul style="list-style-type: none"> • Business case • Scope • Contractor team member • Internal team member • Project milestones • User requirements • Others, please specify) 		<ul style="list-style-type: none"> • 3 - High • 2 - Medium • 1 - Low) 	(DD/MM/YYYY)		(DD/MM/YYYY)	
1								

Date Accepted/Approved	Planned Start Date	Planned Completion Date	Actual Start Date	Actual Completion Date	Status	Last Update Date	Remarks
(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	<ul style="list-style-type: none"> • Being reviewed • Being Studied • Accepted • Approved • Deferred • Being implemented • Closed) 	(DD/MM/YYYY)	

D.8 Asset Inventory

Project:

Serial No.	Asset ID	Asset Category	Asset Description	Request Reference No.	Request Date	Requested By	Approved By
		(• Hardware • Software • Document • Facility • Accommodation • Others)			(DD/MM/YYYY)		
1							
2							

Date Needed	Date Delivered	Planned Return Date	Actual Return Date	Returned By	Status	Remarks
(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)	(DD/MM/YYYY)		(• Pending • Delivered • Returned)	

Appendix E Instructions / Tools

E.1 Work Breakdown Structure (WBS)

WBS is a project management technique for defining and organising the scope of a project, using a hierarchical tree structure. The purpose of creating WBS is to break down the project into smaller components, ensuring that tasks can be more accurately planned and controlled. It can be defined as different levels of details in the Plan phase and Execute phase. Thus WBS provides the project team with a clear picture and the information needed to execute the project properly. Nevertheless, it describes planned outcomes (deliverable based) instead of planned actions (activity based). WBS should be enhanced at the beginning of each project phase/sub-phase. Although there is no definite optimal level of details for the WBS, it is suggested to keep the lowest level of project task components below 80 working hours of effort.

In the WBS hierarchical tree, the first two levels (i.e. Level 1 and Level 2) define a set of planned outcomes that collectively and exclusively represent the complete project scope. The nodes at higher level of the WBS are called parent nodes and each parent node is subdivided into a set of children nodes at lower levels. The children nodes collectively and exclusively represent the complete scope of their parent node.

A WBS groups tasks by areas and sub-areas of work. Areas can be project phases, system modules, or anything that makes sense for organising and managing a particular kind of IT project. However, the use of phases may not be a good approach since the WBS is a deliverable-oriented breakdown of the work. If work is grouped by phases, it will be difficult to indicate whether a deliverable is completed when the work of the deliverable span across different phases.

To create a WBS, the Internal PM needs to obtain the following information from the project scope statement:

- **Project Objectives** — to know what the goal of the project is.
- **Scope Description** — to obtain details on the task breakdown.
- **Boundaries (In-Scope/Out-of-Scope)** — to know what to include and what not to include.

- **Deliverables** — to input all deliverables noted in the project scope statement.

The three steps involved in decomposing the project deliverables into work components are as follows:

a) Identifying the project deliverables

The first step is to identify the final product and major deliverables of the project from the detailed project scope statement and all approved scope change requests. To carry out this step successfully, it is important to ensure the inputs are complete and accurate.

b) Breaking down the project into components

The second step for performing decomposition is to break down the project into components. The list of deliverables identified in the first step serves as the input for this step. A hierarchical description of the project deliverables is prepared by detailing the components of the deliverables and the key activities required to produce them. Then, each of the higher levels is broken down progressively into more details. Reference can be made to WBS of previous projects for brainstorming on ways of breaking down project deliverables, where appropriate.

c) Verifying the WBS

In the final step of decomposition, the WBS is verified. To verify a WBS, the Internal PM needs to check the WBS against the inputs used to create it including detailed project scope statement, all approved scope change requests, and different supporting document such as lessons learnt and other references in historical project libraries of similar projects.

The list below refers to common questions used for verifying a WBS:

- Have all relevant deliverables been included?
- Have any out-of-scope deliverables been included?
- Has the project been broken down into correct components, such as subprojects, sub-subprojects, activities, and deliverables?
- Does the WBS include at least two levels of details?
- Have all known tasks associated with the creation of each deliverable been stated?
- Has the WBS been verified by people who will be leading or performing the work?

The WBS is one of the most important products produced during planning since it forms part of the project foundation to which other processes extensively refer throughout the project lifecycle. Some other project documents such as workplan and logistics arrangement will also build on it.

