



# GAPPS

Global Alliance for the  
Project Professions

## A Guiding Framework for Project Controls

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## Foreword

As program and project management have become more widely recognised management approaches, governments, individuals, and both public and private sector organisations have become interested in frameworks and standards that describe levels of acceptable workplace performance for program and project personnel.

The *Global Alliance for the Project ProfessionS*, formerly known as *Global Alliance for Project Performance Standards* (GAPPS) is a volunteer organisation working to create performance based frameworks and other products by providing a forum for stakeholders from differing countries, systems, backgrounds, and operating contexts to work together to address the needs of the global program and project management community.

These frameworks are intended to support the development and recognition of local standards and to provide a sound basis for mutual recognition and transferability of project, program and other management role related qualifications.

The GAPPS frameworks are intended to be used by businesses, academic institutions, training providers, professional associations, and government standards and qualifications bodies globally. Frameworks may be used “as is” to speed the development of local standards, or they may be adapted to local needs.

This document is the fourth framework produced by the GAPPS. In 2006 the GAPPS released the first version of *A Framework for Performance Based Competency Standards for Global Level 1 and 2 Project Managers*. In 2011 the GAPPS released the first version of *A Framework for Performance Based Competency Standards for Program Managers*. In 2015 the GAPPS released *A Guiding Framework for Project Sponsors*.

Future documents may address other roles involved with projects and programs.

Further information or copies of the frameworks can be found at <https://www.globalpmstandards.org>

Version	Date	Summary of Changes
0.01	30 <sup>th</sup> June 2018	Exposure Draft
0.02	23 <sup>rd</sup> June 2019	Final version to release

# A Guiding Framework for Project Controls

## 1. Scope

Roles in Project Control cover a broad range from entry level to Board level, and include many specialist areas. This document contains a guiding framework for Project Controls Managers or Project Controllers.

The contents of this document may be used “as is” to support your organisation’s development processes or to expedite the process of competency descriptions or standards development. They may be tailored to reflect cultural differences or local practice, and they may be used as a baseline to compare, through a mapping process, with other guidelines.

The GAPPS Framework consists of:

- Six units of performance based competency for the roles in Project Controls.
- Supporting material to aid in the application of the guiding framework.

This framework follows the format of performance based competency standards and is intended to be used to assess threshold competency — demonstration of the ability to do something at a standard considered acceptable in the workplace. It is applicable to those responsible for Project Control in all fields of endeavour including, but not limited to: architecture, automotive, biotechnology, construction, defence and aerospace, design, education, engineering, financial services, government, government contracting, information systems, mining, not-for-profit operations, petro-chemical, pharmaceuticals, software development, and telecommunications.

## 2. Process

Work on a performance or competency based framework for a ‘Project Controls’ job family began in October 2011 at GAPPS Thought Leadership Forum No 23 hosted by the BG Group/QGC in Brisbane. The starting point was a review of existing standards for Project Controls in various forms, initially drawing on the following resources:

- ProVoc<sup>1</sup>/ ACostE Project Control Qualifications
- National Occupational Standards for Project Control – UK NVQ 2004
- Total Cost Management Framework – First Edition, 2006, AACE International
- South African Qualification Authority standards for project controls
- APM Introduction to Project Control
- Competency Standards for Quantity Surveyors, Asia Pacific Region, 2001

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<sup>1</sup> ProVoc is the UK ‘User Group’ for Professional level National Vocational Qualifications (NVQs) that brings together companies, assessors, awarding bodies and regulatory bodies

It is noted that a number of these resources have since been updated. Revised versions and additional resources have been reviewed during the GAPPS development process to ensure currency of coverage.

Review and comparison of these documents provided a picture of coverage of roles in project controls and formed the basis for input and development over subsequent GAPPS Thought Leadership Forums. Globally representative and experienced project management and project controls professionals (see Appendix A) were asked to focus on what practitioners are required to do when providing project control services and oversight for projects. At each of the sessions where project controls were addressed the work of previous groups was reviewed and progressed in an ongoing validation process. In 2017 a review of the document was undertaken by several experienced practitioners and their comments addressed during 2018 GAPPS Thought Leadership Forums. In 2019 an exposure draft was released for public comment and the comments received were addressed at the March 2019 Thought Leadership Forum.

Accepted practice in development of performance based competencies<sup>2</sup> is to seek input from practitioners on what is considered to be minimum acceptable performance in a particular role. Therefore, the process should start with a definition of the role. This proved to be extremely difficult in the area of project controls where it was agreed that roles are both broad and deep. The roles extend from entry level project support roles to very senior Project Controls Director roles which may be at Board level. Project Controls are also provided by specialist consulting firms and include a wide range of specialist areas including cost, scheduling, risk, quality, estimation, quantity and document control.

Work to date has focused on developing an understanding of a core set of performance based competencies expected of a Project Controller or Project Controls Manager. This was intended to provide a shared understanding of the 'job family' and a basis for definition of performance based competencies for other roles in the Project Controls job family.

### 3. Role Context

The role of the *project controls manager* in this context may be for single or multiple projects. The role of *project controls manager* is generally to support the project manager(s) to achieve project objectives by establishing the baseline plan, confirming the control basis, metrics and assumptions, identifying deviations and recommending corrective actions.

In some organizations the *project controls manager* is a position with that title, while in others, it may be termed differently. This may be a position or an assignment. Whenever a single individual is clearly responsible for providing project controls support to the project manager, that individual can be considered to be a ***project controls manager*** for the purposes of this framework.

Figure 1 below describes 3 levels at which the individual may be operating, what they would typically be responsible for and desirable attributes that could be required as well as some of the job titles that are used.

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<sup>2</sup> Heywood, L., Gonczi, A., & Hager, P. (1992). A Guide to Development of Competency Standards for Professions. Canberra: Australian Government Publishing Service.

Level	At this level you would typically be responsible for:	Desirable attributes would include:
<b>Strategic</b>	<p>In line with the organisational risk appetite:</p> <ul style="list-style-type: none"> <li>– setting the overall governance and policy framework for controls including roles and responsibilities, data integrity, reporting and operating structures; assurance processes, tools, parameters for tolerances and contingencies, compliance and continuous improvement</li> <li>– monitoring performance of the overall project, program or portfolio to identify systemic and cumulative risk</li> <li>– intervening to maintain strategic alignment</li> <li>– developing and sustaining organisational controls capability</li> </ul>	<ul style="list-style-type: none"> <li>– interdisciplinary understanding of the business context</li> <li>– credibility that enables engagement with and influence of stakeholders</li> <li>– intuitive insight into control functions</li> <li>– appreciation of the need to maintain confidentiality</li> <li>– embodiment of desired values, behaviours and ethics.</li> </ul> <p>Typical role titles: Head of Project Controls Controls Director</p>
<b>Tactical / Integrative</b>	<p>Within strategy, governance and policy framework</p> <ul style="list-style-type: none"> <li>– implementing policy, developing project specific procedures and making tactical level decisions</li> <li>– defining performance criteria and reporting guidelines</li> <li>– evaluating risks and dependencies within the project and applying appropriate control approaches</li> <li>– gathering and making sense of data, monitoring and reporting on performance</li> <li>– establishing tolerances for deviations from plan, as a basis for escalating decisions and incorporating approved changes to the baseline</li> <li>– recommending decisions, approaches and response options</li> <li>– managing and developing control teams</li> <li>– resolving conflicts as required</li> </ul>	<ul style="list-style-type: none"> <li>– interdisciplinary understanding of the controls function</li> <li>– interpersonal, influencing, delegating and negotiation skills that enable coordination and timely elicitation of performance data</li> <li>– ability to understand the full extent of the project / program phases and related impact on the baseline</li> <li>– appreciation of systems architecture and tools</li> <li>– analytical ability</li> <li>– appreciation of the need to maintain confidentiality</li> </ul> <p>Typical role titles: Controls Manager Project Controls Manager Controls Executive Officer Baseline Manager Integrative Baseline Manager Project Controller</p>
<b>Discipline specific</b>	<p>In one or more of the control disciplines:</p> <ul style="list-style-type: none"> <li>– providing expertise including production, collection, collation, dissemination, synthesis, analysis and meaningful interpretation and administration of data and information</li> <li>– providing timely insights, advice and contributions in areas of discipline expertise</li> <li>– interfacing effectively with other project disciplines and functions</li> </ul>	<ul style="list-style-type: none"> <li>– technical / sub discipline expertise</li> <li>– accuracy and proactive ability to obtain information and apply judgement</li> <li>– understanding of their role within the overall controls function</li> <li>– ability to identify and communicate pertinent information</li> <li>– appreciation of the need to maintain confidentiality</li> </ul> <p>Typical role titles: Planning / Scheduler / Planner Cost Engineer / Cost Controller Quality Controller/ Quality Controls Manager Estimator Risk Controller / Risk Manager Cost Schedule Analyst Cost Account Manager</p>