A WBS can be illustrated in an outline form or as a graphical presentation. Example 1 shows a WBS in outline form for a project involving system development whereas example 2 is a WBS in graphical presentation for a project involving system implementation.

Example 1

XXX IT PROJECT

XXX System (LEVEL 1)

Project Management (LEVEL 2)

1. Activity/Product (LEVEL 3)
 - a. Sub Activity/Product (LEVEL 4)
 - i. Sub Activity/Product (LEVEL 5)
 1. Effort and Estimated Cost (For Timeline & Budget) (LEVEL 6)
2. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 1. Effort and Estimated Cost (For Timeline & Budget)

Requirements

1. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 1. Effort and Estimated Cost (For Timeline & Budget)
2. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 1. Effort and Estimated Cost (For Timeline & Budget)

Design (SA&D)

1. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 1. Effort and Estimated Cost (For Timeline & Budget)
2. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 1. Effort and Estimated Cost (For Timeline & Budget)

Development

1. Activity/Product
 - a. Sub Activity/Product
 - i. Sub activity/product
 1. Effort and Estimated Cost (For Timeline & Budget)
2. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 1. Effort and Estimated Cost (For Timeline & Budget)

Testing

2. Activity/Product
 - a. Sub Activity/Product

- i. Sub Activity/Product
 - 1. Effort and Estimated Cost (For Timeline & Budget)
- 3. Activity/Product
 - a. Sub Activity/Product
 - i. Sub Activity/Product
 - 1. Effort and Estimated Cost (For Timeline & Budget)

Implementation

- 1. Activity/Product
 - a. Activity/Product Sub Activity/Product
 - i. Sub activity/Product
 - 1. Effort and Estimated Cost (For Timeline & Budget)
- 2. Activity/Product
 - a. Activity/Product Sub Activity/Product
 - i. Sub activity/Product
 - 1. Effort and Estimated Cost (For Timeline & Budget)

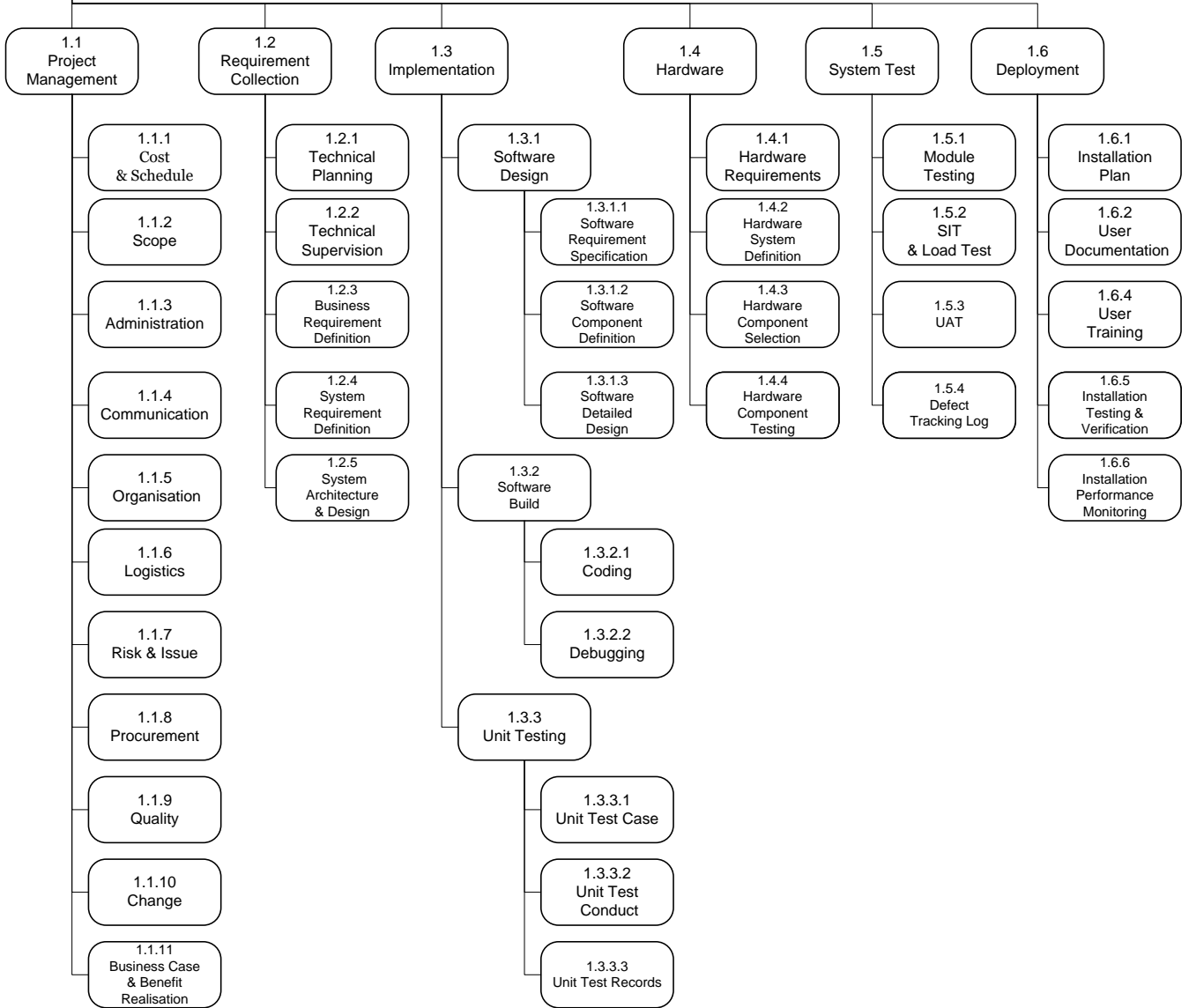
Deployment

- 1. Activity/Product
 - a. Activity/Product Sub Activity/Product
 - i. Sub activity/Product
 - 1. Effort and Estimated Cost (For Timeline & Budget)
- 2. Activity/Product
 - a. Activity/Product Sub Activity/Product
 - i. Sub activity/Product
 - 1. Effort and Estimated Cost (For Timeline & Budget)