**Figure 1. Descriptions of Role Differentiators**

## 4. Performance Based Competency Frameworks

### 4.1 Overview

This section provides a brief overview of the terminology used when describing performance-based competency for potential users of this document who are not familiar with the topic.

Competent comes from the Latin root *competere* which means “to be suitable.” In today’s workplace, the term “competent” is generally used to describe someone who is sufficiently skilled to perform a specified task or to fill a defined position — a competent physician, a competent salesperson, a competent plumber. Increasingly, organisations are interested in assessing the competency of individuals in order to guide employment and development decisions.

Broadly speaking, there are two major approaches to defining and assessing competency:

- *Attribute* based wherein personal attributes such as knowledge, skills, values, attitudes, and other characteristics are identified and assessed. Competency is inferred based on the presence of the necessary attributes.
- *Performance* based wherein work outcomes and performance levels are identified and assessed. Competency is inferred based on the demonstrated ability to satisfy the performance criteria.

Performance Based Competency Standards (PBCS), also called occupational competency standards, are widely used throughout the world and have been developed within the context of government endorsed standards and qualifications frameworks in Australia (Department of Employment, Education and Workplace Relations: DEEWR), New Zealand (New Zealand Qualifications Authority: NZQA), South Africa (South African Qualifications Authority: SAQA), and the United Kingdom (Qualifications and Curriculum Development Agency: QCDA). Although all of these approaches are focused primarily on performance based competency assessment, some approaches do include aspects of attribute based competency assessment.

### 4.2 Design of the GAPPS Framework

GAPPS uses a PBCS approach which typically addresses at least the following two questions:

- What is *usually* done in this occupation, profession, or role by competent performers?
- What standard of performance is *usually* considered acceptable to infer competency?

In the GAPPS frameworks, these questions are answered by defining:

- **Units of Competency**

A Unit of Competency defines a broad area of professional or occupational performance that is meaningful to practitioners and which is demonstrated by individuals in the workplace. This GAPPS framework includes 6 Units of Competency.

- **Elements of Competency**

Elements of Competency describe the key components of work performance within a Unit. They describe *what* is done by individuals in the workplace but do not prescribe *how* the work is done. For example, project sponsors must “cultivate stakeholder commitment,” but they can do this using approaches and tools of their own choice. This GAPPS framework includes a total of 24 Elements of Competency.



- **Performance Criteria**

Performance Criteria set out the type and/or level of performance required to demonstrate competency in each element. They describe observable results and/or actions in the workplace from which competent performance can be inferred. In the GAPPS framework, Performance Criteria can be satisfied in many different ways; there are no mandatory approaches, tools, or methodologies. This GAPPS framework includes a total of 79 Performance Criteria.

- **Explanatory Statements**

Explanatory Statements help to ensure consistent interpretation of the Elements and the Performance Criteria by expanding on critical or significant aspects of them to enable consistent application in different contexts. They also may include a description of a range that may apply to the context of the experience. Where the Explanatory Statements contain lists, the lists are generally illustrative and not exhaustive.

Key terms and definitions used in the descriptions are included in the Explanatory Statements in the Units. Terms are explained the first time they occur within each Unit and are displayed in bold type in subsequent uses. When the context of the use requires further explanation a term may be repeated.

The Explanatory Statements are fundamental to understanding the described competence as they provide context and clarification for terms and concepts that often lack consistent, accepted definitions.

Although some of the terms and definitions of the GAPPS framework described above differ in some respects from those used for PBCS, the overall approach is consistent and compatible with generally accepted practice within the field of competency development and assessment.

The Performance Criteria in this document focus on *threshold* performance — demonstration of the ability to do something at a standard considered acceptable in the workplace. They do not measure *superior* performance — what the best project controllers do. Superior performers should be able to satisfy the threshold criteria without difficulty.

The GAPPS frameworks include the minimum number of Performance Criteria needed to infer competency. As a result, a candidate must satisfy all of the Performance Criteria in the applicable Units in order to be viewed as competent. In addition, the Performance Criteria represent different levels of effort. The number of Performance Criteria in a Unit or Element is not proportional to the amount of time or effort that an individual must spend in that area to be viewed as competent.

The material in this document can also be used to support learning and development when applied by qualified educators and trainers. In order to provide such support, the GAPPS framework would need to be expanded to address questions such as:

- What skills and knowledge are needed to demonstrate this standard of performance?
- What are the parameters for collecting evidence and assessing performance?

## 5. Application

### 5.1 Relationship to Existing Frameworks

This document is intended to complement existing competency standards, not to replace them. For example:

- Organisations that have performance based competency standards (e.g., the South African Qualifications Authority (SAQA) in South Africa) may compare (map) their existing standards to the GAPPS framework in order to facilitate comparison. [?](#)

- Organisations that use attribute based competency assessments (e.g., IPMA - International Project Management Association) may choose to supplement their assessments with performance based criteria.

In similar fashion, this document is not intended to replace guides and standards specific to project controls. Documents such as these, as well as books and articles about project controls serve to develop the underpinning knowledge and understanding that helps project controllers learn how to produce the results from which competency is inferred.

## 5.2 Adoption of this Guiding Framework

GAPPS encourages other organisations to adopt this framework as their own. For example:

- Professional associations that do not currently have assessment frameworks can use it to expedite their ability to serve their members.
- Standards and qualifications bodies can use it to facilitate transferability and mutual recognition of qualifications.
- Public and private organisations can use it to facilitate staff development programs and to help ensure better results from their projects.
- Organisations can use it as a framework from which to develop their own tailored expression of the required competence.

Any entity that adopts the GAPPS framework should use all of the Units, Elements, and Performance Criteria defined here in order to help ensure consistency of application and reciprocity. Additions and modifications, as permitted under the license terms in this document, can be made as appropriate to suit local and regulatory requirements. For example:

- A standards or qualification body may need to modify the structure or terminology to conform to its own conventions or to local culture.
- A private sector organisation may decide to add Elements or Performance Criteria, or to provide further detail in the Explanatory Statements, or specific Evidence Guides, in order to reflect aspects of performance specific to that organisation.
- Any of the above entities may translate these materials to make them more accessible.

## 6. Overview of Units, Elements, and Performance Criteria

The table below provides a summary of the Units of Competency while the table on the following page provides an overview of the Units, Elements, and Performance Criteria. Details for all are provided in Section 7.