Example 2

System Implementation

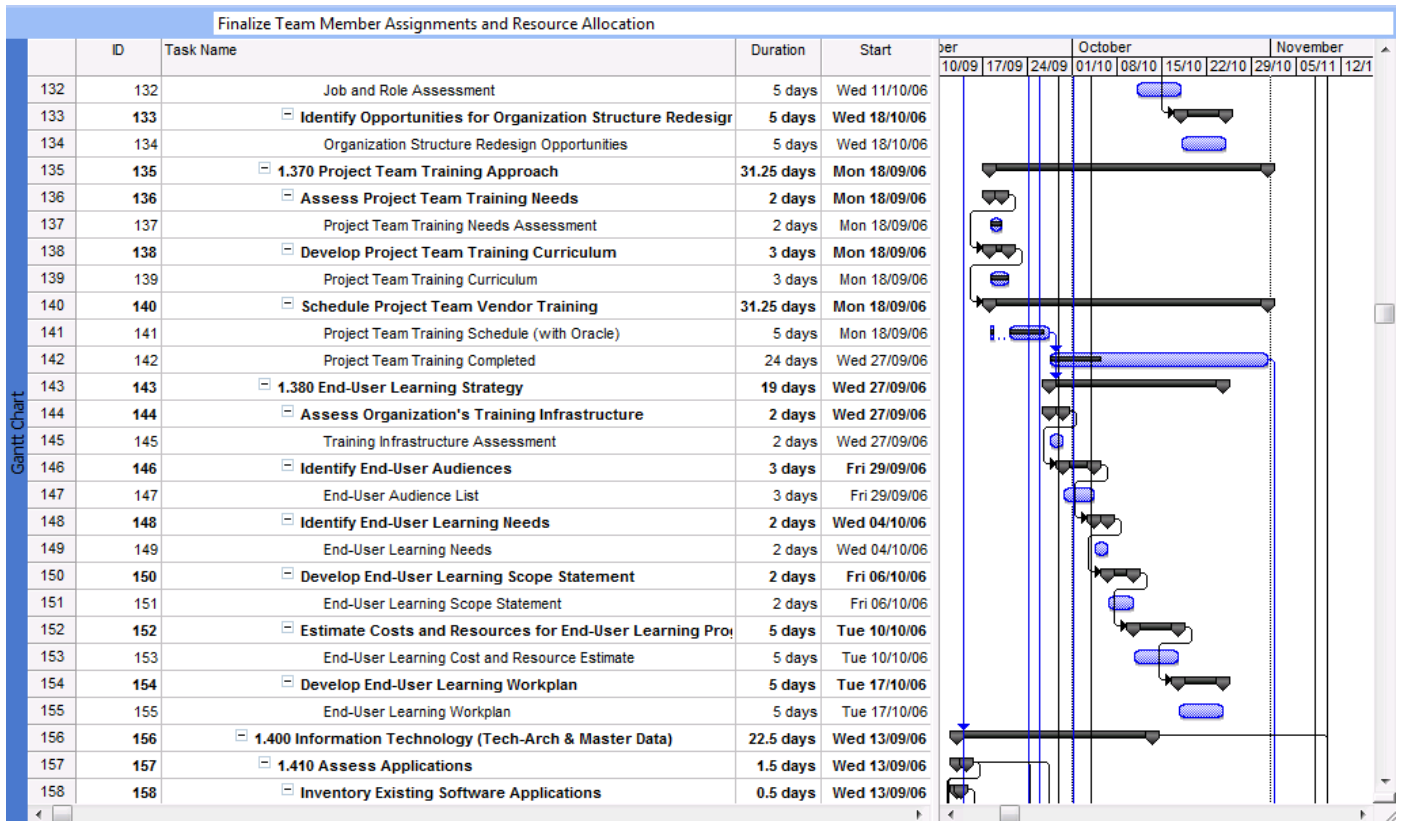
1. XXX System



E.2 Project Schedule Diagram

E.2.1 Gantt Chart

The Gantt chart, a project schedule diagram, is an illustrative bar graph that shows project tasks, timeframe, sequencing, and duration. A sample Gantt chart is shown below.



With project management software such as Microsoft Project, the Gantt chart can be automatically generated based on inputs of task start dates and end dates, which determine the basis of activity duration and sequencing.

E.2.2 Activity Sequencing

All activities in the workplan are linked according to the following relationships:

- Finish to start (FS) - The earliest time at which the activity can start given that its precedent activities are completed
- Finish to finish (FF) – Defined as the completion time for the activity given its precedent activities are completed

- Start to start (SS) – The time at which the activity can start given its precedent activities have already started
- Start to finish (SF) – Defined as the completion time for the activity given its precedent activities have already started

Moreover, sequencing of tasks is determined by addressing the following:

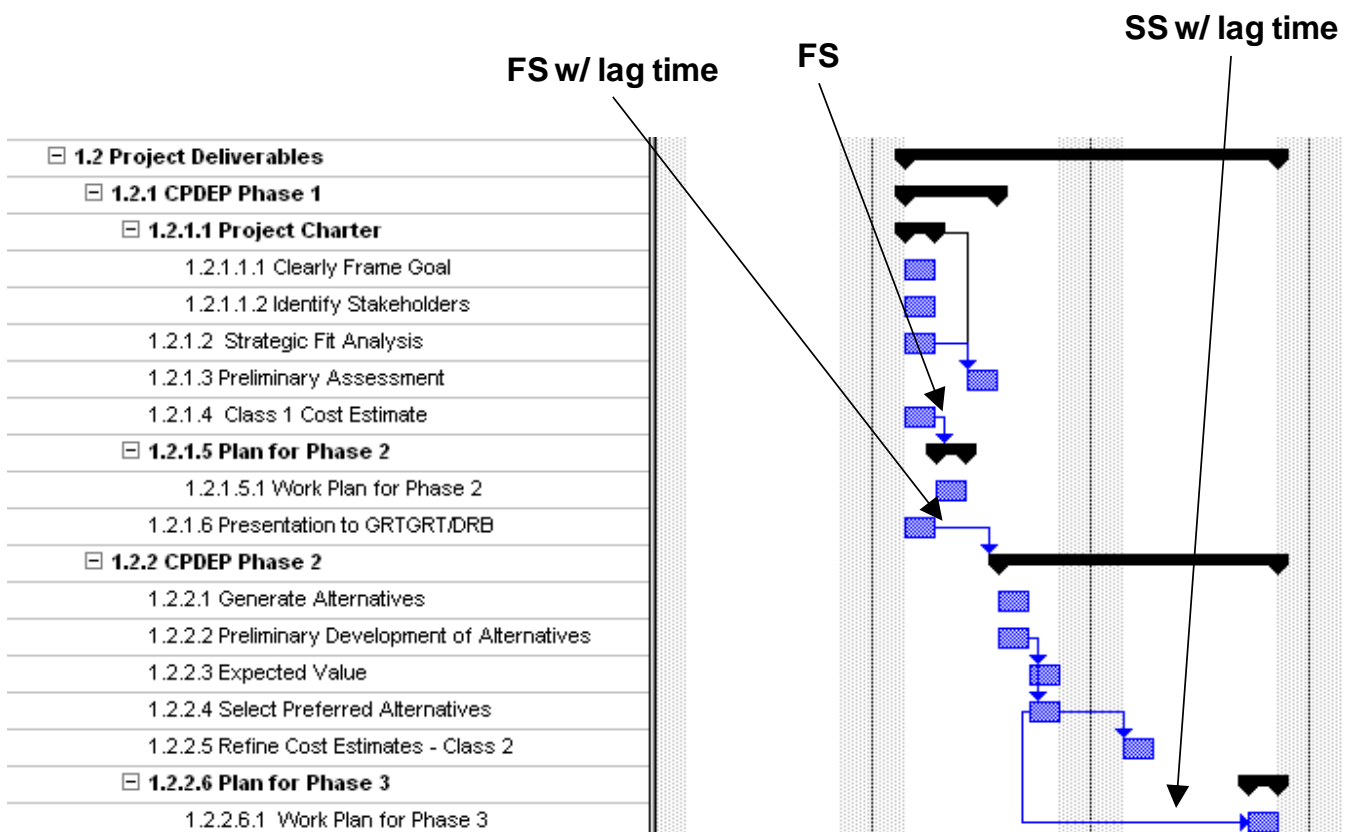
- Which tasks must happen before this one can begin?
- Which tasks can occur concurrently?
- Which tasks must happen immediately after?

Understanding activities dependencies helps to determine the appropriate sequencing relationship. Types of dependencies are the following:

- Mandatory dependencies are dependencies that cannot and will not be changed and are intrinsic to the nature of work being done. For example, installation cannot be performed until the hardware is delivered.
- Discretionary dependencies are dependencies defined to force activities to be scheduled in a certain way. For example, funding and accommodation must have been secured before acquiring contract staff services.
- External dependencies are dependencies outside the control of the project team. For example, issue of tender depends on clearance of tender document by the relevant tender board and other government authorities.

Between tasks, the Internal PM may build in some lag time, defined as time between the completion of predecessor activity and the start of the successor activity.

The following diagram is a graphical depiction of bars that represent the sequencing relationships (as illustrated by arrows) in the form of a Gantt chart.



E.2.3 Critical Path Methodology

To identify the critical path, the four parameters for each activity should be known: earliest start time, earliest finish time, latest finish time, and latest start time.

- **Earliest start time** - The earliest time at which the activity can start given that its precedent activities are completed first.
- **Earliest finish time** – Defined as the earliest start time for the activity plus the time required to complete the activity.
- **Latest finish time** - The latest time at which the activity can be completed without delaying the project.
- **Latest start time** – Defined as the latest finish time minus the time required to complete the activity.

First, calculate the activity float by determining the difference between its earliest and latest start time, or between its earliest and latest finish time. Float is the amount of time that an activity can be delayed past its earliest start or earliest finish without delaying the project.

If the float is equal to zero, it is part of the critical path as it is the path in which none of the activities have float, or in other words, all activities have earliest start time = latest start time and earliest finish time = latest finish time in the path.

The critical path is the longest-duration path in the project schedule. The activities that lie on the critical path cannot be delayed without delaying the project. To accelerate the project, the Internal Project Manager should consider compressing the activities on the critical path by fast tracking or crashing.

It is also common where the Internal Project Manager leverages project management software to automate determination of project's critical path.