### 6.1 Summary of Units of Competency

Unit	Title	Description
PC01	Appreciate the context for project control	This Unit defines the Elements required to demonstrate an understanding and appreciation of the requirements for project controls. It includes the Performance Criteria required to demonstrate competency in how the project controls work, within an organisation/project and within a governance framework.
PC02	Develop project control processes	This Unit defines the Elements required to develop project control processes. It includes the Performance Criteria required to demonstrate competency in how to establish monitoring processes, develop coding structures, utilize information management systems and apply measurement approaches.
PC03	Support development of integrated baseline	This Unit defines the Elements required to support the development of an integrated baseline for a project. It includes the Performance Criteria required to demonstrate competency in defining packages of work, establishing, validating and integrating baselines and communicating with other functions. In the context of project controls, a baseline is an approved start point used as a basis for performance measurement.
PC04	Implement control framework	This Unit defines the Elements required to implement the control framework. It includes the Performance Criteria required to demonstrate competency in how to support the project applying control processes, gathering and analysing data and information, providing reports, recommending corrective actions and supporting the implementation of corrective action.
PC05	Exercise professional and social responsibility	This Unit defines the Elements required to maintain effective and professional working relationships. It includes the Performance Criteria required to demonstrate competency in applying values and ethics in a professional manner, achieving effective working relationships and continuing development of performance.
PC06	Manage the control team (optional for Project Controller)	This Unit defines the Elements required to manage the project control team. It includes the Performance Criteria required to demonstrate competency in how to allocate work, support and develop the team. It is an optional unit as a specialist project controls person may not be managing a team.

**Figure 2: Summary of Units of Competency**

## 6.2 Summary of Units, Elements, and Performance Criteria

Units	Elements	Performance Criteria
PC01 Appreciate the context for project control	1.1 Understand project control requirements.	1.1.1 Project and project control objectives are understood.
		1.1.2 Established <b>budget</b> for project <b>control function</b> is confirmed.
		1.1.3 Understanding of <b>project control organization structure</b> is demonstrated.
		1.1.4 Limits of <b>personal expertise</b> are acknowledged.
		1.1.5 <b>Roles and responsibilities</b> are confirmed.
		1.1.6 <b>Operating processes and procedures</b> are identified..
		1.1.7 <b>Control requirements</b> of <b>relevant stakeholders</b> are understood.
	1.2 Work within governance framework.	1.2.1 Alignment of reporting structures with organisational and project strategy is maintained.
		1.2.2 <b>Information</b> required to control the project is defined, agreed and <b>reviewed</b> .
		1.2.3 Prescribed signing and approval authorities are fully understood and applied. Approval processes and authorities are confirmed and applied
PC02 Develop project control processes	2.1 Establish monitoring processes and parameters.	2.1.1 Program stakeholders and their communication needs are identified and documented.
		2.1.2 Communication approaches are agreed to by pertinent stakeholders.
		2.1.3 Information is shared as planned, and variances are identified and addressed.
		2.1.4 Communication interfaces among constituent projects are monitored.
	2.2 Develop coding structures.	2.2.1 Interests and expectations of pertinent stakeholders are investigated, documented, and considered when making program decisions.
		2.2.2 Approaches to influence ongoing stakeholder commitment are developed and implemented.
	2.3 Utilize information management systems.	2.3.1 <b>Information management systems</b> are selected or adapted to suit the specific requirements of the project.
		2.3.2 A data repository is established.
		2.3.3 Agreed data integrity and security principles are applied.
	2.4 Define and apply measurement approaches.	2.4.1 <b>Performance measures</b> to be used are determined and agreed by <b>relevant stakeholders</b> ..
		2.4.2 Compliance with <b>applicable industry standards</b> is ensured.
		2.4.3 <b>Measurement criteria</b> are established.
	PC03 Support development of integrated baseline	3.1 Facilitate refinement of project deliverables and requirements
3.1.2 <b>Assumptions and constraints</b> are documented..		
3.2 Define executable packages of work		3.2.1 Detailed <b>breakdown structures</b> are developed.
		3.2.2 Responsibilities for work packages are identified.
3.3 Establish the baseline		3.3.1 <b>Resource requirements</b> are determined.
		3.3.2 Sources of data are identified.
		3.3.3 <b>Input</b> is sought from <b>other functions</b> ..
		3.3.4 <b>Scope, cost, schedule, risk and quality baselines</b> are integrated.
3.4 Communicate with other functions		3.4.1 Report content, formats and <b>frequencies</b> are determined.
		3.4.2 Responsibilities for information provision are defined and accepted.
		3.4.3 Baseline information is provided as an input to <b>other functions</b> .
		3.4.4 Information on quality and availability of potential <b>resources</b> is provided.
3.5 Validate the baseline		3.5.1 Report content, formats and <b>frequencies</b> are determined.
		3.5.2 Responsibilities for information provision are defined and accepted.
		3.5.3 Baseline information is provided as an input to <b>other functions</b> .
	3.5.4 Information on quality and availability of potential <b>resources</b> is provided.	

Figure 3. Summary of Units, Elements, and Performance Criteria (continued next page)

Units	Elements	Performance Criteria	
<b>PC04</b> <b>Implement control framework</b>	<b>4.1 Apply project control processes.</b>	4.1.1 Actual performance data is captured.	
		4.1.2 <b>Impacts of change</b> are analysed.	
		4.1.3 <b>Approved changes</b> are incorporated into the baseline and relevant documents.	
	<b>4.2 Ensure information quality.</b>	4.2.1 Ability to obtain information from stakeholders is demonstrated.	
		4.2.2 Information is questioned for meaning, validity and <b>reliability</b> .	
		4.2.3 Information is stored, maintained, updated and utilized.	
	<b>4.3 Analyse comparative data.</b>	4.3.1 Performance <b>variances</b> and <b>trends</b> are analysed.	
		4.3.2 Performance <b>forecasts</b> are conducted.	
	<b>4.4 Implement agreed reporting structures.</b>	4.4.1 Project reports are issued in accordance with the governance and control frameworks.	
		4.4.2 Applicable <b>regulatory and commercial control requirements</b> are supported.	
		4.4.3 Information is collated to validate <b>submissions</b> .	
	<b>4.5 Recommend preventative or corrective action.</b>	4.5.1 <b>Response options</b> are generated.	
		4.5.2 <b>Viable</b> options are identified.	
		4.5.3 Selected <b>response options</b> are documented and <b>proposed</b> .	
	<b>4.6 Support implementation of preventative or corrective action.</b>	4.6.1 Approved <b>response options</b> are communicated for implementation.	
		4.6.2 Relevant documents are updated to reflect the impacts of action approved for implementation.	
4.6.3 Relevant documents are updated to reflect the impacts of action approved for implementation..			
4.6.4 <b>Impacts</b> of implemented corrective actions are monitored, captured and reported			
<b>PC05</b> <b>Exercise professional and social responsibility</b>	<b>5.1 Observe and apply professional ethics and values</b>	5.1.1 Accepted <b>values and ethics</b> are defined and communicated.	
		5.1.2 <b>Behaviours</b> reflect accepted ethics and values.	
		5.1.3 <b>Sensitivity</b> to local cultural values, ethics and practices is demonstrated.	
	<b>5.2 Maintain effective working relationships</b>	5.2.1 Desired results are achieved through <b>influence and positive behaviour</b> .	
		5.2.2 The priorities, expectations and needs of colleagues are understood and considered when making decisions and taking actions.	
		5.2.3 Issues are resolved in a <b>constructive manner</b> ..	
		5.2.4 <b>Communications</b> are conducted in accordance with the approved communication plan.	
		5.2.5 People are treated with <b>respect</b> .	
	<b>5.3 Ensure continued personal and professional performance</b>	5.3.1 Personal development plan is documented, updated and implemented.	
		5.3.2 Personal performance is <b>evaluated</b> and reviewed against an agreed <b>performance contract</b> .	
	<b>PC06</b> <b>Manage the control team*</b>	<b>6.1 Allocate work to the team</b>	6.1.1 Roles and responsibilities are clarified, agreed, documented and communicated.
			6.1.2 Work is assigned and <b>agreed</b> .
<b>6.2 Agree objectives with team and individuals</b>		6.2.1 Performance criteria for each team member are clarified, negotiated and agreed.	
		6.2.2 <b>Team objectives</b> are mutually developed, understood and agreed.	
		6.2.3 Individual and team performance is monitored and feedback provided.	
<b>6.3 Develop the skills of team members</b>		6.3.1 <b>Professional development</b> is encouraged and acknowledged.	
<b>6.4 Build an environment of confidence and trust within the control team</b>		6.4.1 Team members are treated fairly and equitably.	
		6.4.2 Open discussion is encouraged and facilitated.	
		6.4.3 Differences are managed constructively.	
		6.4.4 Issues and concerns are attended to in a timely manner.	
		6.4.5 Interpersonal and leadership styles are chosen and applied based on the circumstances.	
		6.4.6 Personal commitments are realistic and honoured.	
6.4.7 An independent and objective perspective is maintained.			

Units	Elements	Performance Criteria
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Figure 3. Summary of Units, Elements, and Performance Criteria (continued from previous page.)

## 7. Detail of Units, Elements, and Performance Criteria

### 7.1 Format of Units, Elements, and Performance Criteria

The following pages detail the Units, Elements, and Performance Criteria of this framework. They are presented using the format illustrated below in Figure 4.

PCOX	Unit Title
<b>Unit Descriptor</b>	A Unit of Competency defines a broad area of professional or occupational performance that is meaningful to practitioners and which is demonstrated by individuals in the workplace.  This GAPPS framework includes 6 Units of Competency.
PCOX	List of Elements
X.1	Elements of Competency describe the key components of work performance within a Unit.
X.2	They describe <i>what</i> is done by individuals in the workplace but do not prescribe <i>how</i> the work is done.
X.3	This GAPPS framework includes a total of 24 Elements of Competency.
PCOX	Element Y
X.Y	Element description is repeated here.
Performance Criteria	Explanatory Statements
X.Y.1	<b>Performance criteria</b> set out the type and/or level of performance required to demonstrate competency in each element.
X.Y.2	<b>Performance criteria</b> describe observable results and/or actions in the workplace from which competent performance can be inferred.
X.Y.3	<b>Performance criteria</b> are written using the passive voice to facilitate evaluation of evidence during assessment.
X.Y.4	This GAPPS framework includes 79 <b>Performance Criteria</b> .
	<ul style="list-style-type: none"> <li>a. <b>Explanatory statements</b> are provided for key words and phrases in the element descriptions or the <b>performance criteria</b>.</li> <li>b. <b>Explanatory statements</b> may provide clarification and a general guide for the scope and context in which an individual is expected to perform by describing a range of situations or conditions that may apply</li> <li>c. The <b>explanatory statements</b> provide guidance for both Assessors and for the individuals being assessed.</li> <li>c. <b>Explanatory statements</b> are provided the first time each term is used in a unit. Although additional explanations may be included if required to clarify the context of a criteria</li> </ul>

Figure 4. Illustration of presentation format for Units, Elements, and Performance Criteria

## 7.2 Detail of Units, Elements, and Performance Criteria

The following pages detail the Units, Elements, and Performance Criteria of this framework.

PC01 Appreciate the context for project control	
<b>Unit Descriptor</b>	<p>This Unit defines the Elements required to demonstrate an understanding and appreciation of the requirements for project controls.</p> <p>It includes the Performance Criteria required to demonstrate competency in how the project controls work, within an organisation/project and within a governance framework.</p>

PC01 List of Elements	
1.1	Understand project control requirements
1.2	Work within governance framework.

PC01 Element 1	
1.1	Understand project control requirements
Performance Criteria	Explanatory Statements
1.1.1 Project and project control objectives are understood.	a. <b>Appreciate</b> should be interpreted and applied relative to the context within which the person is operating.
1.1.2 Established <b>budget</b> for project <b>control function</b> is confirmed	b. <b>Budget</b> may be in terms of time, cost and/or resources. Note that this is the budget for the <b>control function</b> for the project. The budget may be provided or may be negotiated by the Project Controls Manager.
1.1.3 Understanding of <b>project control organization structure</b> is demonstrated.	c. <b>Project control organization structures</b> will vary according to project type, size and complexity. Controls include a wide range of specializations.
1.1.4 Limits of <b>personal expertise</b> are acknowledged.	d. Acknowledgement of <b>personal expertise</b> is an important element in determining additional controls assistance and expertise that may be required.
1.1.5 <b>Roles and responsibilities</b> are <b>confirmed</b> .	e. <b>Roles and responsibilities</b> will include reporting relationships and authority levels.
1.1.6 <b>Operating processes and procedures</b> are identified.	f. <b>Confirmed</b> may include negotiation to deal with variations in expertise.
1.1.7 <b>Control requirements</b> of <b>relevant stakeholders</b> are understood.	g. <b>Operating processes and procedures</b> are those relevant to the project and the controls function. They may be those of the parent organization, joint venture or alliance partners, contractors and any other relevant parties.
	h. <b>Control requirements</b> may include interpretation and treatment of baselines and change requests. They include approval, monitoring and reporting processes and may include or be affected by such things as the level of project complexity, form of contract, commercial and regulatory requirements. They may include defining measures, tolerances,



PC01 Element 1	
	<p>frequencies or other parameters. <i>(continued from previous page)</i></p> <p>i. <b>Stakeholders</b> include individuals and organisations whose interests may be affected by the project, or whose actions may have an effect on some aspect of the project. Stakeholders may include project proponents, sponsors, clients, customers, contractors, collaborators, contributors, champions, constituent project managers, project team members, project support staff, subcontractors, suppliers, media representatives, and the general public. Stakeholders may be internal to or external from the sponsoring organisation.</p> <p>j. The <b>relevance</b> of a stakeholder may be affected by the impact on the stakeholder, or by the stakeholder's impact on the project, and by cultural or ethical considerations. Different stakeholders are relevant in different situations. Relevant stakeholders will include contractors and the control requirement including process and submissions required from them.</p>

PC01 Element 2	
1.2 Work within <b>governance framework</b>	
Performance Criteria	Explanatory Statements
1.2.1 Alignment of reporting structures with organisational and project strategy is maintained.	a. <b>Governance framework</b> refers to the corporate and project governance frameworks within which the project will be conducted.
1.2.2 <b>Information</b> required to control the project is defined, agreed and <b>reviewed</b> .	b. Breadth and depth of <b>information</b> gathered should be limited to the minimum required to satisfy stakeholder control requirements. Information requirements should be <b>reviewed</b> at key stages of the project life cycle to ensure they remain fit for purpose.
1.2.3 Prescribed signing and approval authorities are fully understood and applied. Approval processes and authorities are confirmed and applied.	



PC02 Develop project control processes	
<b>Unit Descriptor</b>	This Unit defines the Elements required to develop project control processes. It includes the Performance Criteria required to demonstrate competency in how to establish monitoring processes, develop coding structures, utilize information management systems and apply measurement approaches.