E.3 Stakeholder Analysis

Stakeholder analysis is essential to the identification of parties (stakeholders) involved in the project. When conducting stakeholder analysis, questions to ask include:

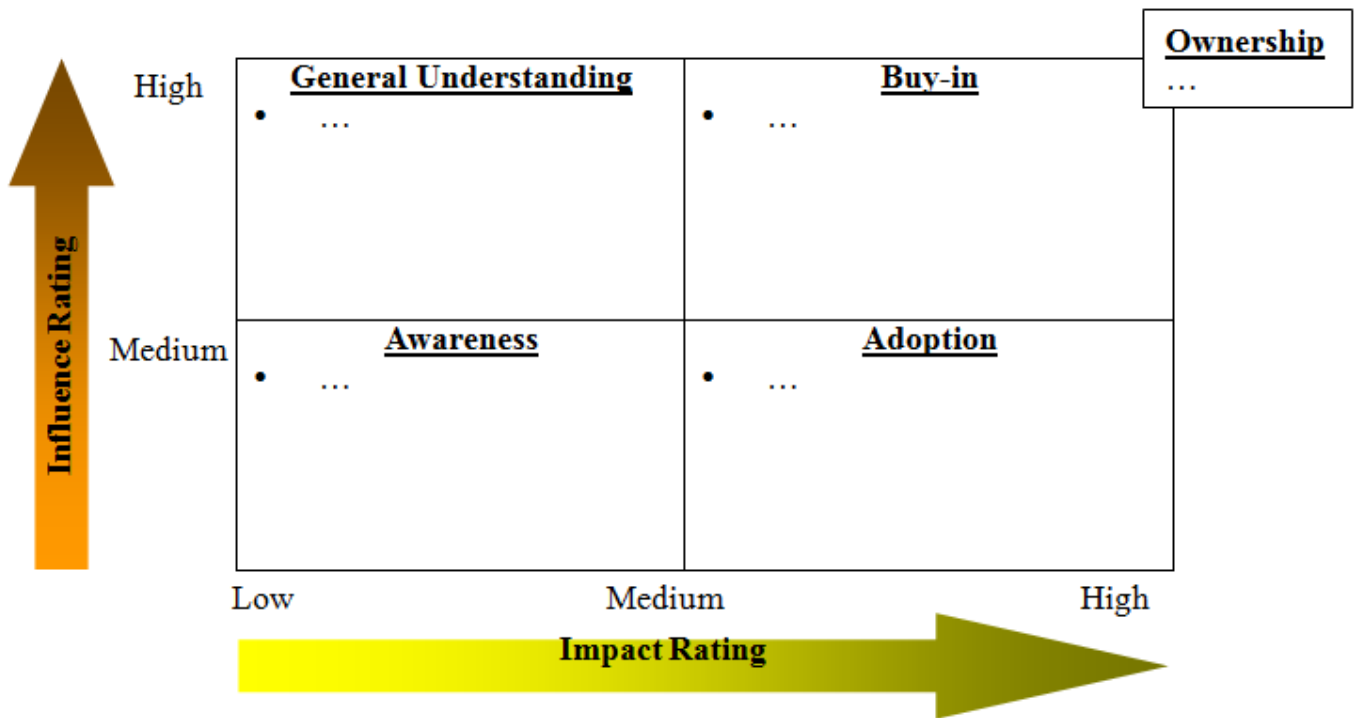
- Who needs the project information?
- Who provides the project information?
- Why the information is needed?
- What are the communication media that will be used to generate, collect, distribute, and store the information?
- What communication activities will be carried out during the project?
- What are the roles of stakeholders and team members in project communications?
- What are the expectations and concerns of stakeholders regarding the project?

The result of stakeholder analysis serves as input to determine the required communication means, as part of stakeholder response strategy.

The conclusion of stakeholder analysis completes the stakeholder register by capturing the following information of each stakeholder group:

- **Stakeholder Group** - an individual or a group of individuals who are involved in or being affected by the project. For example, the Project Owner, the PSC, NGOs, the Public, other B/Ds.

- **Project Role** - the role that a stakeholder group plays in the project. For example, the Project Owner, the PSC, legal advisor, tender assessment panel.
- **Expectations** - the needs of the stakeholder group
- **Concerns** - the concerns or objections expected from the stakeholder group
- **Influence Rating** – the degree of influence that the stakeholder group has on the direction of the project and it is categorised as High, Medium or Low
- **Impact Rating** – the degree of the project’s impact to the stakeholder group and it is categorised as High, Medium or Low
- **Commitment Level** – the level of involvement (commitment) of the stakeholder group at different project phases. The commitment levels include:
 - **Awareness** – stakeholders are aware of the scope and objectives of the project
 - **General Understanding** – stakeholders understand impacts (e.g. anticipated benefits, project schedule and the changes in the future state) to the organisation and their functional areas
 - **Adoption** – stakeholders are participating in project activities (e.g. providing general inputs to user representatives) and are acquiring the skills necessary for the change
 - **Buy-in** – stakeholders are willing to work with and implement changes brought by the project and are ready to acquire the skills to adapt to that change. They may have the responsibility to provide part of the requirements and testing in the project because they should be the one who will use the output of the project intensively
 - **Ownership** – stakeholders make the decision and change their own. They have high influence to ensure the project is successful and the high impact from the project. In general, Project Owner and PSC are highly committed to the project