PC02 List of Elements	
2.1	Establish monitoring processes and parameters
2.2	Develop coding structures
2.3	Utilize information management systems
2.4	Define and apply measurement approaches

PC02 Element 1	
2.1 Establish monitoring processes and parameters	
Performance Criteria	Explanatory Statements
2.1.1 <b>Criteria for acceptable performance</b> are established and agreed.	a. <b>Criteria for acceptable performance</b> may include tolerances e.g. 5% above or below budget or schedule; triggers for unacceptable performance, escalation, key performance indicators (KPI) and the like.
2.1.2 Report content, formats and <b>frequencies</b> are determined.	b. <b>Frequency</b> of reporting includes regular scheduled reports as well as ad hoc exception reporting.
2.1.3 <b>Sources of data</b> are identified.	c. <b>Sources of data</b> should be transparent and traceable. They may include any of the parties involved in the project such as project team / functions principal sub-contractors and supply chain, customer, and any data systems used by these parties.
2.1.4 Responsibilities for <b>information provision, monitoring and control</b> are defined and accepted.	d. Regular and other meetings required for <b>information provision, monitoring and control</b> such as board meetings should be scheduled and included in the communication plan in order to coordinate and facilitate the flow of information. The Project Manager should include this in the communication plan.

PC02 Element 2	
2.2 Develop coding structures	
Performance Criteria	Explanatory Statements
2.2.1 <b>Coding structures</b> are selected to facilitate measurement and reporting requirements. 2.2.2 Compatibility with organizational accounting and data reporting requirements is maintained.	a. <b>Coding structures</b> are a means of integrating elements of project control, reporting and accounting particularly for use with information management systems. They may be provided or required by the client, based on organizational processes, industry or ISO standards, determined by the information management system to be used, or developed specifically for the project. They may be a combination of the above.

PC02 Element 3	
2.3 Utilize information management systems	
Performance Criteria	Explanatory Statements
2.3.1 <b>Information management systems</b> are selected or adapted to suit the specific requirements of the project. 2.3.2 A data repository is established. 2.3.3 Agreed data integrity and security principles are applied.	a. <b>Information management systems</b> should be used effectively for sharing of information and integrated reporting and leveraged to optimise project control processes.

**PC02 Element 4**

**2.4 Define and apply measurement approaches**

Performance Criteria	Explanatory Statements
<p>2.4.1 <b>Performance measures</b> to be used are determined and agreed by <b>relevant stakeholders</b>.</p> <p>2.4.2 Compliance with <b>applicable industry standards</b> is ensured.</p> <p>2.4.3 <b>Measurement criteria</b> are established.</p>	<p>a. <b>Performance measures</b> will be appropriate to the size and complexity of the project and may include staff turnover, rates of production, number of rejects, number of change requests, rate of work performance or output compared to expectations, safety performance, labour productivity. Earned Value measures of SPI and CPI are examples of performance measures.</p> <p>b. <b>Stakeholders</b> include individuals and organisations whose interests may be affected by the project, or whose actions may have an effect on some aspect of the project. Stakeholders may include project proponents, sponsors, clients, customers, contractors, collaborators, contributors, champions, constituent project managers, project team members, project support staff, subcontractors, suppliers, media representatives, and the general public. Stakeholders may be internal to or external from the sponsoring organisation.</p> <p>c. The <b>relevance</b> of a stakeholder may be affected by the impact on the stakeholder, or by the stakeholder’s impact on the project, and by cultural or ethical considerations. Different stakeholders are relevant in different situations.</p> <p>d. <b>Applicable industry standards</b> include local and national regulations. The same information may need to be provided in different ways to satisfy different requirements.</p> <p>e. <b>Measurement criteria</b> would be developed as a basis for monitoring. They would be specific to each project. They may include quality, efficiency, stakeholder expectations and acceptance criteria. This may be an iterative process to ensure satisfaction of all relevant parties.</p>

**PC03 Support development of integrated baseline**

**Unit Descriptor** This Unit defines the Elements required to support the development of an integrated baseline for a project. It includes the Performance Criteria required to demonstrate competency in defining packages of work, establishing, validating and integrating baselines and communicating with other functions.

In the context of project controls, a baseline is an approved start point used as a basis for performance measurement.

**PC03 List of Elements**

- 3.1 Facilitate refinement of project deliverables and requirements
- 3.2 Define executable packages of work
- 3.3 Establish the baseline
- 3.4 Communicate with other functions
- 3.5 Validate the baseline

**PC03 Element 1**

3.1 Facilitate <b>refinement of project deliverables and requirements</b>	
Performance Criteria	Explanatory Statements
3.1.1 Detail of <b>deliverables and requirements</b> for the overall project or phase are verified.	<ul style="list-style-type: none"> <li>a. <b>Integrated baseline</b> may also be referred to as the project plan. Items in Integrated baseline should include audit requirements.</li> <li>b. High level <b>deliverables and requirements</b> would be provided by the Project Manager. Input for <b>refinement of deliverables and requirements</b> may be obtained from participating specialists.</li> <li>c. <b>Assumptions and constraints</b> made in developing baselines must be documented.</li> </ul>
3.1.2 <b>Assumptions and constraints</b> are documented.	

**PC03 Element 2**

3.2 Define executable packages of work.	
Performance Criteria	Explanatory Statements
3.2.1 Detailed <b>breakdown structures</b> are developed.	<ul style="list-style-type: none"> <li>a. <b>Breakdown structures</b> may include breakdown of project, product, resource, organisation and work breakdown structures, milestone deliverables, work packages and the like.</li> <li>b. Packages of work should be both executable and measurable.</li> </ul>
3.2.2 Responsibilities for work packages are identified.	

PC03 Element 3	
3.3 Establish the <b>baseline</b>	
Performance Criteria	Explanatory Statements
3.3.1 <b>Resource requirements</b> are determined 3.3.2 Sources of data are identified. 3.3.3 <b>Input</b> is sought from <b>other functions</b> . 3.3.4 <b>Scope, cost, schedule, risk and quality baselines</b> are integrated.	a. <b>Baseline</b> in the context of project controls is an approved start point used as a basis for performance measurement. b. <b>Resource requirements</b> may include staffing, material, funding, machinery, time, equipment, supplies c. <b>Input</b> may include confirmation of resource availability, scope, cost, timing, regulatory, environmental, political, economic, contractual and other implications and do-ability review d. <b>Other functions</b> may include design, engineering, procurement, construction, human resources, finance, commercial, operations and the like. e. Development of <b>scope, cost, schedule, risk and quality baselines</b> may be the responsibility of separate specialists. Procurement, operational, environmental, communication, resource and other baselines may be included.

PC03 Element 4	
3.4 Communicate with <b>other functions</b> .	
Performance Criteria	Explanatory Statements
3.4.1 Report content, formats and <b>frequencies</b> are determined. 3.4.2 Responsibilities for information provision are defined and accepted. 3.4.3 Baseline information is provided as an input to <b>other functions</b> . 3.4.4 Information on quality and availability of potential <b>resources</b> is provided.	a. <b>Resources</b> may include but are not limited to staffing, material, funding, machinery, time, equipment, supplies

PC03 Element 5	
3.5 Validate the baseline.	
Performance Criteria	Explanatory Statements
3.5.1 Compliance with applicable standards and regulations is verified. 3.5.2 Alignment with <b>declared strategy</b> is maintained. 3.5.3 <b>Independent expert review</b> is sought. 3.5.4 Supporting <b>artefacts</b> are provided	a. <b>Declared strategy</b> is that which has been adopted by the project. It may be specific for the project, an organisation strategy and / or the project control strategy. b. <b>Independent Expert review</b> may include peer review or be provided by specialists independent from the project, internal or external. c. <b>Artefacts</b> may include but is not limited to written, printed or electronic documents, digitised matter, drawings, models, or photographs that provide information or evidence or that serve as an official record.

PC04 Implement control framework	
<b>Unit Descriptor</b>	This Unit defines the Elements required to implement the control framework. It includes the Performance Criteria required to demonstrate competency in how to support the project applying control processes, gathering and analysing data and information, providing reports, recommending corrective actions and supporting the implementation of corrective action.

PC04 List of Elements	
4.1	Apply project control processes
4.2	Ensure information quality
4.3	Analyse comparative data
4.4	Implement agreed reporting structures
4.5	Recommend preventative or corrective action
4.6	Support implementation of preventative or corrective actions

PC04 Element 1	
4.1 Apply project control processes.	
Performance Criteria	Explanatory Statements
4.1.1 Actual performance data is captured 4.1.2 <b>Impacts of change</b> are analysed. 4.1.3 <b>Approved changes</b> are incorporated into the baseline and relevant documents	a. <b>Impact</b> is the effect of a change on the baseline or project objectives. b. <b>Change</b> is a positive or negative deviation from baseline and can be as the result of for example; a scope change, inefficiencies, external influences, safety issues. c. <b>Approved changes</b> should only result in a change to the baseline if this is in accordance with the governance framework.

PC04 Element 2	
4.2 Ensure information quality.	
Performance Criteria	Explanatory Statements
4.2.1 Ability to obtain information from stakeholders is demonstrated. 4.2.2 Information is questioned for meaning, validity and <b>reliability</b> . 4.2.3 Information is stored, maintained, updated and utilized	a. <b>Reliability</b> includes backward (accurate) and forward looking (forecast) perspectives. It also includes confidence that information will continue to be provided predictably.

PC04 Element 3	
4.3 Analyse comparative data.	
Performance Criteria	Explanatory Statements
4.3.1 Performance <b>variances</b> and <b>trends</b> are analysed.	a. <b>Variances</b> may be positive or negative differences from the baseline
4.3.2 Performance <b>forecasts</b> are conducted.	b. <b>Forecasting</b> and <b>trend</b> analysis may be used as a basis for proactive recommendation of preventative action

PC04 Element 4	
4.4 Implement agreed reporting structures.	
Performance Criteria	Explanatory Statements
4.4.1 Project reports are issued in accordance with the governance and control frameworks.	a. <b>Regulatory requirements</b> will usually be imposed as a result of legislation. They may be generic or industry specific and will normally vary with jurisdiction.
4.4.2 Applicable <b>regulatory and commercial control requirements</b> are supported.	b. <b>Commercial control requirements</b> will be defined by the contract or other applicable form of engagement.
4.4.3 Information is collated to validate <b>submissions</b> .	c. <b>Submissions</b> may be from contractors, suppliers, vendors, service providers, consultants or to customers, clients or other stakeholders and may include claims, bids / tenders, product reviews, invoices, reports, updated schedules etc.

PC04 Element 5	
4.5 Recommend <b>preventative</b> or <b>corrective action</b> .	
Performance Criteria	Explanatory Statements
4.5.1 <b>Response options</b> are generated.	a. <b>Preventative actions</b> address potential variances in project performance as identified in forecasts and trend analyses.
4.5.2 <b>Viable</b> options are identified.	b. <b>Corrective actions</b> address reported variances in project performance in accordance with agreed performance tolerances. They may relate to variations from baseline or to requirements or opportunities for continuous improvement.
4.5.3 Selected <b>response options</b> are documented and <b>proposed</b>	c. <b>Viability</b> is established by way of expert judgement or a qualitative assessment, or by quantitative analysis.
	d. <b>Response options</b> may include but are not limited to requests for further information / detail, engagement of other experts, coaching and mentoring, updating of systems, re-planning, adjusting the baseline, or stopping, depending on the particular challenge. Impact analysis may be undertaken in developing options.
	e. <b>Proposed</b> implies undertaking action in accordance with the governance and control framework such as escalation or seeking approval.

**PC04 Element 6**

**4.6 Support implementation of preventative or corrective actions.**

Performance Criteria	Explanatory Statements
<p>4.6.1 Approved <b>response options</b> are communicated for implementation.</p> <p>4.6.2 Relevant documents are updated to reflect the impacts of action approved for implementation.</p> <p>4.6.3 <b>Adjustments</b> to systems, policies, and procedures are documented, proposed, approved by relevant stakeholders and tracked to <b>resolution</b>.</p> <p>4.6.4 <b>Impacts</b> of implemented corrective actions are monitored, captured and reported.</p>	<p>a. <b>Adjustments</b> may be highlighted by insights from, for example; reviews, system failures and gaps, benchmarking.</p> <p>b. <b>Resolution</b> may include updated or changed systems, processes, policies and procedures but may be finalised by non-acceptance. Where possible official sign-off should be obtained.</p> <p>c. <b>Impacts</b> may be positive or negative.</p>



PC05 Exercise professional and social responsibility	
<b>Unit Descriptor</b>	<p>This Unit defines the Elements required to maintain effective and professional working relationships.</p> <p>It includes the Performance Criteria required to demonstrate competency in applying values and ethics in a professional manner, achieving effective working relationships and continuing development of performance.</p>

PC05 List of Elements	
5.1	Observe and apply professional ethics and values
5.2	Maintain effective working relationships
5.3	Ensure continued personal and professional performance

PC05 Element 1	
5.1 Observe and apply professional ethics and values.	
Performance Criteria	Explanatory Statements
5.1.1 Accepted <b>values and ethics</b> are defined and communicated	a. <b>Values</b> and <b>ethics</b> referred to here will include industry ethics and those stated at organisational, team, professional and cultural level. b. <b>Behaviours</b> may be agreed at organisational, project or team level. c. <b>Sensitivity</b> includes accommodation of differing values, ethics and practices of communities, suppliers, workforce, political context and the like.
5.1.2 <b>Behaviours</b> reflect accepted ethics and values	
5.1.3 <b>Sensitivity</b> to local cultural values, ethics and practices is demonstrated.	

PC05 Element 2	
5.2 Maintain effective working relationships.	
Performance Criteria	Explanatory Statements
5.2.1 Desired results are achieved through <b>influence and positive behaviour</b> .	a. <b>Influence and positive behaviour</b> may include offering proactive guidance and support to project managers. b. <b>Constructive manner</b> may include conflict resolution techniques such as: crucial conversations, negotiation, escalation up the line, dealing with the issue not the person. c. <b>Communications</b> may include content required, method used (e.g., electronic, phone, meeting), geographical dispersion, protocols, cultural differences, and confidentiality requirements. They may be documented formally or informally and may be included in other project documentation. d. <b>Respect</b> may include consideration of cultural differences, sensitivity of information shared etc.
5.2.2 The priorities, expectations and needs of colleagues are understood and considered when making decisions and taking actions.	
5.2.3 Issues are resolved in a <b>constructive manner</b> .	
5.2.4 <b>Communications</b> are conducted in accordance with the approved communication plan.	
5.2.5 People are treated with <b>respect</b> .	

PC05 Element 3	
5.3 Ensure continued personal and professional performance.	
Performance Criteria	Explanatory Statements
5.3.1 Personal development plan is documented, updated and implemented.	a. <b>Evaluated</b> may include 360 degree and other approaches and will usually be in accordance with organizational performance evaluation processes. It should be supported by individual review and reflection on personal performance. b. A <b>performance contract</b> is the formal or informal agreement between an individual and their employer concerning expectations of their performance in their role.
5.3.2 Personal performance is <b>evaluated</b> and reviewed against an agreed <b>performance contract</b>	

PC06 Manage the control team (optional for Project Controller)	
<b>Unit Descriptor</b>	This Unit defines the Elements required to manage the project control team.  It is an optional unit as a specialist project controls person may not be managing a team. It includes the Performance Criteria required to demonstrate competency in how to allocate work, support and develop the team.