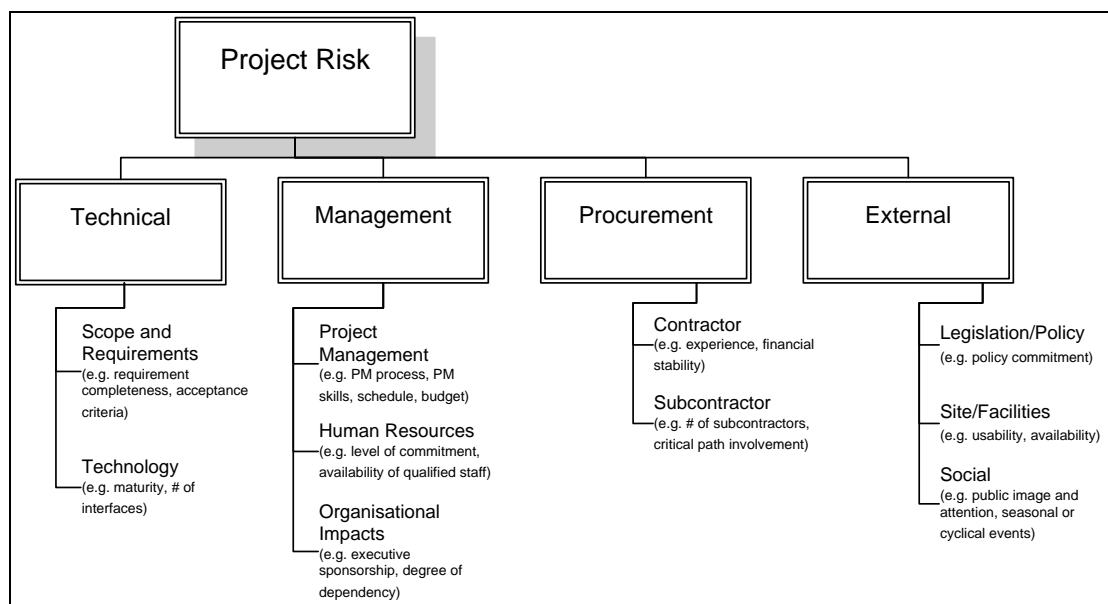
Following the identification of stakeholders, the contact information as well as the communication means per stakeholder group or contact person of a stakeholder group are collected to facilitate subsequent project communications.

Stakeholder analysis is a continuous process to ensure that project communication needs are addressed. While it is conducted as early as the Initiate phase, it is conducted in subsequent phases as well to maintain that the stakeholder register (and related information of stakeholder contacts and communication requirements) is kept up-to-date.

E.4 Risk Assessment Tool

The risk assessment tool assists project teams in the identification of risks. As shown in the Risk Breakdown Structure, risks are categorised into:

- Technical risks covering risks relating to scope and requirements and technology.
- Management risks covering risks relating to project management, human resources and organisational impacts.
- Procurement risks covering risks relating to contractor and sub-contractor.
- External risks covering risks relating to legislation/ policy, site/facility and social.



Risk Breakdown Structure

The risks identified will then be assessed for their probability of occurrence and impacts (on cost, schedule, scope and quality) based on which a risk rating is derived. Development of response plans follows.

Project teams can also make use of the tool to identify and assess issues. It should be noted that risks are uncertainties and when they realise (i.e. probability of occurrence is 100%), they become issues. Therefore, when using the tool for issue assessment, assessment of probability of occurrence is not necessary.

The Risk Assessment Tool can be downloaded from the theme page (<http://itginfo.ccgohksarg/content/pgpm/>). Follow the instructions as detailed in the tool for the identification, assessment and documentation of the project risks. All identified risks should be registered in the RIF (Risk Register) for monitoring and control.