PC06 List of Elements	
6.1	Allocate work to the team
6.2	Agree objectives with team and individuals
6.3	Develop the skills of team members
6.4	Build an environment of confidence and trust within the control team

PC06 Element 1	
6.1 Allocate work to the team.	
Performance Criteria	Explanatory Statements
6.1.1 Roles and responsibilities are clarified, agreed, documented and communicated.	a. <b>Agreed</b> includes documentation of said agreement.
6.1.2 Work is assigned and <b>agreed</b> .	

PC06 Element 2	
6.2 Agree objectives with team and individuals.	
Performance Criteria	Explanatory Statements
6.2.1 Performance criteria for each team member are clarified, negotiated and agreed.	a. <b>Team Objectives</b> are aligned to the project objectives
6.2.2 <b>Team objectives</b> are mutually developed, understood and agreed.	
6.2.3 Individual and team performance is monitored and feedback provided.	

PC06 Element 3	
6.3 Develop the skills of team members.	
Performance Criteria	Explanatory Statements
6.3.1 <b>Professional development</b> is encouraged and acknowledged.	a. <b>Professional development</b> may include internal accreditation / internal licence to operate.

PC06 Element 4	
6.4 Build an environment of confidence and trust within the control team.	
Performance Criteria	Explanatory Statements
6.4.1 Team members are treated fairly and equitably.	
6.4.2 Open discussion is encouraged and facilitated	
6.4.3 Differences are managed constructively.	
6.4.4 Issues and concerns are attended to in a timely manner.	
6.4.5 Interpersonal and leadership styles are chosen and applied based on the circumstances.	
6.4.6 Personal commitments are realistic and honoured.	
6.4.7 An independent and objective perspective is maintained.	

# Appendix A.

## Development of this Document

(Informative)

### A.1 Creation of the GAPPS Organisation

Starting in the mid 1990s, people interested in the development of global project management standards began meeting formally and informally during various project management conferences. In 1998, the International Project Management Association initiated a series of Global Working Parties, including one focused on Standards. This Working Party met on a number of occasions, usually associated with project management conferences, and interested people from many countries were involved. A number of initiatives were identified or formulated and tracked. One of these was the opportunity for development of global performance based standards for project personnel that would complement existing knowledge based standards (such as PMI's *A Guide to the Project Management Body of Knowledge*, APM's *Body of Knowledge*, IPMA's *International Competence Baseline*, and Japan's *Project and Program Management for Enterprise Innovation*) and provide a basis for transferability and mutual recognition of project management qualifications.

The development of global performance based frameworks for project managers, as a joint initiative of governments, professional associations, and corporations, provides an opportunity to:

- Respond directly to the expressed needs of industry.
- Enhance the profile and effectiveness of project management throughout the project management community, both globally and locally.
- Increase support for project management as a field of practice and as an emerging profession.
- Enhance the value and recognition of the performance based competency approach.

The initiative was progressed by development and signing of Memoranda of Understanding (MOUs) to guide cooperation among interested parties. A Global Steering Committee meeting was held in London in August 2002. The meeting was attended by representatives of signatories to the MOUs plus industry representatives and was hosted by the Services SETA (Sector Education and Training Authority) of South Africa. The initiative initially functioned under the name Global Performance Based Standards for Project Management Personnel.

The Global Steering Committee decided to fund the initiative by asking each organisation supporting it (professional associations, standards/qualifications organisations, educational institutions, and corporations) to become a financial subscriber to cover research, preparation of materials, maintenance of the global standards website, and administrative support. In addition, the Global Steering Committee decided that the initial focus should be on the development of performance based competency standards to complement existing knowledge based standards and provide a basis for comparison of existing standards. It was agreed that the initiative would be progressed through Working Sessions attended by representatives of subscribing organisations.

### A.2 Products of the GAPPS

All products of the GAPPS are available from the GAPPS website: [www.globalpmstandards.org](http://www.globalpmstandards.org). They are provided free of charge, to any person to use, copy, modify, merge, publish, distribute, translate in accordance with the copyright provisions laid out at the start of this document.

Currently available GAPPS products are:

*A Framework for Performance Based Competency Standard for Global Level 1 and 2 Project Managers (2007)*

*A Framework for Performance Based Competency Standard for Program Managers (2011)*

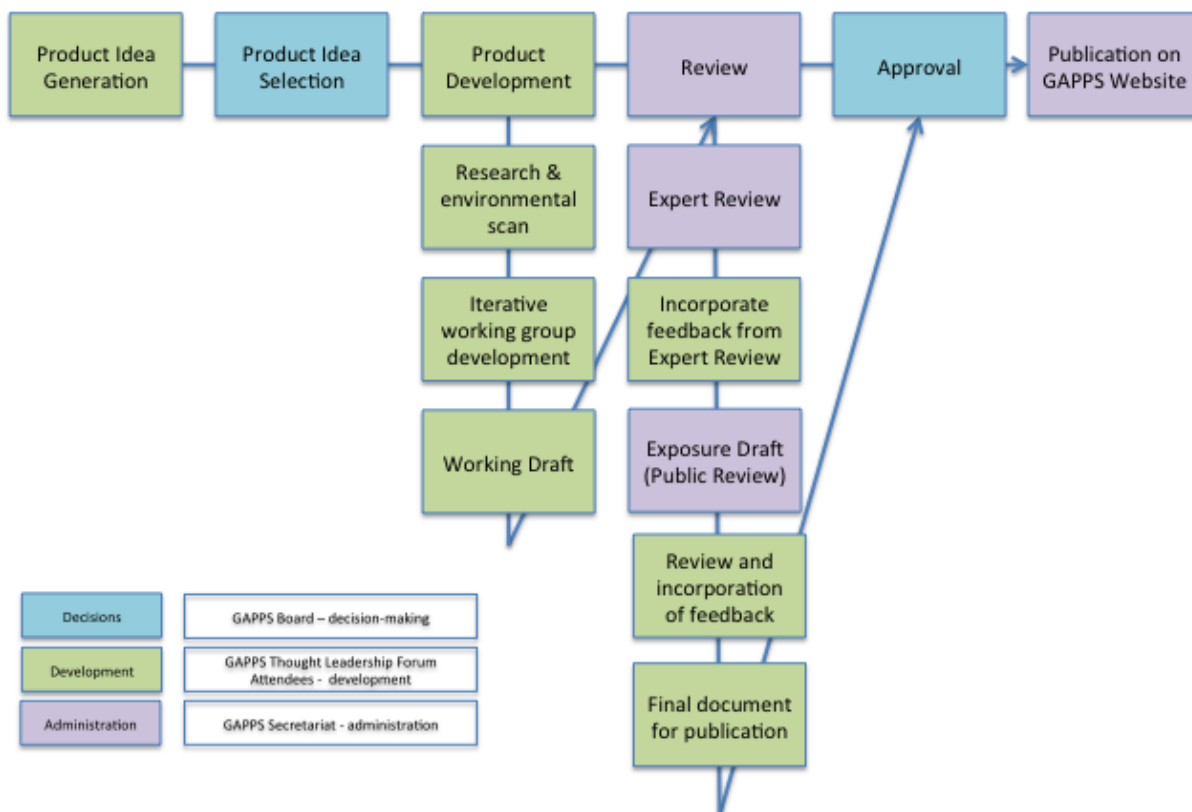
*A Framework for Project Sponsors (2015)*

**Comparisons (Mappings):** have been produced to promote transportability and mutual recognition as well as to enable organisations to easily compare their competence frameworks to a multiplicity of standards. Comparisons include

- Project Manager and Management related standards have been made to the GAPPS Project Manager framework
- Program Manager and Management related standards have been made to the GAPPS Program Manager framework
- A range of Assessment methods

### A.3 GAPPS Product Development Process

The following process is used for development of GAPPS products.



**Figure A.1 GAPPS Product Development Process**

There are three primary processes in development of GAPPS products – decision-making, product development and administration – and there are four primary sets of actors who contribute to those processes. The most important actors are the attendees at GAPPS Thought Leadership Forums who generate product ideas and carry out the product development process. They bring experience, views and perspectives that are globally representative. The GAPPS Board, representing GAPPS member organizations, are responsible for final decisions on product ideas and themes to be pursued in work streams at GAPPS Thought Leadership Forums and for approval of GAPPS products for release on the GAPPS website. The GAPPS Secretariat carries out required administrative functions such as communications, release of products for expert review and public review and upload to the website. The fourth set of actors is the wider public who are invited to contribute to and provide feedback on GAPPS products throughout the production cycle.

GAPPS Thought Leadership Forums are usually held three times a year in different parts of the world. At each Forum, a small core of people who have been involved previously in development of a product are joined by others who bring fresh eyes and ideas to the work at hand. The GAPPS production cycle is therefore iterative, incorporating scrutiny, review and critique by experienced practitioners throughout. It is an open process welcoming anyone who is interested in contribution and review.

## Appendix B.

### Record of contributors to the framework for Project Controls

<b>NAME</b>	<b>REPRESENTING</b>	<b>COUNTRY</b>
Adamopoulos, Pierre	Heriot Watt University	UK
Aitken, Alicia	PPG / Telstra	Australia
Al-Qahtani, Ali S	Ma'aden Aluminium Company	Saudi Arabia
Al-Shammary, Sami	Ma'aden Aluminium Company	Saudi Arabia
Andrew Gale	University of Manchester	UK
Andrew Tims	Major Projects Authority, UK	UK
Angelilo, Stephen	NASA	USA
Baker, Chris	NAB	Australia
Baker, Rod	APMG	UK
Bibby, Jon	Costain	UK
Ben Aiben, Saad	Ma'aden Aluminium Company	Saudi Arabia
Bentley, Lesley	Living Planit	Australia
Best, Robert	Services SETA	South Africa
Billat, Pensilla	Sasol Ltd	South Africa
Botes, Melani	SOLAL	South Africa
Buhagiar, Michael	The University of Sydney	Australia
Callaway, Amy	TBH Group	Australia
Castillo, Omar	The University of Sydney	Australia
Chen, Helen	Centre for Public Project Management	Singapore
Chung, Ken	The University of Sydney	Australia
Coleman, Sarah	APM	UK
Crawford, Lynn	The University of Sydney	Australia
Darley, Martin	AACEI	USA
David Preece	APM	UK
Duncan, Bill	asapm	USA
Edwards, Andrew	State Emergency Services/NSW Fire & Rescue	Australia
Egbu, Charles	Doctoral student, London Southbank University, LSBU	UK
Eltinayn, Nuha	Doctoral student, London Southbank University, LSBU	UK
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## Appendix C.

### Application of the framework

This GAPPS framework explicitly recognises that there are many different approaches to project controls, that there are many different ways to achieve satisfactory results, that there are many different techniques for assessing competency, and that there are many different paths for project controllers to follow to develop their competency.

Terms that are commonly used include:

**Candidate:** is the person being assessed.

**Assessor:** an independent person who conducts the assessment.

**Assessment:** is a judgement process by an independent party that an individual has met an agreed standard.

#### C.1 How it supports the Assessment Process

When used for assessment, this GAPPS framework is intended to help an assessor evaluate whether an experienced, practicing project controls manager is likely to be able to perform competently on future assignments. The assessment should include direct contact and interaction between the candidate and the assessor as well as examination of evidence supplied by the candidate and by other sources such as clients, supervisors, peers, and managers of the undertaking. Assessment may also include direct observation of the candidate in a workplace environment.

As with most other performance based competency frameworks, GAPPS assumes that 100% of the Performance Criteria must be satisfied for a candidate to be assessed as competent in the role. As a result, Performance Criteria have generally not been repeated in different Units although items of evidence may be used for multiple criteria. This interdependent nature of the Performance Criteria requires that assessments be done using an holistic approach.

A candidate that does not meet all of the Performance Criteria should be assessed as “unable to provide evidence of competency.” To the extent possible, the assessment process should provide input to both successful and unsuccessful candidates about opportunities for improvement and professional growth.

The Units, Elements, and Performance Criteria are not linear or sequential: there is no requirement that the work be done in any particular sequence or that the Performance Criteria be satisfied in any particular order. In addition, some Performance Criteria can be satisfied with relatively little effort while others will require a substantial commitment from the sponsor over the full length of the undertaking.

#### C.2 Assessment Guidelines

This appendix is included in order to provide some basic information for organisations that may wish to develop an assessment process using this framework.

##### The Assessment Process

Assessment against performance based frameworks is the process of collecting evidence and making judgments about whether an individual can perform to the level expected in the workplace as

expressed in the relevant framework. All persons involved in the assessment should be given access to a copy of the relevant framework.

The assessment process should include activities to ensure the reliability of the results. In particular, there should be activities to ensure that assessment results are consistent across assessors and over time.

Assessment should be broad enough to include evidence of the achievement of all the performance criteria. Assessment must confirm the inference that competency is (a) able to be satisfied under the particular circumstances assessed and (b) able to be transferred to other circumstances. In order to meet these tests, a GAPPS compliant assessment will normally include:

- A written assessment guide with an evidence guide and suggested questions to verify that the evidence is satisfactory (see section C.3).
- Face-to-face contact in the form of an interview or observation in the workplace.
- Contact with third parties such as the project sponsor's supervisor, the project client, steering committee members, project manager and project team members.

A GAPPS compliant assessment should also be fair. This means that:

- The assessment process is defined, understood, and agreed by all affected parties.
- There is an opportunity for appeal.
- The assessment schedule allows the candidate enough time to prepare.
- Adjustments can be made when candidates have particular needs.

Assessment methods should reflect basic workplace demands such as literacy and the needs of particular groups, including but not limited to:

- People with disabilities
- People from culturally and linguistically diverse backgrounds
- People from economically disadvantaged groups
- People of different ages
- People in rural and remote locations

### C.3 Assessor Requirements

Generally, an assessor will need to demonstrate:

- Prior competency as a project controller or project controls manager at or above the level of the candidate being assessed.
- Evidence of currency in the field of project controls (e.g., controlling projects, managing projects, consulting on project controls and/or management, providing training in project controls and/or management).
- Competency in conducting performance based competency assessments.
- Familiarity with the content and structure of the framework being used in the assessment.

### C.4 Evidence Requirements

A GAPPS compliant assessment will include both documentary and process evidence. Documentary evidence may be provided on paper or in electronic form. Most performance criteria will require more than a single piece of documentary evidence. Process evidence will normally be provided in the form of the candidate's answers to an assessor's questions. As they answer the assessor's questions the candidate should demonstrate ability to reflect on their practice and in doing so demonstrate that they are able to integrate performance with understanding. Process evidence demonstrates the ability to perform a set of tasks in an authentic context.

Typically, a GAPPS compliant assessment will evaluate evidence from more than one undertaking. While the assessor must review and validate the evidence in order to evaluate that the candidate meets the requirements of the relevant framework, the onus is on the candidate to demonstrate that the evidence provided is:

Authentic — that it reflects the candidate’s own work in project controls.

Valid — that the evidence relates to the current, relevant version of the framework, and that it was obtained from a project that meets the requirements for the role assessed.

Reliable — that the candidate consistently meets requirements in the framework.

Current — that the bulk of the work of the undertakings being used to provide evidence was done during the period required by the relevant framework.

Sufficient — that it addresses all of the performance criteria in enough detail to provide assurance that the candidate’s performance is likely to be repeatable on a future project.